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National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

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EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) collects and maintains information about the generation, management, and disposition of hazardous wastes that are regulated by the Resource Conservation and Recovery Act (RCRA) of 1976, as amended. This Report presents information for 1989. Data from a total of 20,732[1] RCRA hazardous waste sites are included in this Report. Of these, 20,233 were large quantity generators and 3,078 were treatment, storage or disposal (TSD) facilities. Most sites that were TSD facilities were also large quantity generators.

RCRA HAZARDOUS WASTE GENERATION

Quantity Generated and Number of Generators

In 1989, a total of 197.5 million tons[2] of RCRA hazardous waste was generated nationwide by 20,233 large quantity generators. A small number of sites accounted for most of the quantity. The largest 1 percent of sites generated nearly 97 percent of the hazardous waste. More than three-quarters of all sites generated less than 100 tons of hazardous waste each, together accounting for only 0.2 percent of the nationwide generation. Conversely, only 1.7 percent of the sites generated more than 10,000 tons each, contributing approximately 98 percent to the total U.S. RCRA hazardous waste generation.

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[1] This number includes 19 sites that claimed their data as Confidential Business Information (CBI).

[2] This quantity represents RCRA hazardous wastes that were subsequently managed in units subject to RCRA permitting requirements. RCRA hazardous wastes that were managed exclusively in units exempt from RCRA permitting requirements are excluded from this report. See Chapter 2 for a more detailed discussion. This report does not include the wastes classified as hazardous by the new Toxicity Characteristic Leaching Procedure (TCLP) rule adopted in 1990.

Among the States[3], New Jersey reported the largest amount generated during 1989. Its total generation of 47.1 million tons, or 23.8 percent of the national total, was followed by Michigan with 35.1 million tons, Tennessee with 34.4 million tons, Texas with 28.2 million tons, and West Virginia with 14.4 million tons. Twenty-two of the 55 States each reported generating less than 100,000 tons of RCRA hazardous waste, together representing only 0.2 percent of the nationwide total (see Exhibit 1). California reported the largest number of generators with 2,387, or 11.8 percent of the national total, followed by Texas with 1,575, New Jersey with 1,434, and Illinois with 1,425.

Quantity Generated by Industrial Sector

Industries in the manufacturing sector accounted for the majority of the number of RCRA hazardous waste generators and the quantity of RCRA hazardous waste. Manufacturing sites, designated by two-digit Standard Industrial Classification (SIC) codes 20 through 39, made up 58 percent of generators and accounted for almost 98 percent of the hazardous waste quantity. Within the manufacturing sector, the chemicals and allied products industry (two-digit SIC code 28) generated, by far, the largest quantity of hazardous waste, accounting for 88 percent of the total generation for the United States.

[3] The term "State" includes the District of Columbia, Puerto Rico, Guam, the Trust Territories, and the Virgin Islands.

Exhibit 1. RCRA Hazardous Waste Generation, Number of Generators, Hazardous Waste Management, Number of TSD Facilities, Imports and Exports, by State, 1989

STATE	TOTAL GENERATED (tons)	NUMBER OF GENERATORS	TOTAL MANAGED (tons)	NUMBER OF TSD FACILITIES	QUANTITY IMPORTED (tons)	QUANTITY EXPORTED (tons)
ALABAMA	403,701	25	564,189	71	333,661	157,501
ALASKA	3,664	43	29	20	0	3,470
ARIZONA	124,595	28	95,737	17	778	23,415
ARKANSAS	805,150	40	824,156	24	115,352	99,014
CALIFORNIA	4,670,579	1	4,978,478	357	28,556	204,896
COLORADO	117,347	31	81,292	59	1,984	33,044
CONNECTICUT	1,390,314	13	366,215	131	21,253	108,501
DELAWARE	19,766	39	3,472	7	1	14,084
DISTRICT OF COLUMBIA	2,357	52	0	0	0	2,409
FLORIDA	411,832	20	359,733	22	16,617	60,915
GEORGIA	2,615,210	19	2,551,209	57	18,188	89,459
GUAM	573	53	0	1	0	203
HAWAII	2,149	46	803	22	149	1,449
IDAHO	15,062	48	45,951	9	37,524	1,579
ILLINOIS	1,381,799	4	1,441,365	139	285,886	244,472
INDIANA	1,843,015	10	2,021,016	44	313,484	132,313
IOWA	76,240	31	74,653	30	2,330	21,402
KANSAS	1,713,963	26	1,700,795	34	26,167	40,820
KENTUCKY	149,612	21	145,481	51	92,282	66,109
LOUISIANA	9,094,768	16	9,205,887	46	238,750	150,058
MAINE	52,528	41	0	4	0	52,635
MARYLAND	265,227	18	211,256	37	7,731	68,913
MASSACHUSETTS	34,142	14	0	0	0	25,444
MICHIGAN	35,143,264	8	35,067,217	232	199,634	227,860
MINNESOTA	239,098	24	348,586	237	12,581	38,805
MISSISSIPPI	717,291	29	697,961	31	18,649	43,415
MISSOURI	384,289	22	289,531	74	96,944	105,154
MONTANA	4,978	46	2,857	9	0	2,497
NEBRASKA	72,209	38	83,959	12	19,115	8,374
NEVADA	4,685	45	20,246	11	15,142	1,954
NEW HAMPSHIRE	18,211	33	5,952	6	211	13,100
NEW JERSEY	47,096,658	3	46,931,754	98	165,933	218,015
NEW MEXICO	10,961	41	6,355	19	16	5,252
NEW YORK	406,910	7	419,838	73	141,488	149,938
NORTH CAROLINA	586,338	11	565,799	28	36,168	43,530
NORTH DAKOTA	28,840	50	25,451	6	660	3,651
OHIO	2,727,383	5	2,710,118	161	402,061	326,339
OKLAHOMA	205,382	30	228,363	48	113,781	47,713
OREGON	27,954	36	65,285	13	57,330	18,817
PENNSYLVANIA	1,246,706	6	1,139,446	157	356,702	426,113
PUERTO RICO	246,161	37	243,417	38	6	8,636
RHODE ISLAND	5,565	27	12,897	4	13,707	5,201
SOUTH CAROLINA	106,224	17	175,807	34	151,652	38,535
SOUTH DAKOTA	1,088	51	0	2	122	1,372
TENNESSEE	34,363,940	15	34,533,270	67	67,541	41,335
TEXAS	28,171,860	2	27,788,963	304	189,576	298,396
TRUST TERRITORIES	23	54	2	2	2	24
UTAH	211,563	35	258,227	34	46,639	6,505
VERMONT	13,481	44	106	6	100	13,840
VIRGIN ISLANDS	5,757	55	5,757	1	0	0
VIRGINIA	5,227,092	23	5,324,021	52	53,109	40,988
WASHINGTON	228,323	9	170,943	56	15,501	57,476
WEST VIRGINIA	14,390,206	34	14,335,403	19	1,774	63,767
WISCONSIN	411,897	12	371,333	55	23,387	111,190
WYOMING	3,180	49	287	7	0	2,954
TOTAL	197,501,112	20,233	196,500,866	3,078	3,740,225	3,972,853

[1] Quantity managed only by storage is excluded

NOTE: Columns may not sum due to rounding.

Types of Hazardous Waste Generated

Approximately 95 percent of the RCRA hazardous waste reported was wastewater, a substantial portion of which was classified as hazardous due to the "mixture"[4] and "derived-from"[5] rules. These wastes were typically characterized by multiple "listed"[6] EPA waste codes. The most common characteristic waste code reported was D002, indicating corrosivity.

RCRA HAZARDOUS WASTE MANAGEMENT

Quantity Managed and Number of TSD Facilities

In 1989, a total of 3,078 TSD facilities reported the management of 196.5 million tons of RCRA hazardous waste in units subject to RCRA permitting requirements. As with hazardous waste generation, a few sites accounted for most of the hazardous waste managed. The three largest hazardous waste TSD facilities accounted for 57 percent of the total RCRA hazardous waste management quantity, while the 50 largest TSD facilities accounted for more than 90 percent of the total. Ninety-six percent of the hazardous waste generated was managed on site, while four percent of the RCRA hazardous waste was shipped off site for management.

Among the States, the 5 largest generators were also the largest managers of RCRA hazardous waste. During 1989, New Jersey managed 46.9 million tons, or 23.9 percent of the national total, followed by Michigan with 35.1 million tons, Tennessee with 34.5 million tons, Texas with 27.8 million tons, and West Virginia with 14.3 million tons (see Exhibit 1).

[4] The mixture rule states that a waste must be managed as hazardous if it is a mixture of solid waste and one or more listed hazardous wastes that have not been delisted.

[5] The derived-from rule states that any solid waste generated from the treatment, storage, or disposal of a listed hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate remains a hazardous waste unless and until delisted.

[6] They bear EPA waste codes beginning with the letters F, P, U, or K.

California reported the largest number of TSD facilities with 357, followed by Texas with 304 facilities. Nationally, 58 percent of the TSD facilities only stored hazardous waste on site but did not treat or dispose of hazardous waste in units subject to RCRA permitting requirements.

The 60 largest TSD facilities in the nation managed 93.3 percent of the hazardous waste. At these facilities, 14.6 percent of the waste managed was characteristic waste, 36.0 percent was listed waste, and 49.4 percent was both characteristic and listed waste. These percentages closely match those for national hazardous waste generation.

Forty of the 60 largest TSD facilities were in the chemicals and allied products industry (two-digit SIC Code 28). This industry accounted for 172.2 million tons, or 87.6 percent of the total quantity of RCRA hazardous waste managed nationwide. Other industries included among the 60 largest facilities were the petrochemicals and coal products industry (two-digit SIC Code 29), the electronic and other electric equipment industry (two-digit SIC Code 36), the fabricated metal products industry (two-digit SIC Code 34), the primary metals industry (two-digit SIC Code 33), and the electric, gas, and sanitary services industry (two-digit SIC Code 49).

Hazardous Waste Management Methods

In terms of the quantity of hazardous waste managed, the predominant waste management method was the biological, physical, or chemical treatment of wastewater, accounting for 76 percent of the total. The management method that ranked second in quantity of waste managed was underground injection wells (14%), another disposal method for wastewater. Approximately 2.3 million tons, or 1.2 percent of the total quantity, was disposed in 86 landfill facilities, while 1.3 million tons or 0.7 percent of the total quantity was incinerated[7] at 221 facilities.

[7] Incineration includes those quantities of waste that are treated by incinerators with RCRA permits. Incineration does not include fuel blending or energy recovery, the two other treatment categories associated with thermal combustion about which the biennial report collects data.

Exhibit 2 shows the quantities of RCRA hazardous wastes landfilled, incinerated, or injected into underground wells, in each State. The remainder was disposed of by other methods or recycled.

A total of nearly 8 million tons of RCRA hazardous waste was shipped off site for management at 484 TSD facilities. The largest portion of this quantity was disposed of in landfills, accounting for more than one-fourth of the total.

INTERSTATE HAZARDOUS WASTE MOVEMENT

Approximately 8 million tons, or 4 percent of the RCRA hazardous waste generated in the United States in 1989, was shipped off site for management. One-half of this total quantity, or 4 million tons, was transported to a different State for management, while the balance was managed in the same State in which it was generated. Exhibit 1 shows that Ohio imported more waste than any other State, roughly 402,000 tons. Pennsylvania was the leading exporter, sending more than 426,000 tons to other States for management.

Of the 55 States, 17 were net importers of RCRA hazardous waste, 37 were net exporters, and 1 State, the Virgin Islands, neither imported nor exported waste. (A State is a net importer if the total imports were greater than total exports.) The largest net importer of RCRA hazardous waste was Indiana, with net imports of approximately 181,000 tons. California was the largest net exporter, shipping approximately 176,000 tons more hazardous waste out of State than it received.

Exhibit 2. Quantity of RCRA Hazardous Waste Landfilled, Incinerated, or Injected into Underground Wells, 1989

STATE	QUANTITY LANDFILLED (tons)	QUANTITY INCINERATED (tons)	QUANTITY INJECTED INTO UNDERGROUND WELLS (tons)
ALABAMA	353,580	4,122	0
ALASKA	0	0	0
ARIZONA	262	266	0
ARKANSAS	188	35,578	681,490
CALIFORNIA [1]	2,167	57,645	0
COLORADO	213	111	0
CONNECTICUT	261	5254	0
DELAWARE	0	888	0
DISTRICT OF COLUMBIA	0	0	0
FLORIDA	0	0	320,134
GEORGIA	0	11,779	0
GUAM	0	0	0
HAWAII	0	1	0
IDAHO [1]	0	2	0
ILLINOIS	172,641	28,668	487,527
INDIANA	330,758	35,358	945,336
IOWA	0	3,014	0
KANSAS	4	3,100	1,666,025
KENTUCKY	0	1,256	0
LOUISIANA	266,640	113,607	8,278,900
MAINE	0	0	0
MARYLAND	0	6,261	0
MASSACHUSETTS	0	0	0
MICHIGAN	200,175	28,102	60,405
MINNESOTA	27	3,886	0
MISSISSIPPI	3,367	78	342,473
MISSOURI	5700	69,003	0
MONTANA	0	0	0
NEBRASKA	0	0	0
NEVADA	15,760	100	0
NEW HAMPSHIRE	0	0	0
NEW JERSEY	167	359	0
NEW MEXICO	0	10	0
NEW YORK	277,156	43,916	0
NORTH CAROLINA	0	0	0
NORTH DAKOTA	7	441	0
OHIO [1]	3,643	176,810	1,330,688
OKLAHOMA	63,206	898	64,703
OREGON [1]	25	26	0
PENNSYLVANIA	0	8,881	0
PUERTO RICO	0	38,162	0
RHODE ISLAND	0	0	0
SOUTH CAROLINA	85,878	35,767	0
SOUTH DAKOTA	0	0	0
TENNESSEE	0	0	1,583,784
TEXAS	52,391	521,822	12,194,749
TRUST TERRITORIES	0	0	0
UTAH	40,581	394	0
VERMONT	6	3	0
VIRGIN ISLANDS	0	0	0
VIRGINIA	0	13,288	0
WASHINGTON	14	0	0
WEST VIRGINIA	17,334	28,699	0
WISCONSIN	0	2659	0
WYOMING	0	0	0
CBI [2]	0	0	70
TOTAL	2,275,783	1,280,216	27,956,288

[1] Some sites in these states claimed their data as CBI. The national landfill quantity includes hazardous waste landfilled at the CBI sites. The State quantities do not include hazardous waste landfilled at the CBI sites (Total of 383,632 tons).

[2] To preserve confidentiality, CBI data for underground injection were not incorporated into the State totals.

NOTE: Columns may not sum due to rounding.

WASTE MINIMIZATION

Of the 20,713[8] sites that reported in 1989, 6,067 sites (29 percent) engaged in one or more new waste minimization[9] activities during 1989. These 6,067 sites accounted for 50 percent of the total quantity of RCRA hazardous waste generated in the nation, indicating that many of the largest generators did engage in new waste minimization activities in 1989. Approximately 37 percent of all sites reported conducting an opportunity assessment in 1988 or 1989 to identify practices that could lead to waste minimization.

The sites that engaged in new waste minimization activities during 1989 did so for only some of the hazardous wastes they generated. Nationally, of the 147,295 wastes[10] reported in 1989, only 11,434 wastes, or 8 percent, were targets of a new waste minimization activity. Moreover, these wastes comprised only 8.2 million tons, or 4 percent, of the total quantity of hazardous waste generated. Wastewaters, the largest quantity hazardous wastes, were infrequently the targets of new waste minimization activities.

Approximately 38 percent of the sites in the manufacturing industries (two-digit SIC codes 20 to 39) engaged in new waste minimization activities compared to the national average of 29 percent. Manufacturing sites also reported new waste minimization activities on individual

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[8] Waste minimization data from 19 CBI sites were not included in the analyses.

[9] Waste minimization refers to source reduction and/or recycling.

[10] A site required to submit the 1989 Hazardous Waste Report completed a Form GM if it generated or shipped any quantity of RCRA hazardous waste during 1989.

A complete, separate, and independent Form GM was submitted for each RCRA hazardous waste:

- generated on site during 1989 from production processes or service activities;
- shipped off site during 1989 that was received from off site and had not been recycled, blended, or otherwise treated on site; or,
- residual generated during 1989 from the on-site treatment, disposal, or recycling of wastes.

wastes almost twice as frequently as did sites outside that sector (9.5 percent of individual wastes minimized, versus 5.1 percent).

Of all waste minimization activities reported, 90 percent of them involved source reduction, compared to only 16 percent that involved recycling (6% involved both source reduction and recycling). The most common source reduction activities were process modifications and good operating practices, cited by 34 percent and 33 percent of the sites, respectively.[11] The most common wastes that were subjected to waste minimization (by source reduction or recycling) during 1989 were ignitable wastes (EPA waste code D001) and solvents (EPA waste codes F001, F002, F003, F005). The most commonly reported factors limiting the sites from initiating new waste minimization activities were economic infeasibility (the cost savings in waste management or production would not recover the capital investment), lack of technical information, and concerns that product quality would decline. Permitting burdens were cited infrequently as a reason for not initiating new waste minimization activities.

COMPARISON TO 1987 HAZARDOUS WASTE ACTIVITIES

Quantity Generated and Number of Generators

The quantity of RCRA hazardous waste generated in the United States declined from 238.3 million tons in 1987 to 197.5 million tons in 1989, a reduction of 17 percent. This decrease was largely the result of shifts in the management of wastewaters from surface impoundments that were subject to RCRA permitting requirements to tanks that were exempt from those requirements. The number of large quantity generators reported in 1989 (20,233), was 14 percent higher than that reported in 1987 (17,677). Nearly all the increase in the number of

[11] Examples of process modifications include better control on operating conditions, change from solvents to aqueous cleaners, and closed-loop recycling. Examples of good operating practices include improved maintenance scheduling, segregation of hazardous waste from non-hazardous waste, and segregation of recyclable waste from non-recyclable waste.

generators was among sites that generated fewer than 13 tons. The number of sites that reported generating more than 13 tons was about the same in 1987 and 1989.

A comparison of the individual sites reporting as large quantity generators in 1987 and 1989 finds that only 52 percent of the generators in 1989 also reported in 1987. However, the sites that reported in both years accounted for approximately 98 percent of the total quantity of waste generated in both 1987 and 1989. Among larger generators (those that generated more than 100 tons in either year), approximately 84 percent of the sites reporting in 1987 also reported in 1989. Larger generators also appear to report consistently over the years, while many of the smaller large quantity generators appear to meet reporting thresholds only once or in occasional years.

Quantity Managed and Number of TSD Facilities

The quantity of RCRA hazardous waste managed in units subject to RCRA permitting requirements decreased by 16 percent, from 233.5 million tons in 1987 to 196.5 million tons in 1989. Most of the decrease resulted not from changes in the quantity of waste produced, but rather from a change in waste management practices. A number of larger sites that had managed wastewaters in surface impoundments subject to RCRA permitting requirements have converted to tank management that is exempt from RCRA permitting requirements. The number of TSD facilities reporting decreased from 3,308 in 1987 to 3,078 in 1989, a decline of 7 percent.

Hazardous Waste Imports and Exports

Approximately 4 million tons of hazardous waste were shipped to another State for management in 1989, compared to 3.6 million tons in 1987, an increase of 10 percent.

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NATIONAL BIENNIAL RCRA HAZARDOUS WASTE REPORT

(Based on 1989 Data)

1.1 INTRODUCTION

The United States Environmental Protection Agency's (EPA) mission to protect human health and the environment includes the responsibility to manage, jointly with the States, the nation's hazardous waste. As part of this task, EPA and State environmental offices collect and maintain information regarding the generation, handling, and final disposition of that waste.

In accordance with the Resource Conservation and Recovery Act (RCRA) of 1976 and its subsequent amendments, EPA's responsibilities include the collection of information from the regulated community every two years on hazardous waste generation and management. This report, the National Biennial RCRA Hazardous Waste Report, to be referred to hereafter as the National Biennial Report, presents national, regional and State[1] summaries of 1989 waste generation and management data. The data in the report include: 1) the number of hazardous waste generators regulated under RCRA, and the types and quantities of RCRA waste they generate; 2) the number of treatment, storage, and disposal (TSD) facilities; and 3) information on waste minimization practices. The report does not address RCRA wastes that were managed exclusively in hazardous waste management units exempt from RCRA permitting requirements (e.g., a wastewater treatment tank unit, whose discharge is regulated by the Clean Water Act). It also does not include waste that is regulated under RCRA that is subsequently exported out of the United States.

[1] Throughout this report, the term "State" includes the District of Columbia, Puerto Rico, Guam, the Trust Territories, and the Virgin Islands.

1.2 REPORT OVERVIEW

This 1989 National Biennial Report consists of five chapters and four appendices. Chapter 1 focuses on the administration of the Biennial Reporting System and includes a discussion of the known limitations of the data. Chapter 2 describes the amount of RCRA hazardous waste that is generated and managed in the nation. Chapter 3 discusses waste minimization activities at RCRA hazardous waste generation and management facilities. Chapter 4 presents a comparison of the 1989 data to data included in the "1987 National Biennial RCRA Hazardous Waste Report." The comparison includes the quantities of waste generated and the number of large quantity generators, on regional and State levels; types and the quantities of waste managed and the number of TSD facilities, on a regional and State level; and the types of waste management methods used. Chapter 5 presents profiles of the RCRA hazardous waste generation and management activities in individual States. These profiles provide data pertaining to generation and management practices, imports to and exports from the State, quantities of waste types generated, the types of RCRA waste and the methods used to manage them, and the 40 largest generators and TSD facilities within each State.

The four appendices include definitions of terms (Appendix A), a list of system type codes (Appendix B), a list of related documents that may be of interest to the reader (Appendix C), and a list of EPA waste codes (Appendix D).[2]

[2] Throughout this document, any reference to "waste" or "hazardous waste" indicates RCRA hazardous waste. Similarly, references to "waste codes" or "EPA waste codes" indicate RCRA hazardous waste codes.

1.3 DESCRIPTION OF THE NATIONAL BIENNIAL REPORT

The National Biennial Report is based on hazardous waste reports that are filed by generators and managers of RCRA hazardous waste. These sites submit information about RCRA hazardous waste that is shipped off site or managed at the same site where it is generated. The site reports are submitted to EPA regional offices, or to States authorized to administer the RCRA programs, by March 1 of each even-numbered year. The reports describe the types and quantities of RCRA hazardous waste generated or managed in the preceding odd-numbered year. The 1989 National Biennial Report is a census of this regulated community.

The authorizing legislation for the National Biennial Report is contained in Sections 3002 and 3004 of the Resource Conservation and Recovery Act (RCRA) of 1976, P.L., 94-580. Section 3002 requires the EPA to establish standards for recordkeeping practices that accurately identify the quantities of RCRA hazardous wastes generated, the constituents thereof, and the disposition of such wastes. Section 3002 also calls for the submission of reports to the EPA, or the authorized State, setting out the quantities and disposition of RCRA hazardous wastes identified or listed under RCRA Subtitle C that are generated at the site. Section 3004 of RCRA requires the EPA to promulgate regulations establishing standards applicable to hazardous waste TSD facilities. The TSD facilities are required to maintain records about and report all hazardous wastes identified or listed in Subtitle C of RCRA that are treated, stored, disposed or recycled. In 1984, Congress passed the Hazardous and Solid Waste Amendments (HSWA) which requires that sites report waste minimization information through biennial reports. The amendments require the regulated community to report on changes in waste volume and toxicity that were achieved during the reporting year.

In response to the RCRA and HSWA requirements, EPA developed regulations that specify when generators or TSD facilities must complete hazardous waste reports and what types of information must be included. The regulations for hazardous waste report requirements are found in Title 40 of the Code of Federal Regulations, Section 262.41 (40 CFR 262.41) for generators and 40 CFR 264.75 and 265.75 for TSD facilities.

1.4 WHO MUST FILE RCRA HAZARDOUS WASTE REPORTS

Hazardous waste reports must be filed by generators and managers of RCRA hazardous waste that meet certain criteria. TSD facilities were required to complete reports for the 1989 National Biennial Report if the site managed RCRA hazardous waste in units subject to RCRA permitting requirements. These sites operated under either RCRA Interim Status (Part A Permit Application filed) or a RCRA Permit (Part B Permit Application approved).

A RCRA hazardous waste generator was required to file a hazardous waste report if the site met the definition of a RCRA large quantity generator during 1989. Large quantity generation status was determined by the following RCRA criteria:

- The site generated in any single month 1,000 kg (2,200 lbs) or more of RCRA hazardous waste; or
- The site generated in any single month or accumulated at any time more than 1 kg (2.2 lbs) of RCRA acute hazardous waste; or
- The site generated or accumulated at any time more than 100 kg (220 lbs) of spill cleanup material contaminated with RCRA acute hazardous waste.

Throughout the National Biennial Report, all references to "generators" indicate sites that meet these criteria. Waste quantities managed on site in units exempt from RCRA permitting requirements are not counted in determining large quantity generator status.

1.5 DATA COLLECTION

1.5.1 Background

The legislation that established the RCRA program provides for a division of responsibilities between EPA and the States. Any State may apply to EPA for authority to establish and operate the RCRA program. The State must demonstrate that its RCRA program is equivalent to, no less stringent than, and consistent with the EPA RCRA program. Upon approval, a State has the authority to operate all or part of the RCRA program in lieu of EPA.

State RCRA programs may be more stringent or broader in scope than the EPA RCRA program. States may, if they choose, regulate additional wastes, require permits for additional types of waste management facilities, or require reporting from sites that do not meet the generation quantity threshold established under the Federal RCRA regulations that were discussed in Section 1.4. The biennial report data collection process, therefore, has at its core the requirements of federal regulations, while individual States may have additional and sometimes more stringent State data requirements.

1.5.2 Minimum Data Requirements

The EPA designed hazardous waste report forms and instructions for States, and often administers the data collection effort in States that are not authorized to operate the RCRA program. States authorized to administer their own RCRA program may collect data with EPA-designed hazardous waste report forms or may collect equivalent information on State-designed forms. Authorized States may also require more frequent reporting or may request additional types of information.

There is, however, a requirement to collect a common and minimum set of data elements. The minimum data requirements are specified in the Code of Federal Regulations. Data that

generators of hazardous waste are required to report are specified in 40 CFR 262.41. Data that TSD facilities must provide are specified in 40 CFR 264.75 and 265.75.

RCRA hazardous waste generators must provide the following data:

- The EPA identification number, name, and address of the generator;
- The calendar year covered by the report;
- The EPA identification number, name, and address for each off-site TSD facility in the United States to which waste was shipped during the year;
- The name and EPA identification number of each transporter used during the reporting year for shipments to a TSD facility within the United States;
- A description, EPA hazardous waste number (from 40 CFR Part 261, Subpart C or D), and quantity of each RCRA hazardous waste shipped off site to a TSD facility within the United States. This information must be listed by the EPA identification number of each off-site TSD facility to which waste was shipped;
- A description of the efforts undertaken during the report year to reduce the volume and toxicity of waste generated;
- A description of the changes in volume and toxicity of waste actually achieved during 1989 as compared to 1988; and
- The certification signed by the generator or authorized site representative.

A generator that also manages waste on site must comply with the reporting requirements both as a generator and as a TSD facility.

TSD facilities must provide the following data:

- The EPA identification number, name, and address of the facility;
- The calendar year covered by the report;

- A description and the quantity of each RCRA hazardous waste the facility both generated and managed, as well as waste received, during the year. For off-site facilities, this information must be listed by the EPA identification number of each generator;

- For off-site facilities, the EPA identification number of each RCRA hazardous waste generator from which the facility received hazardous waste during the year; for imported shipments, the name and address of the foreign generator;

- The method of treatment, storage, or disposal for each RCRA hazardous waste;

- For generators that treat, store, dispose, or recycle hazardous waste on site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;

- For facilities that treat, store, dispose or recycle RCRA hazardous waste on site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years, to the extent such information is available for the years prior to 1984; and

- The certification signed by the owner or operator of the facility or authorized site representative.

1.5.3 Roles and Responsibilities

States: States are required to submit their biennial report data to U.S. EPA under 40 CFR 271.17 (a). This section of the Code of Federal Regulations specifies that any information obtained or used in the administration of a State program shall be available to EPA upon request without restriction.

A State can be the sole implementer of the data collection process (i.e., it collects both basic waste [as required by Sections 3002 and 3004 of RCRA] and HSWA-required waste minimization data from its reporting sites), or it may implement the process jointly with the region (i.e., the State collects only basic waste data while the region collects waste minimization data). States may also provide additional data that facilitates supplemental

analyses of hazardous waste management practices. (All States must at least provide the minimum required data specified in the Code of Federal Regulations.)

Regions: A region may be the sole implementer of the data collection process (i.e., it collects both basic waste and HSWA-required waste minimization data from its reporting sites), or it may be a joint implementer with the State (i.e., the State collects only basic waste while the region collects waste minimization data). The region may have no implementer role at all.

Whether or not a region has an implementer role, it is responsible for transferring data to EPA Headquarters where it is stored in the Biennial Reporting System (BRS) National Oversight Database. As part of this process, regions must work with the States to ensure the successful transfer of State data from the States to the regions. In their oversight role, the regions are responsible for assessing the quality of the data they receive from an implementer and informing the implementer of any detected errors. The implementer is then responsible for contacting sites and correcting the data.

Headquarters: Headquarters' responsibilities include providing oversight and implementation guidance to the regions and States concerning the biennial reporting process, developing and maintaining the BRS data management system, and publishing the National Biennial Report every two years.

1.6 DATA LIMITATIONS

1.6.1 Background

There are limitations to biennial report data that should be considered when reviewing the National Biennial RCRA Hazardous Waste Report. The limitations result in many cases from the different data collection approaches that were used by the various States. These limitations can be generally classified in two separate groups.

The first group of limitations relates to the scope of the National Biennial Report. The second group includes actual errors in, or omissions from, the database and report. Both sets of problems remain unresolved and contribute to inaccuracies in the data as they are currently reported.

1.6.2 Limitations to the Data

RCRA Wastes Managed Only in Units Exempt from RCRA Permitting Requirements Are Excluded -- Data on RCRA wastes managed only in units that are exempt from RCRA permitting requirements were not consistently collected by States and, where possible, are excluded from this report. Data from other sources (e.g., the 1986 National Survey of Hazardous Waste Generators and TSDR Facilities) indicate that roughly two-thirds of the RCRA hazardous waste generated in a typical year is managed in units exempt from RCRA permitting requirements.

Use of Waste Management Codes Is Inconsistent -- At least two different sets of codes were used by States to describe the methods used to treat, store, dispose, or recycle RCRA hazardous wastes. Some States customized the basic sets, producing a large number of code system variants. The need to translate these varying code systems into a common system for this Report lends, in many cases, to a loss of detail.

Quantities in Storage Are Excluded from Management Totals -- The hazardous waste management methods reported here represent the primary method of managing the waste. Because storage is only an interim step and never the primary management method for RCRA hazardous waste, quantities in storage are excluded from the management exhibits in Chapter 2. Counts of TSD facilities include sites that have storage in units subject to RCRA permitting requirements as their only management method. Counts of treatment, disposal and recycling (TDR) facilities exclude sites that have only storage as a management method subject to RCRA permitting requirements.

Transfer Storage Facility Shipments Are Excluded from Generation Quantities -- Some facilities only receive waste from off site, aggregate it into like batches, then ship it to another facility for final disposition. Since the quantity of waste shipped is often used as a proxy for the quantity of waste generated, such "transfer storage" facilities may appear to be large generators when, in reality, they generate little or no waste, but only receive it and ship it off site again. To the extent possible, quantities that were only received then shipped off site are not included in the quantities of waste generated in each State. In some States it may not have been possible to identify these sites and subtract these quantities.

This Report Includes Only Hazardous Wastes Regulated by RCRA -- Some States provided additional generation data on State-regulated wastes, such as waste oils, polychlorinated biphenyls (PCBs), and asbestos. These wastes are usually not regulated by RCRA and their quantities are excluded from this Report. Waste oils, PCBs, and asbestos are subject to RCRA regulation only if they are mixed with other RCRA wastes or if they meet one or more of the RCRA waste characteristic standards.

1.6.3 Errors or Omissions in the Data

Inconsistently Reported Hazardous Wastewaters Dominate Quantities -- RCRA hazardous wastewaters represented approximately 95 percent of the total quantity of waste included in this Report. Because of confusion over the correct interpretation of RCRA regulations relating to wastewaters, some sites apparently failed to include RCRA hazardous wastewaters managed in units subject to RCRA permitting requirements in their report submissions. These exclusions may have resulted in artificially low State and national quantity totals.

Counts of RCRA Large Quantity Generators Are Imprecise for Some States -- Many States impose more stringent regulations on hazardous waste generators than EPA. These States may regulate additional wastes not classified as hazardous under RCRA, may require hazardous waste reports from sites that generate quantities of waste small enough to be exempt from reporting under RCRA, or both. As a result, some States have included sites that do not meet the RCRA large quantity generator criteria. Other States appear to have excluded sites that do meet the RCRA criteria.

Waste Minimization Data Are not Available for All Sites -- The implementation of the waste minimization reporting requirements was incomplete in 1989. Data on waste minimization practices and activities were not collected from all sites in those States that used their own data collection report forms. This issue is explored in more detail in Chapter 3.

Waste Management Data Were Not Available for All States -- Two States, Massachusetts and Maine, were unable to provide 1989 data on TSD facilities and quantities of waste managed.

2. NATIONAL RESULTS

2.1 INTRODUCTION

Chapter 2 summarizes the 1989 national data on RCRA hazardous waste generation and management. Sections 2.2 and 2.3 discuss hazardous waste generation. The discussion addresses quantities of hazardous waste that were generated, the types of hazardous wastes generated, and the number of generators. Sections 2.4 and 2.5 discuss RCRA hazardous waste management. The discussion addresses the quantities of RCRA hazardous waste that were managed, the number of TSD facilities, the management methods employed, and the types of RCRA hazardous wastes managed by different methods. Section 2.6 addresses the movement of RCRA hazardous waste between States.

2.2 RCRA HAZARDOUS WASTE GENERATION, QUANTITY GENERATED, AND NUMBER OF LARGE QUANTITY GENERATORS

Exhibit 2-1 shows the 10 EPA regions and the States that comprise them. Exhibit 2-2 presents, by EPA region, the total quantity and percentage of RCRA hazardous waste generated and the associated number and percentage of RCRA large quantity generators. A total of 197.5 million tons[1] of hazardous waste was generated nationwide by 20,233 generators. Regions 2, 4, 5, and 6 generated the most RCRA hazardous waste, with each of the regions generating more than 19 percent of the national total quantity. Collectively, these 4 regions accounted for nearly 85 percent of the national total. More than half of the number of generators were located in Regions 4, 5, and 6, while relatively few (9.0%) were located in Regions 7, 8, and 10. Region 2 generated the largest quantity of hazardous waste, with 47.8 million tons, while Region 5 had the largest number of generators, with 4,922 sites.

[1] This report does not include the wastes classified as hazardous by the new Toxicity Characteristic Leaching Procedure (TCLP). The TCLP rule became effective on September 25, 1990, for large quantity generators and on March 29, 1991, for small quantity generators.

Exhibit 2-1. EPA Regions in the United States

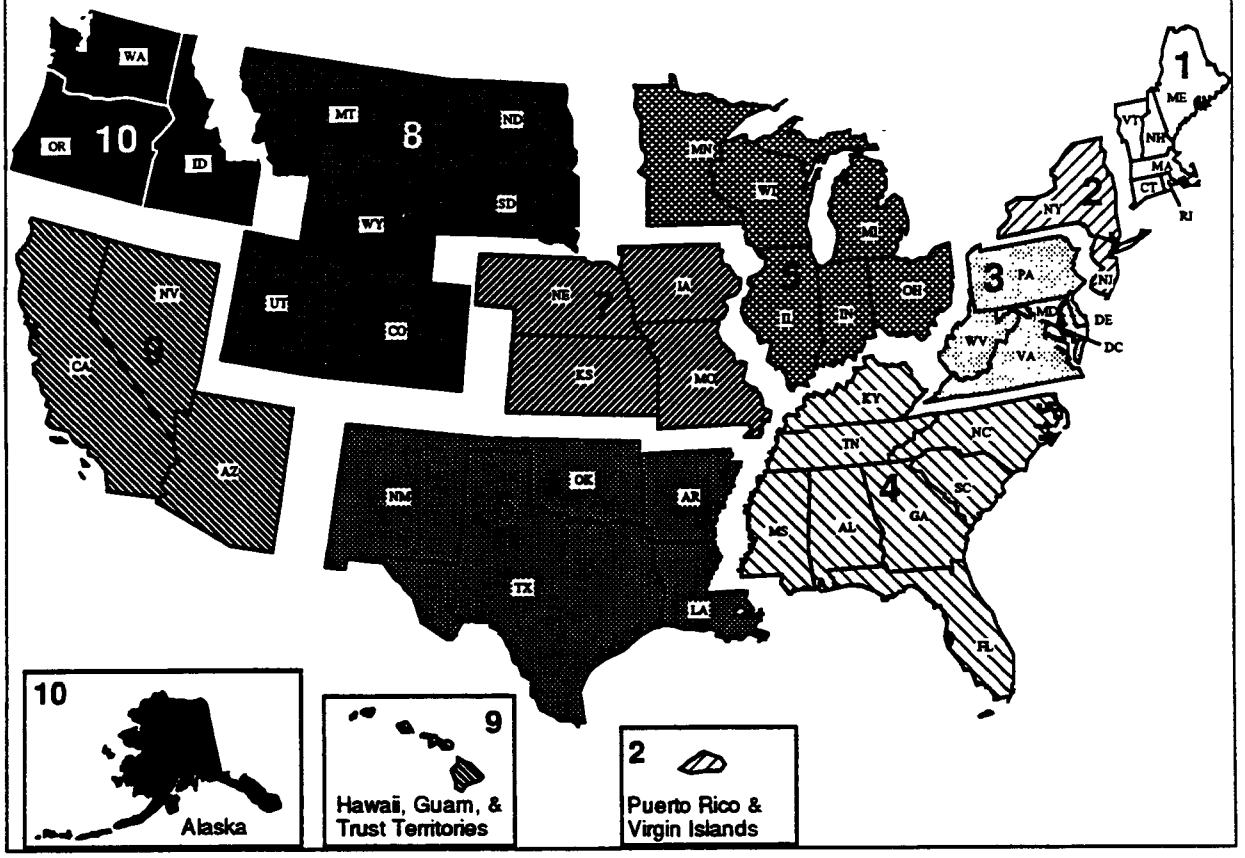


Exhibit 2-2. Number and Percentage of RCRA Hazardous Waste Generators and Total RCRA Hazardous Waste Quantity Generated, by EPA Region, 1989

EPA REGION	TOTAL GENERATED	PERCENT	NUMBER OF GENERATORS	PERCENT
1	1,514,241	0.8	1,390	6.9
2	47,755,486	24.2	2,359	11.7
3	21,151,353	10.7	1,848	9.1
4	39,354,148	19.9	2,984	14.7
5	41,746,455	21.1	4,922	24.3
6	38,288,120	19.4	2,257	11.2
7	2,246,701	1.1	693	3.4
8	366,996	0.2	292	1.4
9	4,802,606	2.4	2,634	13.0
10	275,004	0.1	854	4.2
TOTAL	197,501,112	100.0	20,233	100.0

NOTE: Columns may not sum due to rounding.

Exhibit 2-3 compares the regional distributions of hazardous waste quantities and large quantity generators. There is little relationship between the number of generators and the quantity of waste. For example, Region 2 has 24.2 percent of the waste, but only 11.7 percent of the generators. Conversely, Region 9 has only 2.4 percent of the waste, but 13 percent of the generators. This disparity results from the fact that Region 2 has one extremely large generator, while many sites in Region 9 generated relatively small quantities of waste.

Exhibit 2-4 presents the quantity of RCRA hazardous waste generated and the number of generators by State in alphabetical order. Exhibit 2-5 presents the rank order of States based on the quantity of RCRA hazardous waste generated. New Jersey reported the largest amount generated during 1989, 47.1 million tons, or 23.8 percent of the national total, followed by Michigan with 35.1 million tons, Tennessee with 34.4 million tons, Texas with 28.2 million tons, and West Virginia with 14.4 million tons. The Trust Territories reported the least, with 23 tons generated, followed by Guam with 573 tons, South Dakota with 1,088 tons, and Hawaii with 2,149 tons.

Exhibit 2-6 presents the rank order of States based on the number of generators. California ranks first in the number of generators with 2,387, followed by Texas with 1,575, New Jersey with 1,434, and Illinois with 1,425. While California reported the largest number of generators, 11.8 percent of the national total, the State generated only 2.3 percent of the national total quantity of RCRA hazardous waste, again illustrating that there is little relationship between the number of generators and the quantity of RCRA hazardous waste that they generate.

The map in Exhibit 2-7 shows, by State, the range of RCRA hazardous waste generated in the nation. Twenty-two of the 55 States each reported generating less than 100,000 tons of hazardous waste (11 States generated less than 10,000 tons each), together representing only 0.2 percent of the nationwide generation. Conversely, 5 States generated more than 14 million tons each, together accounting for more than 80 percent of the total U.S. generation.

Exhibit 2-3. Comparison of Percentage of RCRA Hazardous Waste Quantity Generated and Percentage of Large Quantity Generators, by EPA Region, 1989

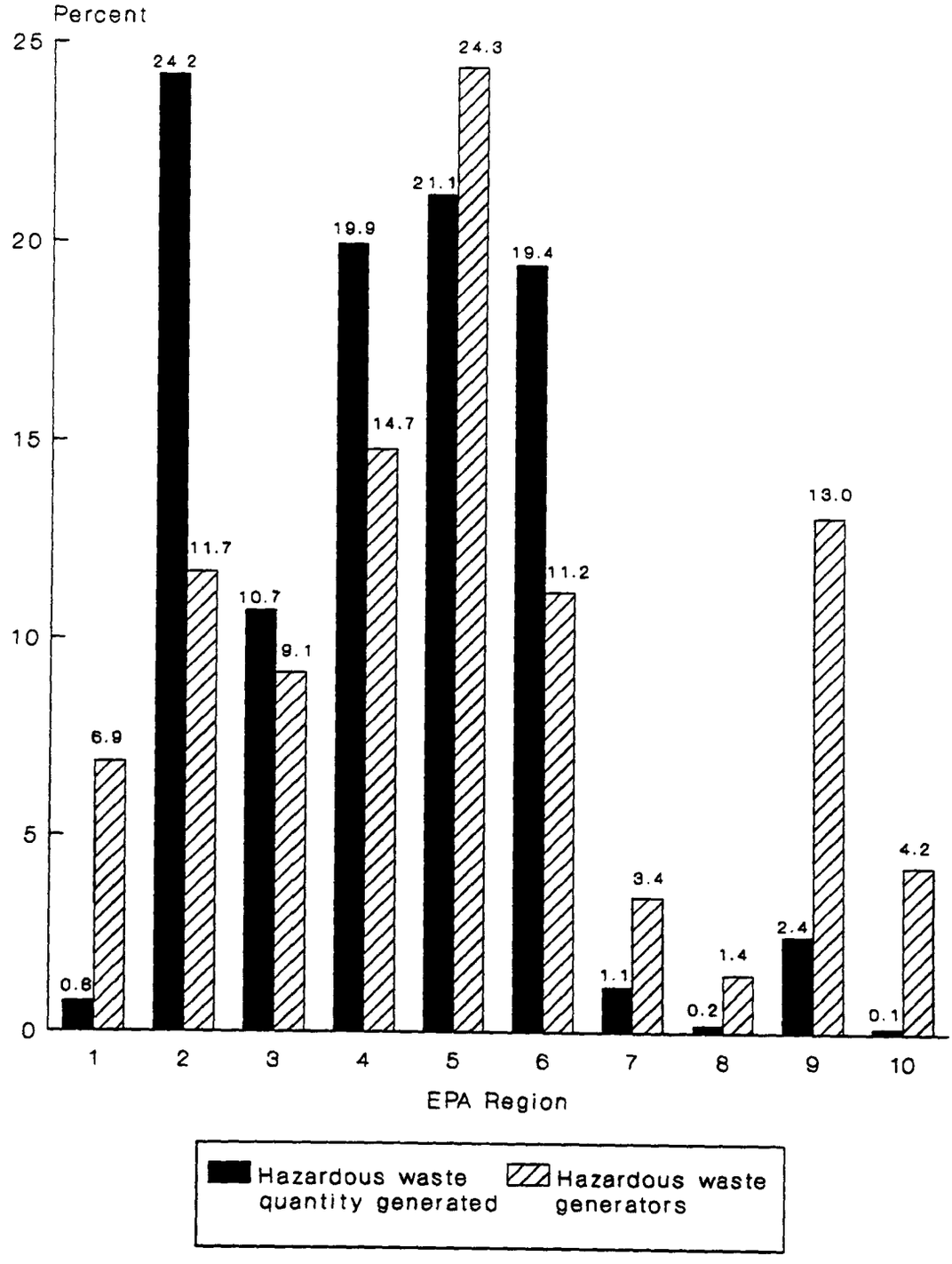


Exhibit 2-4. Quantity of RCRA Hazardous Waste Generated, and Number of Hazardous Waste Generators, by State, 1989

STATE	HAZARDOUS WASTE QUANTITY			HAZARDOUS WASTE GENERATORS		
	RANK	TOTAL GENERATED (tons)	PERCENT	RANK	NUMBER OF GENERATORS	PERCENT
ALABAMA	22	403,701	0.2	25	224	1.1
ALASKA	49	3,664	<0.05	43	43	0.2
ARIZONA	31	124,595	0.1	28	175	0.9
ARKANSAS	16	805,150	0.4	40	51	0.3
CALIFORNIA	8	4,670,579	2.3	1	2,387	11.8
COLORADO	32	117,347	0.1	31	131	0.6
CONNECTICUT	13	1,390,314	0.7	13	506	2.5
DELAWARE	40	19,766	<0.05	39	59	0.3
DISTRICT OF COLUMBIA	51	2,357	<0.05	52	11	0.1
FLORIDA	20	411,832	0.2	20	368	1.8
GEORGIA	10	2,615,210	1.3	19	378	1.9
GUAM	54	573	<0.05	53	10	<0.05
HAWAII	52	2,149	<0.05	46	28	0.1
IDAHO	42	15,062	<0.05	48	20	0.1
ILLINOIS	14	1,381,799	0.7	4	1,425	7.0
INDIANA	11	1,843,015	0.9	10	697	3.4
IOWA	34	76,240	<0.05	31	131	0.6
KANSAS	12	1,713,963	0.9	26	192	0.9
KENTUCKY	30	149,612	0.1	21	337	1.7
LOUISIANA	6	9,094,768	4.6	16	445	2.2
MAINE	36	52,528	<0.05	41	46	0.2
MARYLAND	24	265,227	0.1	18	385	1.9
MASSACHUSETTS	37	34,142	<0.05	14	494	2.4
MICHIGAN	2	35,143,264	17.8	8	824	4.1
MINNESOTA	26	239,098	0.1	24	241	1.2
MISSISSIPPI	17	717,291	0.4	29	153	0.8
MISSOURI	23	384,289	0.2	22	298	1.5
MONTANA	47	4,978	<0.05	46	28	0.1
NEBRASKA	35	72,209	<0.05	38	72	0.4
NEVADA	48	4,685	<0.05	45	32	0.2
NEW HAMPSHIRE	41	18,211	<0.05	33	111	0.5
NEW JERSEY	1	47,096,658	23.8	3	1,434	7.1
NEW MEXICO	44	10,961	<0.05	41	46	0.2
NEW YORK	21	406,910	0.2	7	848	4.2
NORTH CAROLINA	18	586,338	0.3	11	684	3.4
NORTH DAKOTA	38	28,840	<0.05	50	17	0.1
OHIO	9	2,727,383	1.4	5	1,176	5.8
OKLAHOMA	29	205,382	0.1	30	140	0.7
OREGON	39	27,954	<0.05	36	77	0.4
PENNSYLVANIA	15	1,246,706	0.6	6	1,004	5.0
PUERTO RICO	25	246,161	0.1	37	76	0.4
RHODE ISLAND	46	5,565	<0.05	27	191	0.9
SOUTH CAROLINA	33	106,224	0.1	17	394	1.9
SOUTH DAKOTA	53	1,088	<0.05	51	12	0.1
TENNESSEE	3	34,363,940	17.4	15	446	2.2
TEXAS	4	28,171,860	14.3	2	1,575	7.8
TRUST TERRITORIES	55	23	<0.05	54	2	<0.05
UTAH	28	211,563	0.1	35	85	0.4
VERMONT	43	13,481	<0.05	44	42	0.2
VIRGIN ISLANDS	45	5,757	<0.05	55	1	<0.05
VIRGINIA	7	5,227,092	2.6	23	287	1.4
WASHINGTON	27	228,323	0.1	9	714	3.5
WEST VIRGINIA	5	14,390,206	7.3	34	102	0.5
WISCONSIN	19	411,897	0.2	12	559	2.8
WYOMING	50	3,180	<0.05	49	19	0.1
TOTAL		197,501,112	100.0		20,233	100.0

NOTE: Columns may not sum due to rounding.

Exhibit 2-5. Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Generated, and Number of Hazardous Waste Generators, 1989

STATE	HAZARDOUS WASTE QUANTITY			HAZARDOUS WASTE GENERATORS		
	RANK	TOTAL GENERATED (tons)	PERCENT	RANK	NUMBER OF GENERATORS	PERCENT
NEW JERSEY	1	47,096,658	23.8	3	1,434	7.1
MICHIGAN	2	35,143,264	17.8	8	824	4.1
TENNESSEE	3	34,363,940	17.4	15	446	2.2
TEXAS	4	28,171,860	14.3	2	1,575	7.8
WEST VIRGINIA	5	14,390,206	7.3	34	102	0.5
LOUISIANA	6	9,094,768	4.6	16	445	2.2
VIRGINIA	7	5,227,092	2.6	23	287	1.4
CALIFORNIA	8	4,670,579	2.4	1	2,387	11.8
OHIO	9	2,727,383	1.4	5	1,176	5.8
GEORGIA	10	2,615,210	1.3	19	378	1.8
INDIANA	11	1,843,015	0.9	10	697	3.4
KANSAS	12	1,713,963	0.9	26	192	0.9
CONNECTICUT	13	1,390,314	0.7	13	506	2.5
ILLINOIS	14	1,381,799	0.7	4	1,425	7.0
PENNSYLVANIA	15	1,246,706	0.6	6	1,004	5.0
ARKANSAS	16	805,150	0.4	40	51	0.3
MISSISSIPPI	17	717,291	0.4	29	153	0.8
NORTH CAROLINA	18	586,338	0.3	11	684	3.4
WISCONSIN	19	411,897	0.2	12	559	2.8
FLORIDA	20	411,832	0.2	20	368	1.8
NEW YORK	21	406,910	0.2	7	848	4.2
ALABAMA	22	403,701	0.2	25	224	1.1
MISSOURI	23	384,289	0.2	22	298	1.5
MARYLAND	24	265,227	0.1	18	385	1.9
PUERTO RICO	25	246,161	0.1	37	76	0.4
MINNESOTA	26	239,098	0.1	24	241	1.2
WASHINGTON	27	228,323	0.1	9	714	3.5
UTAH	28	211,563	0.1	35	85	0.4
OKLAHOMA	29	205,382	0.1	30	140	0.7
KENTUCKY	30	149,612	0.1	21	337	1.7
ARIZONA	31	124,595	0.1	28	175	0.9
COLORADO	32	117,347	0.1	31	131	0.6
SOUTH CAROLINA	33	106,224	0.1	17	394	1.9
IOWA	34	76,240	<0.05	31	131	0.6
NEBRASKA	35	72,209	<0.05	38	72	0.4
MAINE	36	52,528	<0.05	41	46	0.2
MASSACHUSETTS	37	34,142	<0.05	14	494	2.4
NORTH DAKOTA	38	28,840	<0.05	50	17	0.1
OREGON	39	27,954	<0.05	36	77	0.4
DELAWARE	40	19,766	<0.05	39	59	0.3
NEW HAMPSHIRE	41	18,211	<0.05	33	111	0.5
IDAHO	42	15,062	<0.05	48	20	0.1
VERMONT	43	13,481	<0.05	44	42	0.2
NEW MEXICO	44	10,961	<0.05	41	46	0.2
VIRGIN ISLANDS	45	5,757	<0.05	55	1	<0.05
RHODE ISLAND	46	5,565	<0.05	27	191	0.9
MONTANA	47	4,978	<0.05	46	28	0.1
NEVADA	48	4,685	<0.05	45	32	0.2
ALASKA	49	3,664	<0.05	43	43	0.2
WYOMING	50	3,180	<0.05	49	19	0.1
DISTRICT OF COLUMBIA	51	2,357	<0.05	52	11	0.1
HAWAII	52	2,149	<0.05	46	28	0.1
SOUTH DAKOTA	53	1,088	<0.05	51	12	0.1
GUAM	54	573	<0.05	53	10	<0.05
TRUST TERRITORIES	55	23	<0.05	54	2	<0.05
TOTAL		197,501,112	100.0		20,233	100.0

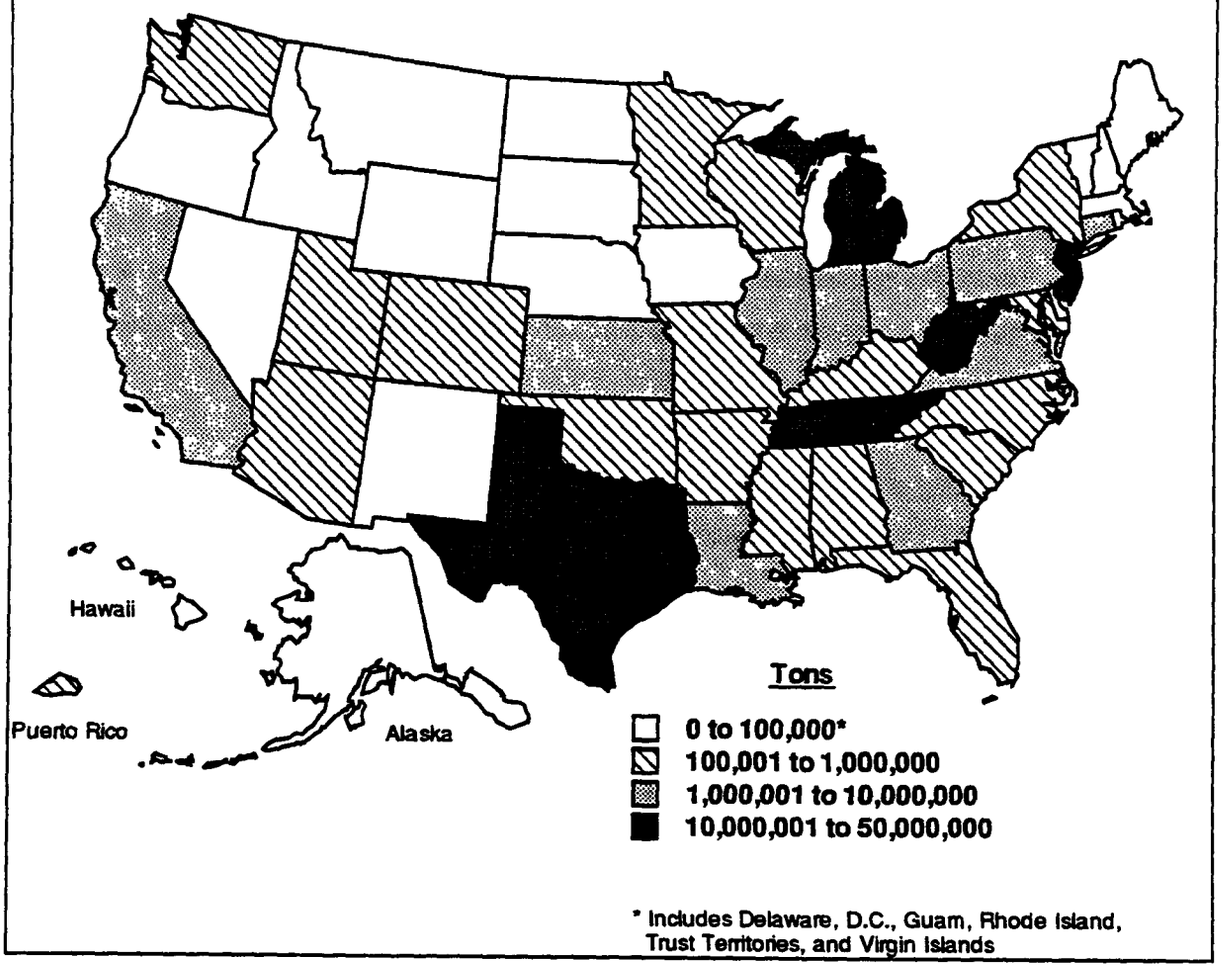
NOTE: Columns may not sum due to rounding.

Exhibit 2-6. Rank Ordering of States Based on Number of Hazardous Waste Generators and Quantity of Hazardous Waste Generated, 1989

STATE	HAZARDOUS WASTE QUANTITY			HAZARDOUS WASTE GENERATORS		
	RANK	TOTAL GENERATED (tons)	PERCENT	RANK	NUMBER OF GENERATORS	PERCENT
CALIFORNIA	8	4,670,579	2.4	1	2,387	11.8
TEXAS	4	28,171,860	14.3	2	1,575	7.8
NEW JERSEY	1	47,096,658	23.8	3	1,434	7.1
ILLINOIS	14	1,381,799	0.7	4	1,425	7.0
OHIO	9	2,727,383	1.4	5	1,176	5.8
PENNSYLVANIA	15	1,246,706	0.6	6	1,004	5.0
NEW YORK	21	406,910	0.2	7	848	4.2
MICHIGAN	2	35,143,264	17.8	8	824	4.1
WASHINGTON	27	228,323	0.1	9	714	3.5
INDIANA	11	1,843,015	0.9	10	697	3.4
NORTH CAROLINA	18	586,338	0.3	11	684	3.4
WISCONSIN	19	411,897	0.2	12	559	2.8
CONNECTICUT	13	1,390,314	0.7	13	506	2.5
MASSACHUSETTS	37	34,142	<0.05	14	494	2.4
TENNESSEE	3	34,363,940	17.4	15	446	2.2
LOUISIANA	6	9,094,768	4.6	16	445	2.2
SOUTH CAROLINA	33	106,224	0.1	17	394	1.9
MARYLAND	24	265,227	0.1	18	385	1.9
GEORGIA	10	2,615,210	1.3	19	378	1.9
FLORIDA	20	411,832	0.2	20	368	1.8
KENTUCKY	30	149,612	0.1	21	337	1.7
MISSOURI	23	384,289	0.2	22	298	1.5
VIRGINIA	7	5,227,092	2.6	23	287	1.4
MINNESOTA	26	239,098	0.1	24	241	1.2
ALABAMA	22	403,701	0.2	25	224	1.1
KANSAS	12	1,713,963	0.9	26	192	0.9
RHODE ISLAND	46	5,565	<0.05	27	191	0.9
ARIZONA	31	124,595	0.1	28	175	0.9
MISSISSIPPI	17	717,291	0.4	29	153	0.8
OKLAHOMA	29	205,382	0.1	30	140	0.7
COLORADO	32	117,347	0.1	31	131	0.6
IOWA	34	76,240	<0.05	31	131	0.6
NEW HAMPSHIRE	41	18,211	<0.05	33	111	0.5
WEST VIRGINIA	5	14,390,206	7.3	34	102	0.5
UTAH	28	211,563	0.1	35	85	0.4
OREGON	39	27,954	<0.05	36	77	0.4
PUERTO RICO	25	246,161	0.1	37	76	0.4
NEBRASKA	35	72,209	<0.05	38	72	0.4
DELAWARE	40	19,766	<0.05	39	59	0.3
ARKANSAS	16	805,150	0.4	40	51	0.3
MAINE	36	52,528	<0.05	41	46	0.2
NEW MEXICO	44	10,961	<0.05	41	46	0.2
ALASKA	49	3,664	<0.05	43	43	0.2
VERMONT	43	13,481	<0.05	44	42	0.2
NEVADA	48	4,685	<0.05	45	32	0.2
MONTANA	47	4,978	<0.05	46	28	0.1
HAWAII	52	2,149	<0.05	46	28	0.1
IDAHO	42	15,062	<0.05	48	20	0.1
WYOMING	50	3,180	<0.05	49	19	0.1
NORTH DAKOTA	38	28,840	<0.05	50	17	0.1
SOUTH DAKOTA	53	1,088	<0.05	51	12	0.1
DISTRICT OF COLUMBIA	51	2,357	<0.05	52	11	0.1
GUAM	54	573	<0.05	53	10	<0.05
TRUST TERRITORIES	55	23	<0.05	54	2	<0.05
VIRGIN ISLANDS	45	5,757	<0.05	55	1	<0.05
TOTAL		197,501,112	100.0		20,233	100.0

NOTE: Columns may not sum due to rounding.

Exhibit 2-7. RCRA Hazardous Waste Generated in the U.S., by State, 1989



The map in Exhibit 2-8 shows, by State, the range of generator counts in the nation. Six of the States each reported more than 1,000 generators. Seven States reported between 501 and 1,000 generators. The two smaller categories of generators, 0 to 100, and 101 to 500, each included 21 States.

Exhibit 2-9 shows the cumulative distribution of waste quantities for the largest 10 percent of generators. This exhibit indicates that: the largest 1 percent of sites generated nearly 97 percent of the RCRA hazardous waste; the largest 2 percent of sites generated 98 percent of the RCRA hazardous waste; and the largest 5 percent of sites generated 99 percent of the RCRA hazardous waste.

Exhibit 2-10 illustrates that the vast majority of RCRA hazardous waste was generated at a small number of sites, while the vast majority of sites generated relatively small quantities of waste. Nearly 76 percent of the respondent sites generated less than 100 tons of RCRA hazardous waste. These sites cumulatively accounted for only 0.2 percent of the nationwide generation. Conversely, only 1.7 percent of the sites generated more than 10,000 tons each, contributing approximately 98 percent of the nationwide generation. These large sites typically generated tremendous quantities of RCRA hazardous wastewater that dwarf the quantities of other forms of generated waste.

Exhibit 2-11 lists the 50 largest RCRA hazardous waste generators in the nation in 1989. The 5 sites that generated the largest quantities of wastes accounted for 55 percent of the national total, while the 50 largest sites together generated 92 percent of the national total quantity. Of the 50 sites, most are manufacturers, mainly in the chemical manufacturing and oil refining industries. Fifteen of these sites are located in Texas, and 8 sites are in Louisiana. The largest generator, E.I. DuPont Chambers Works in Deepwater, New Jersey, generated 46.7 million tons, nearly all of which was RCRA hazardous wastewater. Also ranking among the largest five generators in the nation were The Dow Chemical Company, in Midland, Michigan; Eastman Kodak's Tenn Eastman Company of Kingsport, Tennessee; American Cyanamid Company of Willow Island, West Virginia; and Shell Oil Company of Deer Park, Texas.

Exhibit 2-8. Ranges of Number of Generators, 1989

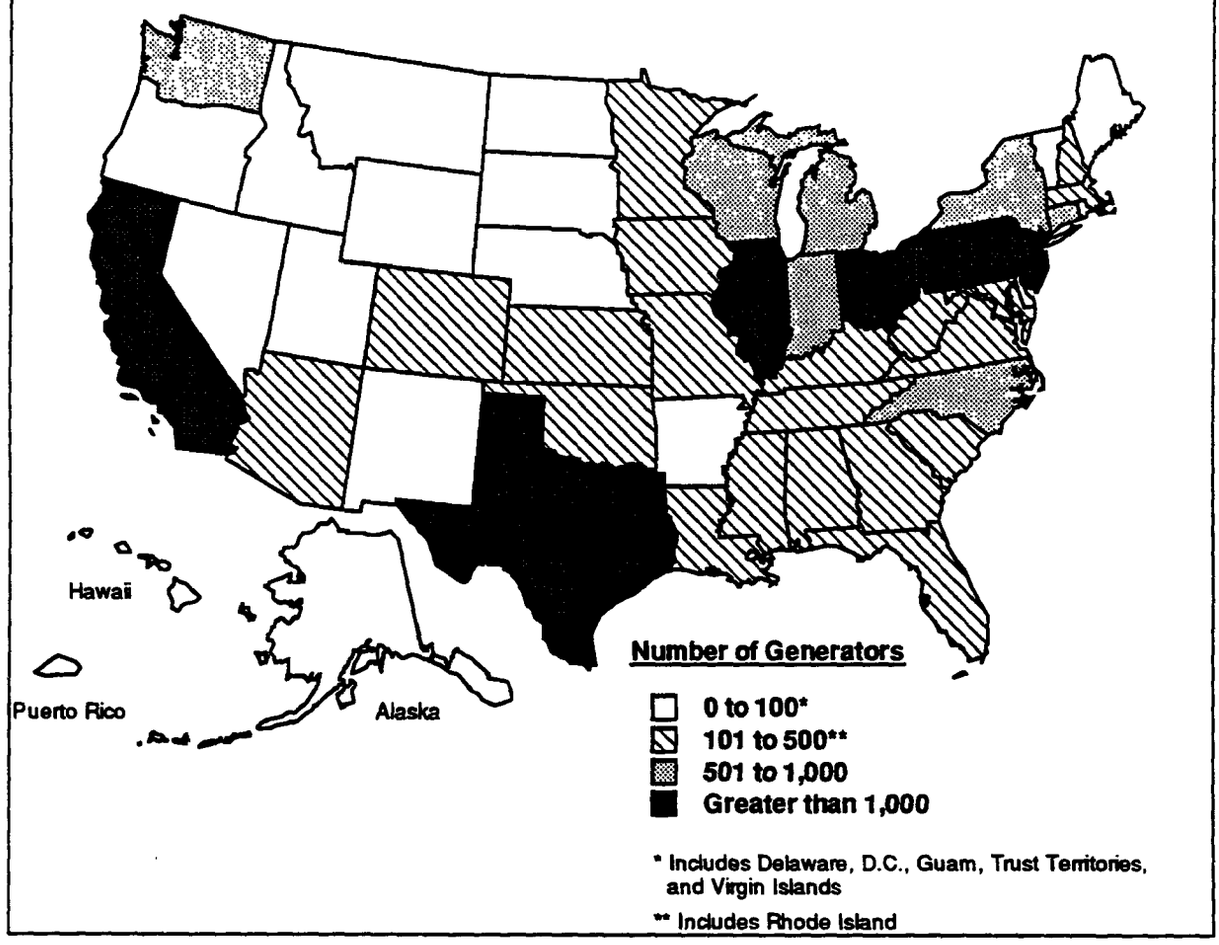


Exhibit 2-9. Cumulative Distribution of the Quantity of RCRA Hazardous Waste Generated by the Largest Ten Percent of Generators, 1989

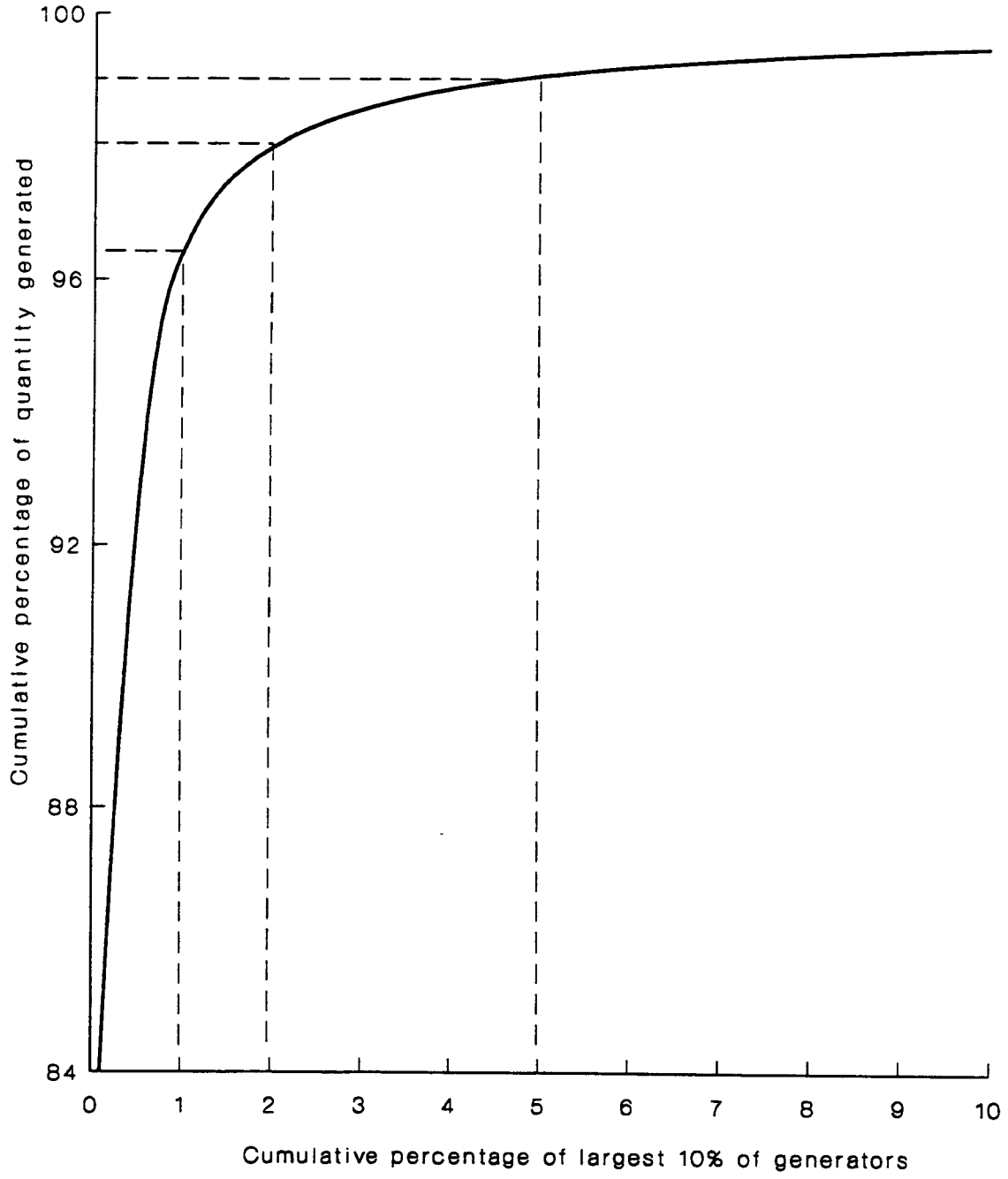


Exhibit 2-10. Percentage of Generators and Quantity of RCRA Hazardous Waste Generated in 3 Ranges of Generation Quantity, 1989

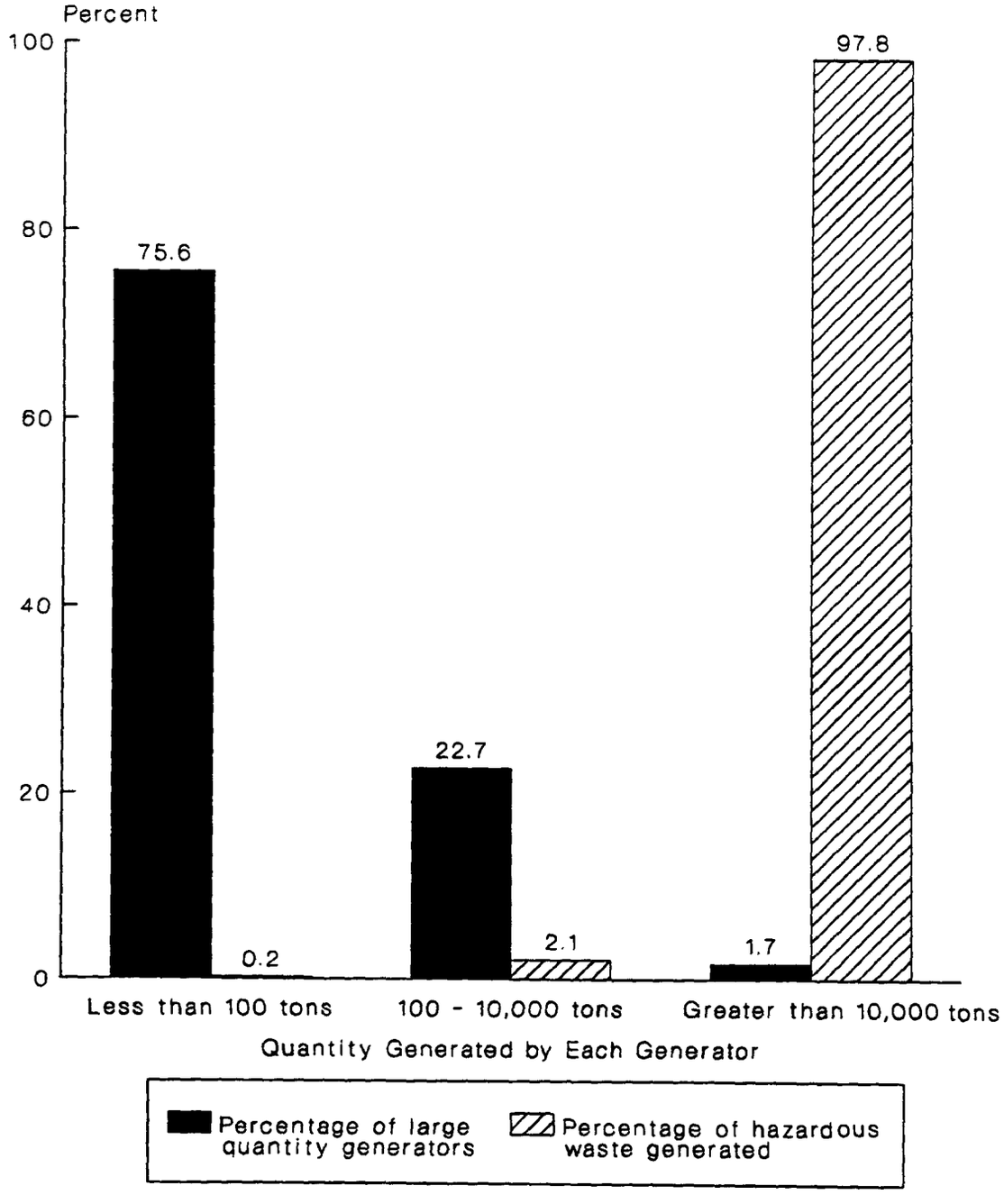


Exhibit 2-11. Fifty Largest RCRA Hazardous Waste Generators in the U.S., 1989

RANK	EPA ID	SITE NAME	CITY	TOTAL GENERATED (tons)
1	NJD002385730	DUPONT E.I. CHAMBERS WORKS	DEEPWATER	46,695,042
2	MID000724724	THE DOW CHEMICAL COMPANY	MIDLAND	33,760,292
3	TND003376928	TENN EASTMAN CO., DIV OF EASTMAN KODAK	KINGSPORT	32,536,940
4	WVD004341491	AMERICAN CYANAMID COMPANY	WILLOW ISLAND	7,886,806
5	TXD067285973	SHELL OIL CO. DEER PARK COMPLEX	DEER PARK	7,840,363
6	WVD005005509	RHONE-POULENC AG. COMPANY	INSTITUTE	5,814,145
7	TXD007330202	TEXAS EASTMAN COMPANY	LONGVIEW	4,507,313
8	VA1210020730	U.S. ARMY AMMUNITION PLANT	RADFORD	4,050,016
9	TXD008123317	E.I. DUPONT DE NEMOURS	VICTORIA	3,635,042
10	LAD008186579	SHELL OIL CO. REFINERY	NORCO	2,390,769
11	GAD003324985	MERCK & CO., INC.	ALBANY	2,153,083
12	TXD001700806	MONSANTO CO.	ALVIN	2,070,731
13	LAD008175390	AMERICAN CYANAMID COMPANY	WESTWEGO	2,043,294
14	KSD007482029	VULCAN MATERIALS COMPANY	WICHITA	1,592,778
15	TND004044491	EI DUPONT DE NEMOURS & CO.	NEW JOHNSONVILLE	1,583,784
16	CAD041472986	NATIONAL SEMICONDUCTOR CORP.	SANTA CLARA	1,510,095
17	TXD008079642	E.I. DUPONT DE NEMOURS	ORANGE	1,474,980
18	TXD008081101	E.I. DUPONT DE NEMOURS	BEAUMONT	1,381,919
19	LAD008213191	RUBICON, INC.	GEISMAR	1,090,953
20	TXD008079527	STERLING CHEM, INC.	TEXAS CITY	1,087,761
21	VAD066000993	AMERICAN TELEPHONE & TELEGRAPH	RICHMOND	933,670
22	CTD990672081	PRATT & WHITNEY, EAST HARTFORD	EAST HARTFORD	920,149
23	OHD042157644	BP CHEMICALS, INC.	LIMA	831,625
24	LAD065470916	WITCO CHEMICAL CORP.	TAFT	777,611
25	TXD083472266	ARCO CHEMICAL COMPANY (CHANNELVIEW)	CHANNELVIEW	721,081
26	LAD008179707	MOBIL OIL CORPORATION	CHALMETTE	701,872
27	LAD001890367	E.I. DUPONT DE NEMOURS & CO.	LAPLACE	699,908
28	CAD097030993	NORRIS INDUSTRIES, INC.	VERNON	695,656
29	MSD008186587	MORTON INTERNATIONAL, INC.	MOSS POINT	670,720
30	TXD000751172	BP CHEMICALS, INC.	GREEN LAKE	655,317
31	ARD043195429	GREAT LAKES CHEMICAL CORPORATION	EL DORADO	653,539
32	WVD056866312	MOBAY CORPORATION	NATRIUM	585,036
33	TXD007376700	HOECHST CELANESE CHEMICAL GROUP, INC.	PAMPA	490,072
34	TXD026040709	HOECHST CELANESE CHEMICAL GROUP, INC.	BAY CITY	484,001
35	TXD078432457	HOECHST CELANESE CHEMICAL GROUP, INC.	PASADENA	461,456
36	IND005159199	INLAND STEEL COMPANY	EAST CHICAGO	434,612
37	IND003913423	BETHLEHEM STEEL CORP. BURNS HARBOR	BURNS HARBOR,	420,578
38	TXD044452324	GAF CORPORATION TEXAS CITY	TEXAS CITY	418,341
39	NCD057454670	OCCIDENTAL CHEM. CORP.-CASTLE HAYNE PLT.	CASTLE HAYNE	413,230
40	OHD005050273	CENTRAL FOUNDRY DIV. GMC	DEFIANCE	407,011
41	ILD006278170	ALLIED-SIGNAL, INC.	METROPOLIS	404,540
42	CA7210020759	RIVERBANK ARMY AMMUNITION PLANT	RIVERBANK	385,307
43	ILD042075333	CABOT CORPORATION	TUSCOLA	369,631
44	FLD004106811	KAISER ALUMINUM & CHEMICAL CORP.	MULBERRY	320,134
45	IND016584641	MIDWEST STEEL COMPANY	PORTAGE	307,659
46	OHD005108477	ARISTECH CHEMICAL CORPORATION	HAVERHILL	304,820
47	TXD026481523	GATX TERMINALS CORPORATION	GALENA PARK	291,991
48	LAD001700756	MONSANTO COMPANY	LULING	289,338
49	TXD000836486	ISK BIOTECH CORP.	HOUSTON	275,941
50	LAD980622104	SHELL CHEMICAL CO. NORCO	NORCO	264,500
TOTAL				180,695,453

NOTE: Columns may not sum due to rounding.

2.3 TYPES OF HAZARDOUS WASTES GENERATED

Exhibit 2-12 shows the types of RCRA hazardous waste generated in the U.S. in 1989. Characteristic waste is classified as hazardous because it is ignitable, corrosive, reactive, or toxic as determined by EPA. These wastes bear EPA waste codes beginning with the letter D. Listed wastes are specifically named in 40 CFR 261.3. They are listed as hazardous because the dangers are attributable to specific risks associated with each chemical or waste. They bear EPA waste codes beginning with the letters F, P, U, or K.

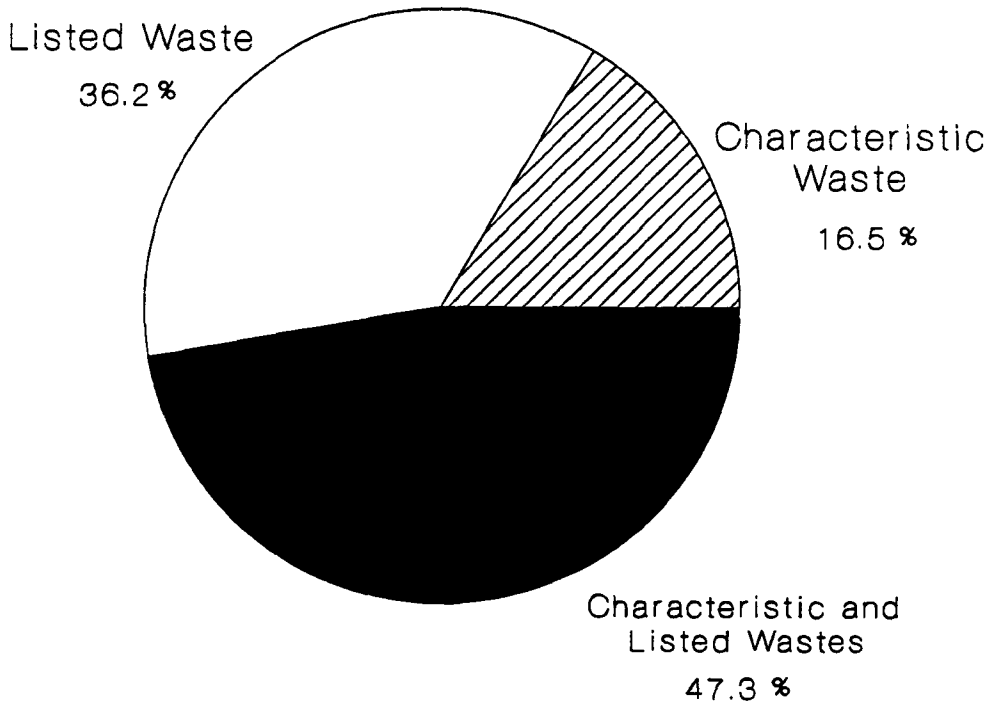
Characteristic wastes were 16.5 percent of the national total. Listed wastes were 36.2 percent, and combined characteristic and listed wastes were 47.3 percent of the total waste generated.

2.4 RCRA HAZARDOUS WASTE MANAGEMENT QUANTITY AND NUMBER OF TREATMENT, STORAGE, OR DISPOSAL FACILITIES

All of the data presented in this section pertain to RCRA hazardous wastes managed in units subject to RCRA permitting requirements. It is important to note that, although the treatment, disposal, or recycling of hazardous waste may ultimately occur in units exempt from RCRA permitting requirements, if the waste was stored in units subject to RCRA permitting requirements (e.g., surface impoundments or waste piles) prior to management in units exempt from RCRA permitting, the waste quantity was classified as being managed in units subject to RCRA permitting requirements and included in the data presented in this section.

Some States reported quantities of RCRA hazardous wastes that were managed exclusively in units exempt from RCRA permitting requirements. To the extent possible, these quantities were excluded from this report. Such wastes were mostly hazardous wastewaters that were

Exhibit 2-12. RCRA Hazardous Waste Generated in the U.S., Characteristic Waste, Listed Waste, and Combination of Characteristic and Listed Wastes, 1989



Note: CBI data excluded.

treated in tanks, and the treated water was discharged to the Publicly Owned Treatment Works (POTW) or to the surface waters under a National Pollutant Discharge Elimination System (NPDES) permit.

At a regional level, RCRA TSD facilities were more evenly distributed across the regions than was the quantity of RCRA hazardous waste managed. Exhibit 2-13 shows the number of TSD facilities and the quantity of hazardous waste managed, by EPA region. Nationally, 3,078 TSD facilities reported the management of 196.5 million tons of RCRA hazardous waste. As was the case with RCRA hazardous waste generation, Regions 2, 4, 5, and 6 managed the vast majority of the hazardous waste, accounting for 85 percent of the national total. In contrast, Regions 1, 7, 8, and 10 each managed less than one percent of the total quantity of RCRA hazardous waste managed in 1989. Cumulatively, these 4 regions managed less than 2 percent of the national total. Most RCRA TSD facilities were located in Regions 5, 6, and 9, while relatively few were located in Regions 8 and 10. No region had less than 1 percent of the total number of TSD facilities.

Exhibit 2-14 shows that there are 1,770 storage-only facilities throughout the nation, nearly 58 percent of the total number of TSD facilities. In Exhibit 2-2, the total U.S. RCRA hazardous waste generation is listed as 197.5 million tons, while in Exhibit 2-13, the total quantity of RCRA hazardous waste managed in the nation is listed as 196.5 million tons. It is likely that most of the 1 million ton difference is due to the RCRA hazardous wastes that were generated in 1989 and managed only by storage during 1989.

Exhibit 2-15 compares the percentage of TSD facilities and the percentage of the national total quantity of RCRA hazardous waste managed on a regional level. Region 9, with approximately 13 percent of all TSD facilities, managed only 2.6 percent of the national total, while Region 2, with fewer than 7 percent of the TSD facilities, managed more than 24 percent of the national total of RCRA hazardous waste. This disparity is largely due to one facility in Region 2 that managed a large quantity of RCRA hazardous waste.

Exhibit 2-13. Number and Percentage of RCRA TSD Facilities and RCRA Hazardous Waste Quantity Managed, by EPA Region, 1989

EPA REGION	HAZARDOUS WASTE QUANTITY[1]		TSD FACILITIES	
	TOTAL MANAGED	PERCENT[2]	NUMBER	PERCENT[2]
1	385,169	0.2	151	4.9
2	47,600,767	24.2	210	6.8
3	21,013,597	10.7	272	8.8
4	39,593,449	20.1	361	11.7
5	41,959,635	21.4	868	28.2
6	38,053,723	19.4	441	14.3
7	2,148,938	1.1	150	4.9
8	368,114	0.2	117	3.8
9	5,095,266	2.6	410	13.3
10	282,208	0.1	98	3.2
TOTAL	196,500,866	100.0	3,078	100.0

[1] Quantity managed only by storage is excluded.
[2] Columns may not sum due to rounding.

Exhibit 2-14. Number of RCRA Storage-Only Facilities, by EPA Region, 1989

EPA REGION	STORAGE FACILITIES	
	NUMBER	PERCENT[1]
1	106	6.0
2	158	8.9
3	194	11.0
4	151	8.5
5	550	31.1
6	132	7.5
7	88	5.0
8	90	5.1
9	248	14.0
10	53	3.0
TOTAL	1,770	100.0

[1] Columns may not sum due to rounding.

Exhibit 2-15. Comparison of Percentage of RCRA Hazardous Waste Quantity Managed and Percentage of Treatment, Storage, and Disposal Facilities, by EPA Region, 1989

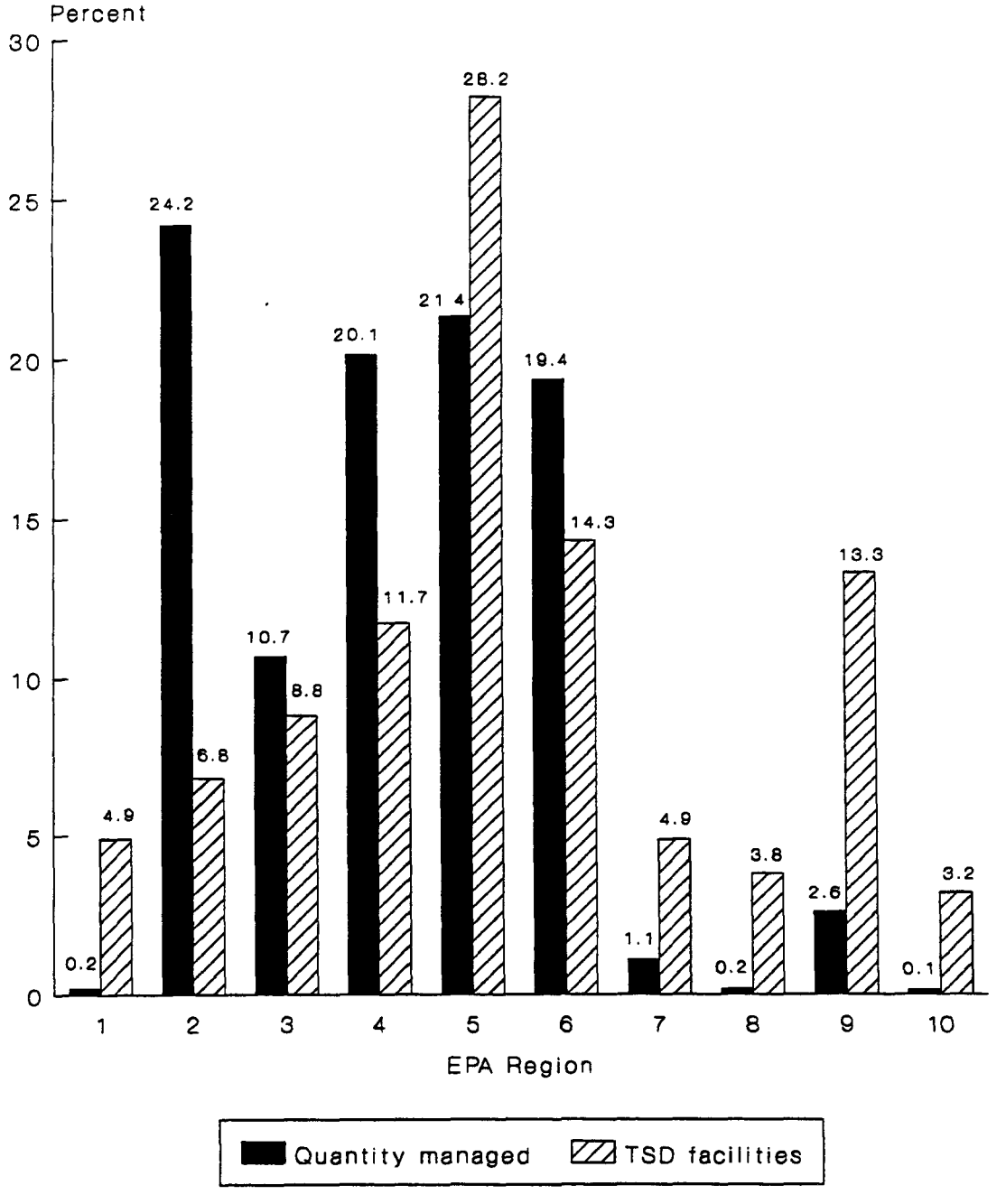


Exhibit 2-16 displays the quantity of RCRA hazardous waste managed and the number of TSD facilities with the States, listed alphabetically. Exhibit 2-17 displays a rank ordering of the States based on the quantity of RCRA hazardous waste that was managed. New Jersey, Michigan, and Tennessee, respectively, managed the largest quantities of RCRA hazardous wastes and accounted for nearly 60 percent of the total quantity of RCRA hazardous waste managed in RCRA TSD facilities. These 3 States managed approximately 24 percent, 18 percent, and 18 percent of the total quantity of RCRA hazardous waste managed in the nation, respectively, while they had only 3 percent, 8 percent and 2 percent, respectively, of the total number of TSD facilities. This illustrates that a few facilities managed very large quantities of RCRA hazardous wastes.

Exhibit 2-18 is a rank ordering of States based on the number of TSD facilities. California had the largest number of TSD facilities (357), followed by Texas (304) and Minnesota (237). Two States - the District of Columbia and Massachusetts - did not report the operation of any TSD facilities in 1989. For Massachusetts, this was the result of incomplete reporting. Three other States - Maine, South Dakota, and Guam - did not report any quantity of RCRA hazardous waste managed in 1989, yet each reported the operation of at least one TSD facility. This occurred because these States only reported the storage of hazardous wastes under waste management, and storage quantities were excluded from the exhibit.

The map in Exhibit 2-19 shows, by State, the range of RCRA hazardous waste management quantities in the nation. Twenty-four States reported management totals of less than 100,000 tons (15 were below 10,000 tons each). Conversely, 5 States managed more than 14 million tons each, together accounting for nearly 81 percent of the total U.S. RCRA hazardous waste management quantity. When compared with Exhibit 2-7, the States identified in Exhibit 2-19 as having the largest quantities of managed wastes correspond closely to those States with the largest quantities of waste generated. The 11 States ranked as the largest waste RCRA hazardous generators are also the largest RCRA hazardous waste managers.

Exhibit 2-16. Quantity of RCRA Hazardous Waste Managed, by State, 1989

STATE	RCRA HAZARDOUS WASTE QUANTITY			TSD FACILITY		
	RANK	TOTAL QUANTITY MANAGED (tons)[1]	PERCENT	FACILITY RANK	NUMBER	PERCENT
ALABAMA	18	564,189	0.3	12	71	2.3
ALASKA	49	29	<0.05	34	20	0.6
ARIZONA	32	95,737	<0.05	37	17	0.6
ARKANSAS	15	824,156	0.4	31	24	0.8
CALIFORNIA	8	4,978,478	2.5	1	357	11.6
COLORADO	34	81,292	<0.05	14	59	1.9
CONNECTICUT	21	366,215	0.2	8	131	4.3
DELAWARE	44	3,472	<0.05	43	7	0.2
DISTRICT OF COLUMBIA	51	0	0.0	54	0	0.0
FLORIDA	22	359,733	0.2	32	22	0.7
GEORGIA	10	2,551,209	1.3	15	57	1.9
GUAM	51	0	0.0	52	1	<0.05
HAWAII	46	803	<0.05	32	22	0.7
IDAHO	37	45,951	<0.05	41	9	0.3
ILLINOIS	13	1,441,365	0.7	7	139	4.5
INDIANA	11	2,021,016	1.0	22	44	1.4
IOWA	35	74,653	<0.05	29	30	1.0
KANSAS	12	1,700,795	0.9	25	34	1.1
KENTUCKY	31	145,481	0.1	19	51	1.7
LOUISIANA	6	9,205,887	4.7	21	46	1.5
MAINE	51	0	0.0	48	4	0.1
MARYLAND	28	211,256	0.1	24	37	1.2
MASSACHUSETTS	51	0	0.0	54	0	0.0
MICHIGAN	2	35,067,217	17.8	4	232	7.5
MINNESOTA	23	348,586	0.2	3	237	7.7
MISSISSIPPI	16	697,961	0.4	28	31	1.0
MISSOURI	24	289,531	0.1	10	74	2.4
MONTANA	45	2,857	<0.05	41	9	0.3
NEBRASKA	33	83,959	<0.05	39	12	0.4
NEVADA	39	20,246	<0.05	40	11	0.4
NEW HAMPSHIRE	42	5,952	<0.05	45	6	0.2
NEW JERSEY	1	46,931,754	23.9	9	98	3.2
NEW MEXICO	41	6,355	<0.05	35	19	0.6
NEW YORK	19	419,838	0.2	11	73	2.4
NORTH CAROLINA	17	565,799	0.3	30	28	0.9
NORTH DAKOTA	38	25,451	<0.05	45	6	0.2
OHIO	9	2,710,118	1.4	6	161	5.2
OKLAHOMA	27	228,363	0.1	20	48	1.6
OREGON	36	65,285	<0.05	38	13	0.4
PENNSYLVANIA	14	1,139,446	0.6	5	157	5.1
PUERTO RICO	26	243,417	0.1	23	38	1.2
RHODE ISLAND	40	12,897	<0.05	48	4	0.1
SOUTH CAROLINA	29	175,807	0.1	25	34	1.1
SOUTH DAKOTA	51	0	0.0	50	2	0.1
TENNESSEE	3	34,533,270	17.6	13	67	2.2
TEXAS	4	27,788,963	14.1	2	304	9.9
TRUST TERRITORIES	50	2	<0.05	50	2	0.1
UTAH	25	258,227	0.1	25	34	1.1
VERMONT	48	106	<0.05	45	6	0.2
VIRGIN ISLANDS	43	5,757	<0.05	52	1	<0.05
VIRGINIA	7	5,324,021	2.7	18	52	1.7
WASHINGTON	30	170,943	0.1	16	56	1.8
WEST VIRGINIA	5	14,335,403	7.3	35	19	0.6
WISCONSIN	20	371,333	0.2	17	55	1.8
WYOMING	47	287	<0.05	43	7	0.2
TOTAL		196,500,866	100.0		3,078	100.0

[1] Quantity managed only by storage is excluded.

NOTE: Columns may not sum due to rounding.

Exhibit 2-17. Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Managed, 1989

STATE	HAZARDOUS WASTE QUANTITY			TSD FACILITY		
	RANK	TOTAL QUANTITY MANAGED (tons)[1]	PERCENT	FACILITY RANK	NUMBER	PERCENT
NEW JERSEY	1	46,931,754	23.9	9	98	3.2
MICHIGAN	2	35,067,217	17.8	4	232	7.5
TENNESSEE	3	34,533,270	17.6	13	67	2.2
TEXAS	4	27,788,963	14.1	2	304	9.9
WEST VIRGINIA	5	14,335,403	7.3	35	19	0.6
LOUISIANA	6	9,205,887	4.7	21	46	1.5
VIRGINIA	7	5,324,021	2.7	18	52	1.7
CALIFORNIA	8	4,978,478	2.5	1	357	11.6
OHIO	9	2,710,118	1.4	6	161	5.2
GEORGIA	10	2,551,209	1.3	15	57	1.9
INDIANA	11	2,021,016	1.0	22	44	1.4
KANSAS	12	1,700,795	0.9	25	34	1.1
ILLINOIS	13	1,441,365	0.7	7	139	4.5
PENNSYLVANIA	14	1,139,446	0.6	5	157	5.1
ARKANSAS	15	824,156	0.4	31	24	0.8
MISSISSIPPI	16	697,961	0.4	28	31	1.0
NORTH CAROLINA	17	565,799	0.3	30	28	0.9
ALABAMA	18	564,189	0.3	12	71	2.3
NEW YORK	19	419,838	0.2	11	73	2.4
WISCONSIN	20	371,333	0.2	17	55	1.8
CONNECTICUT	21	366,215	0.2	8	131	4.3
FLORIDA	22	359,733	0.2	32	22	0.7
MINNESOTA	23	348,586	0.2	3	237	7.7
MISSOURI	24	289,531	0.1	10	74	2.4
UTAH	25	258,227	0.1	25	34	1.1
PUERTO RICO	26	243,417	0.1	23	38	1.2
OKLAHOMA	27	228,363	0.1	20	48	1.6
MARYLAND	28	211,256	0.1	24	37	1.2
SOUTH CAROLINA	29	175,807	0.1	25	34	1.1
WASHINGTON	30	170,943	0.1	16	56	1.8
KENTUCKY	31	145,481	0.1	19	51	1.7
ARIZONA	32	95,737	<0.05	37	17	0.6
NEBRASKA	33	83,959	<0.05	39	12	0.4
COLORADO	34	81,292	<0.05	14	59	1.9
IOWA	35	74,653	<0.05	29	30	1.0
OREGON	36	65,285	<0.05	38	13	0.4
IDAHO	37	45,951	<0.05	41	9	0.3
NORTH DAKOTA	38	25,451	<0.05	45	6	0.2
NEVADA	39	20,246	<0.05	40	11	0.4
RHODE ISLAND	40	12,897	<0.05	48	4	0.1
NEW MEXICO	41	6,355	<0.05	35	19	0.6
NEW HAMPSHIRE	42	5,952	<0.05	45	6	0.2
VIRGIN ISLANDS	43	5,757	<0.05	52	1	<0.05
DELAWARE	44	3,472	<0.05	43	7	0.2
MONTANA	45	2,857	<0.05	41	9	0.3
HAWAII	46	803	<0.05	32	22	0.7
WYOMING	47	287	<0.05	43	7	0.2
VERMONT	48	106	<0.05	45	6	0.2
ALASKA	49	29	<0.05	34	20	0.6
TRUST TERRITORIES	50	2	<0.05	50	2	0.1
DISTRICT OF COLUMBIA	51	0	0.0	48	0	0.0
GUAM	51	0	0.0	50	1	<0.05
MAINE	51	0	0.0	52	4	0.1
MASSACHUSETTS	51	0	0.0	54	0	0.0
SOUTH DAKOTA	51	0	0.0	54	2	0.1
TOTAL		196,500,866	100.0		3,078	100.0

[1] Quantity managed only by storage is excluded.

NOTE: Columns may not sum due to rounding.

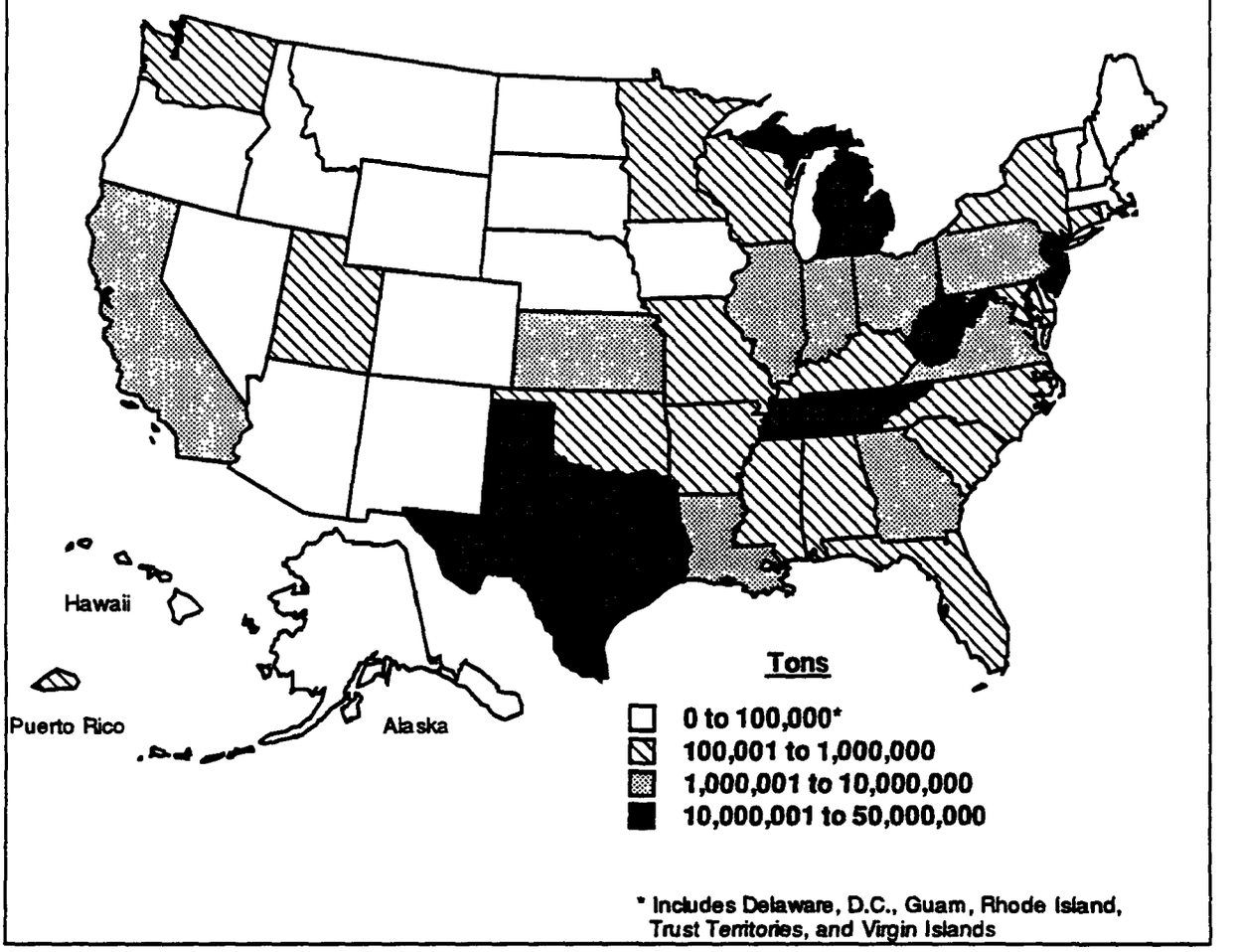
Exhibit 2-18. Rank Ordering of States Based on Number of TSD Facilities, 1989

STATE	HAZARDOUS WASTE QUANTITY			TSD FACILITY		
	RANK	TOTAL QUANTITY MANAGED (tons)[1]	PERCENT	FACILITY RANK	NUMBER	PERCENT
CALIFORNIA	8	4,978,478	2.5	1	357	11.6
TEXAS	4	27,788,963	14.1	2	304	9.9
MINNESOTA	23	348,586	0.2	3	237	7.7
MICHIGAN	2	35,067,217	17.8	4	232	7.5
OHIO	9	2,710,118	1.4	6	161	5.2
PENNSYLVANIA	14	1,139,446	0.6	5	157	5.1
ILLINOIS	13	1,441,365	0.7	7	139	4.5
CONNECTICUT	21	366,215	0.2	8	131	4.3
NEW JERSEY	1	46,931,754	23.9	9	98	3.2
MISSOURI	24	289,531	0.1	10	74	2.4
NEW YORK	19	419,838	0.2	11	73	2.4
ALABAMA	18	564,189	0.3	12	71	2.3
TENNESSEE	3	34,533,270	17.6	13	67	2.2
COLORADO	34	81,292	<0.05	14	59	1.9
GEORGIA	10	2,551,209	1.3	15	57	1.9
WASHINGTON	30	170,943	0.1	16	56	1.8
WISCONSIN	20	371,333	0.2	17	55	1.8
VIRGINIA	7	5,324,021	2.7	18	52	1.7
KENTUCKY	31	145,481	0.1	19	51	1.7
OKLAHOMA	27	228,363	0.1	20	48	1.6
LOUISIANA	6	9,205,887	4.7	21	46	1.5
INDIANA	11	2,021,016	1.0	22	44	1.4
PUERTO RICO	26	243,417	0.1	23	38	1.2
MARYLAND	28	211,256	0.1	24	37	1.2
KANSAS	12	1,700,795	0.9	25	34	1.1
SOUTH CAROLINA	29	175,807	0.1	25	34	1.1
UTAH	25	258,227	0.1	25	34	1.1
MISSISSIPPI	16	697,961	0.4	28	31	1.0
IOWA	35	74,653	<0.05	29	30	1.0
NORTH CAROLINA	17	565,799	0.3	30	28	0.9
ARKANSAS	15	824,156	0.4	31	24	0.8
FLORIDA	22	359,733	0.2	32	22	0.7
HAWAII	46	803	<0.05	32	22	0.7
ALASKA	49	29	<0.05	34	20	0.6
NEW MEXICO	41	6,355	<0.05	35	19	0.6
WEST VIRGINIA	5	14,335,403	7.3	35	19	0.6
ARIZONA	32	95,737	<0.05	37	17	0.6
OREGON	36	65,285	<0.05	38	13	0.4
NEBRASKA	33	83,959	<0.05	39	12	0.4
NEVADA	39	20,246	<0.05	40	11	0.4
IDAHO	37	45,951	<0.05	41	9	0.3
MONTANA	45	2,857	<0.05	41	9	0.3
DELAWARE	44	3,472	<0.05	43	7	0.2
WYOMING	47	287	<0.05	43	7	0.2
NEW HAMPSHIRE	42	5,952	<0.05	45	6	0.2
NORTH DAKOTA	38	25,451	<0.05	45	6	0.2
VERMONT	48	106	<0.05	45	6	0.2
MAINE	51	0	0.0	48	4	0.1
RHODE ISLAND	40	12,897	<0.05	48	4	0.1
SOUTH DAKOTA	51	0	0.0	50	2	0.1
TRUST TERRITORIES	50	2	<0.05	50	2	0.1
GUAM	51	0	0.0	52	1	<0.05
VIRGIN ISLANDS	43	5,757	<0.05	52	1	<0.05
DISTRICT OF COLUMBIA	51	0	0.0	54	0	0.0
MASSACHUSETTS	51	0	0.0	54	0	0.0
TOTAL		196,500,866	100.0		3,078	100.0

[1] Quantity managed only by storage is excluded.

NOTE: Columns may not sum due to rounding.

Exhibit 2-19. RCRA Hazardous Waste Managed, by State, 1989



* Includes Delaware, D.C., Guam, Rhode Island, Trust Territories, and Virgin Islands

The map in Exhibit 2-20 shows, by State, the range of TSD facility counts in the nation. Eight of the States each reported more than 100 TSD facilities. Eleven States reported between 51 and 100 TSD facilities. Twenty-one States had facility counts between 11 and 50, while 15 States numbered 10 or fewer TSD facilities.

As was the case with RCRA hazardous waste generation (Exhibit 2-9), a few TSD facilities accounted for most of the hazardous waste management in units subject to RCRA permitting requirements during 1989. These relatively large TSD facilities typically treat wastewaters. Exhibit 2-21 shows the cumulative distribution of the quantity of hazardous waste managed in units subject to RCRA permitting requirements at the largest 10 percent of facilities. This exhibit indicates that:

- The largest 1 percent of TSD facilities managed almost 89 percent of the RCRA hazardous waste;
- The largest 2 percent of TSD facilities managed almost 94 percent of the RCRA hazardous waste; and,
- The largest 5 percent of TSD facilities managed almost 98 percent of the RCRA hazardous waste.

Exhibit 2-22 further illustrates that the vast majority of the RCRA hazardous waste was managed by a small proportion of the TSD facilities, while a large proportion of TSD facilities manage relatively little RCRA hazardous waste. More than three-fourths of the TSD facilities managed less than 100 tons each, together accounting for less than 0.01 percent of the national total quantity managed. An additional 21.5 percent of the TSD facilities managed between 100 and 100,000 tons each. Three percent of the TSD facilities managed over 100,000 tons each, cumulatively accounting for almost 96 percent of the total quantity of RCRA hazardous waste managed in the U.S. during 1989.

Exhibit 2-20. Number of Treatment, Storage, or Disposal (TSD) Facilities, by State, 1989

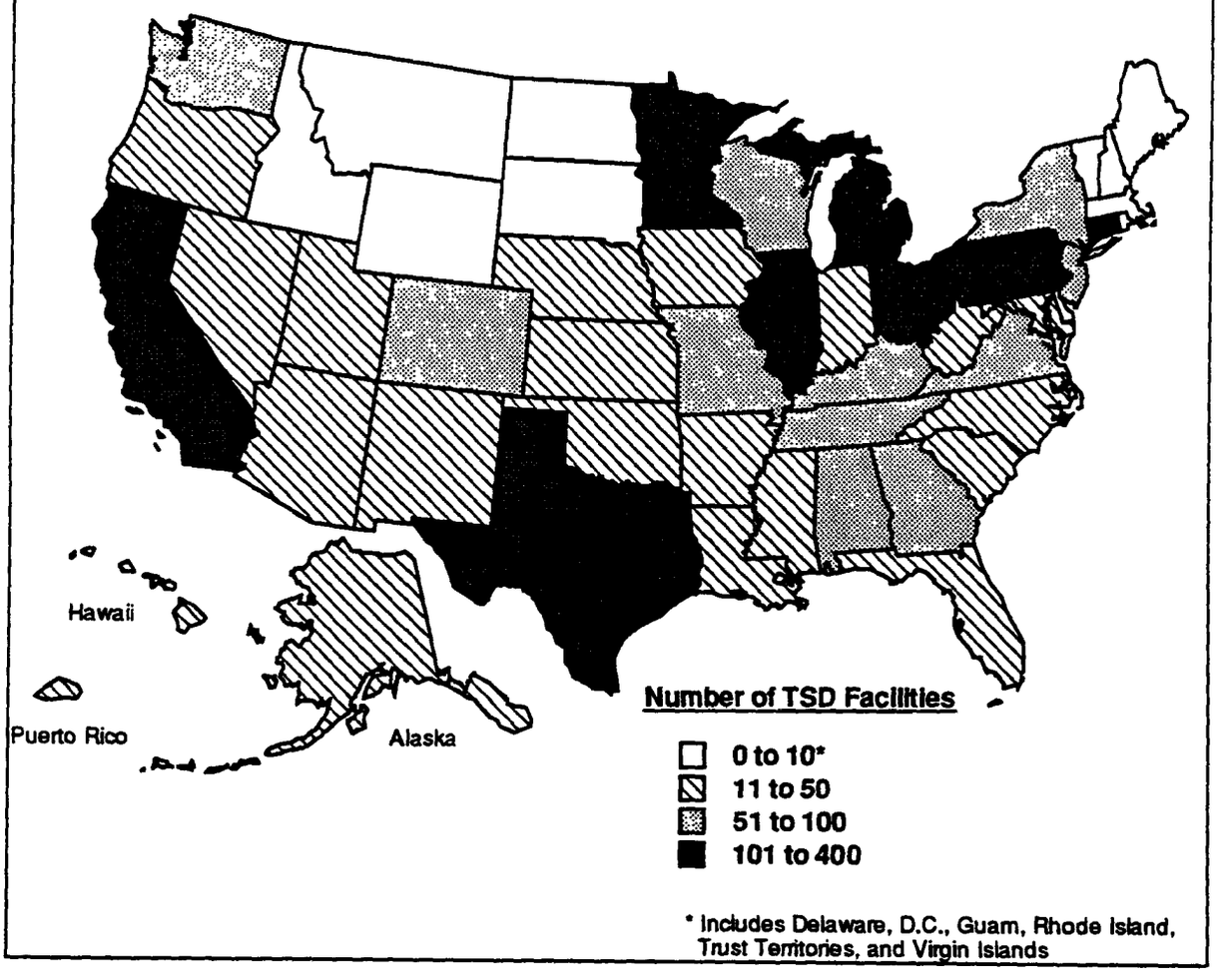


Exhibit 2-21. Cumulative Distribution of the Quantity of RCRA Hazardous Waste Managed by the Largest Ten Percent of Treatment, Storage, or Disposal Facilities, 1989

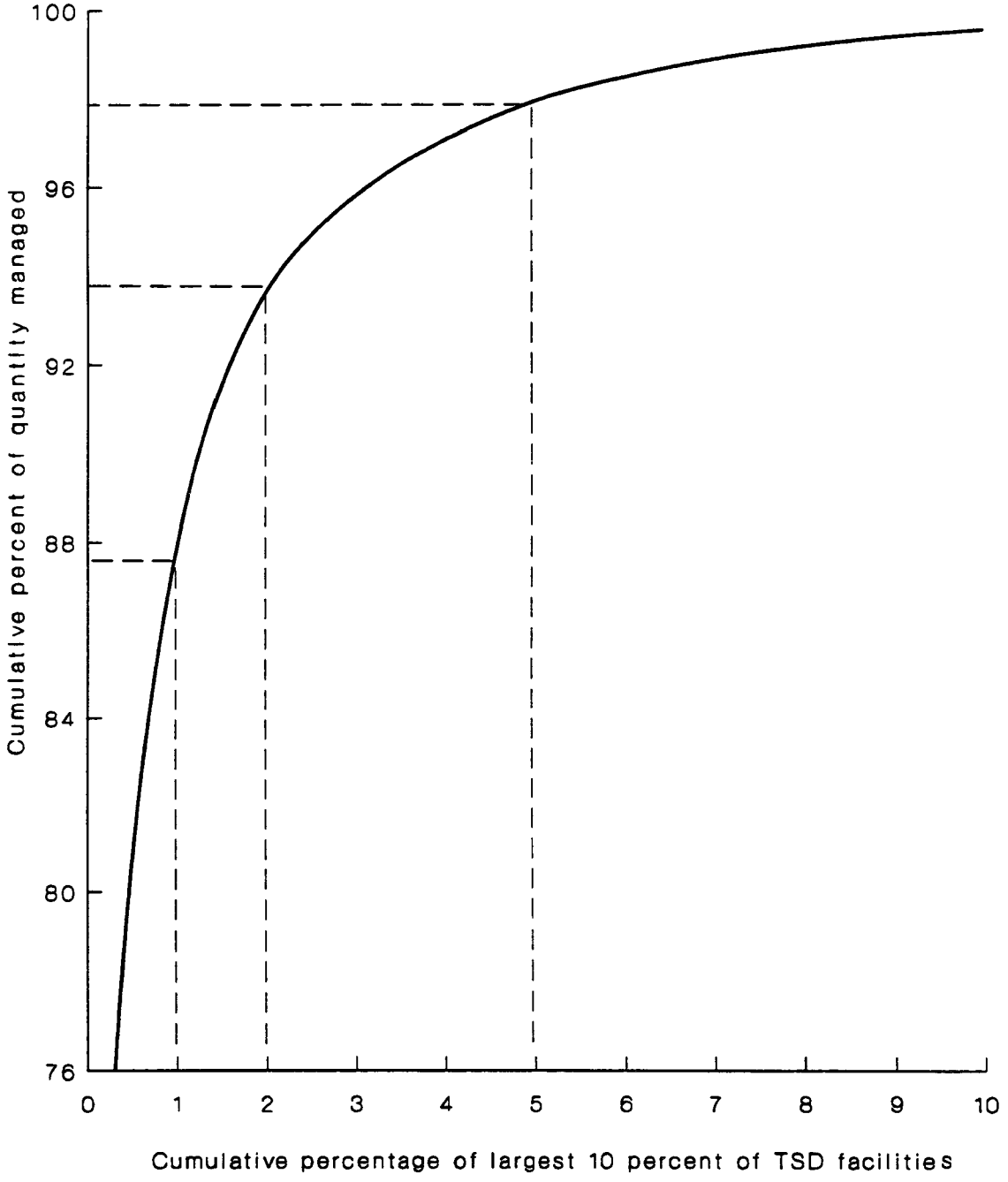
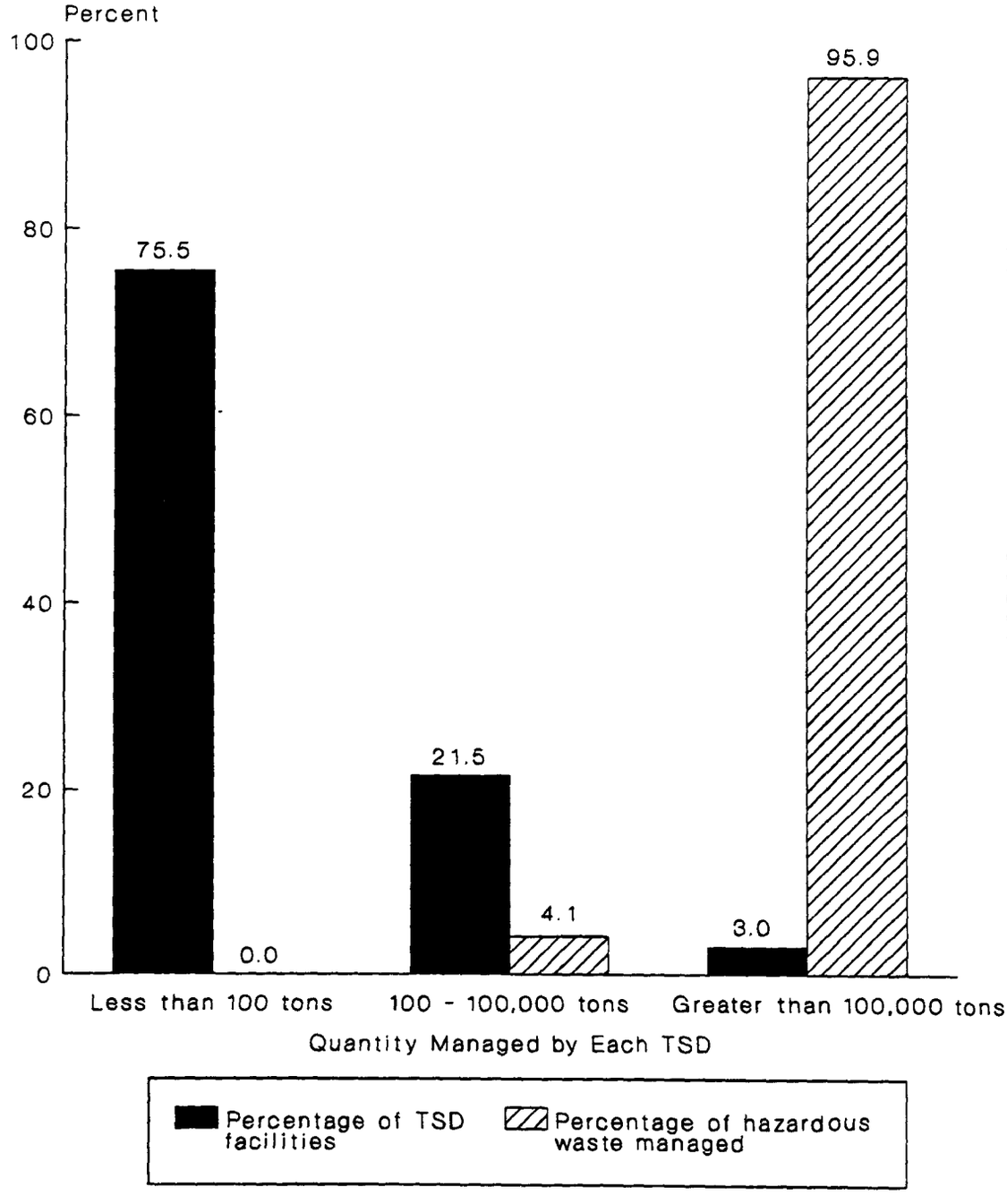


Exhibit 2-22. Percentage of TSD Facilities and Quantity of Waste Managed in 3 Ranges of Management Quantity, 1989



Exhibits 2-23 and 2-24 identify the 50 largest RCRA TSD facilities in the U.S. in 1989, along with the management methods they employed and the quantity waste managed by each method at those TSD facilities. Exhibit 2-23 includes RCRA hazardous waste generated and managed on site, as well as RCRA hazardous waste received from off site. In comparison, Exhibit 2-24 only includes RCRA hazardous waste received from off site. For each TSD facility listed in Exhibit 2-24, the management methods are listed in descending order of quantity. The source of hazardous waste is also identified as generated on site or received from off site.

The 5 largest TSD facilities managed nearly 66 percent of the total management quantity, while the 50 largest TSD facilities managed approximately 92 percent of the national total. The sites identified in Exhibit 2-23 are generally the same as those identified in Exhibit 2-11, which lists the 50 largest RCRA hazardous waste generators; this is because the largest generators of hazardous waste typically managed their own waste on site. At each of the 10 largest TSD facilities, the largest quantities of RCRA hazardous wastes managed were wastewaters generated on site.

The 60 largest TSD facilities in the nation managed 93.3 percent of the hazardous waste. At these facilities, 14.6 percent of the waste managed was characteristic waste, 36.0 percent was listed waste, and 49.4 percent was both characteristic and listed waste. These percentages closely match those for national hazardous waste generation.

ıibit 2-23. Fifty Largest RCRA Hazardous Waste Management Facilities in the U.S., 1989 (All Quantities in U.S. Tons)

ıNK	EPA ID SITE NAME, CITY / MANAGEMENT METHOD		GENERATED ON SITE	RECEIVED FROM OFF SITE	METHOD TOTAL	TOTAL MANAGED[1]
1	NJD002385730 **DUPONT E I CHAMBERS WORKS**, DEEPWATER					46,891,990
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	46,686,000	120,611	46,806,611	
	OTHER TREATMENT	M121-M129	0	85,015	85,015	
	INCINERATION	M041-M049	0	176	176	
	LANDFILL	M132	0	167	167	
	INVALID SYSTEM TYPE		0	21	21	
2	MID000724724 **THE DOW CHEMICAL COMPANY**, MIDLAND					33,738,640
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	33,715,978	0	33,715,978	
	INCINERATION	M041-M049	14,470	4,042	18,511	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	4,151	0	4,151	
3	TND003376928 **TENN EASTMAN CO, DIV OF EASTMAN KODAK**, KINGSPORT					32,580,613
	AQUEOUS ORGANIC TREATMENT	M081-M089	32,558,746	21,806	32,580,552	
	INVALID SYSTEM TYPE		0	60	60	
4	WVD004341491 **AMERICAN CYANAMID COMPANY**, WILLOW ISLAND					7,884,958
	AQUEOUS ORGANIC TREATMENT	M081-M089	7,872,801	0	7,872,801	
	INCINERATION	M041-M049	10,710	0	10,710	
	SURFACE IMPOUNDMENT	M133	1,446	0	1,446	
5	TXD067285973 **SHELL OIL CO DEER PARK COMPLEX**, DEER PARK					7,824,186
	AQUEOUS ORGANIC TREATMENT	M081-M089	7,809,087	0	7,809,087	
	INCINERATION	M041-M049	7,793	0	7,793	
	UNDERGROUND INJECTION	M134	4,975	0	4,975	
	LANDFILL	M132	2,331	0	2,331	
6	WVD005005509 **RHONE-POULENC AG COMPANY**, INSTITUTE					5,813,554
	AQUEOUS ORGANIC TREATMENT	M081-M089	5,793,245	0	5,793,245	
	LANDFILL	M132	16,695	4	16,699	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3,610	0	3,610	
7	TXD007330202 **TEXAS EASTMAN COMPANY**, LONGVIEW					4,507,408
	AQUEOUS ORGANIC TREATMENT	M081-M089	3,467,464	104	3,467,568	
	METALS RECOVERY (FOR REUSE)	M011-M019	611,499	0	611,499	
	AQUEOUS INORGANIC TREATMENT	M071-M079	394,477	0	394,477	
	SOLVENTS RECOVERY	M021-M029	18,300	0	18,300	
	INCINERATION	M041-M049	14,271	16	14,287	
	LANDFILL	M132	1,277	0	1,277	
8	VA1210020730 **U S ARMY AMMUNITION PLANT**, RADFORD					4,046,504
	AQUEOUS INORGANIC TREATMENT	M071-M079	4,043,802	0	4,043,802	
	SOLVENTS RECOVERY	M021-M029	1,731	0	1,731	
	INCINERATION	M041-M049	971	0	971	
9	TXD008123317 **E I DUPONT DE NEMOURS**, VICTORIA					3,635,830
	UNDERGROUND INJECTION	M134	3,632,939	0	3,632,939	
	LANDFILL	M132	2,090	727	2,817	
	AQUEOUS INORGANIC TREATMENT	M071-M079	48	0	48	
	OTHER TREATMENT	M121-M129	26	0	26	
10	LAD008186579 **SHELL OIL CO REFINERY**, NORCO					2,389,596
	UNDERGROUND INJECTION	M134	2,389,596	0	2,389,596	
11	GAD003324985 **MERCK & CO INC**, ALBANY					2,150,760
	OTHER TREATMENT	M121-M129	2,150,760	0	2,150,760	
12	TXD001700806 **MONSANTO CO**, ALVIN					2,070,771
	UNDERGROUND INJECTION	M134	2,061,377	0	2,061,377	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	7,344	0	7,344	
	LANDFILL	M132	2,050	0	2,050	
13	LAD008175390 **AMERICAN CYANAMID COMPANY**, WESTWEGO					2,043,293
	UNDERGROUND INJECTION	M134	2,043,293	0	2,043,293	

(Continued on next page)

Quantity managed only by storage is not included.

Exhibit 2-23. Fifty Largest RCRA Hazardous Waste Management Facilities in the U.S., 1989 (All Quantities in U.S. Tons) (Continued)

RANK	EPA ID SITE NAME, CITY / MANAGEMENT METHOD		GENERATED ON SITE	RECEIVED FROM OFF SITE	METHOD TOTAL	TOTAL MANAGED[1]
14	KSD007482029 **VULCAN MATERIALS COMPANY**, WICHITA					1,667,5
	UNDERGROUND INJECTION	M134	1,591,023	75,003	1,666,025	
	INCINERATION	M041-M049	1,532	0	1,532	
15	TND004044491 **E I DUPONT DE NEMOURS & CO**, NEW JOHNSONVILLE					1,583,7
	UNDERGROUND INJECTION	M134	1,583,784	0	1,583,784	
16	CAD041472986 **NATIONAL SEMICONDUCTOR CORP**, SANTA CLARA					1,509,2
	OTHER TREATMENT	M121-M129	1,483,686	0	1,483,686	
	AQUEOUS INORGANIC TREATMENT	M071-M079	25,586	0	25,586	
17	TXD008079642 **E I DUPONT DE NEMOURS**, ORANGE					1,469,2
	UNDERGROUND INJECTION	M134	1,469,252	0	1,469,252	
18	TXD008081101 **E I DUPONT DE NEMOURS**, BEAUMONT					1,376,4
	UNDERGROUND INJECTION	M134	1,369,324	0	1,369,324	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	4,260	0	4,260	
	INCINERATION	M041-M049	2,881	0	2,881	
19	LAD008213191 **RUBICON INC**, GEISMAR					1,089,8
	UNDERGROUND INJECTION	M134	1,089,575	0	1,089,575	
	INCINERATION	M041-M049	324	0	324	
20	TXD008079527 **STERLING CHEM INC**, TEXAS CITY					1,063,2
	UNDERGROUND INJECTION	M134	1,062,766	0	1,062,766	
	INCINERATION	M041-M049	474	0	474	
21	VAD066000993 **AMERICAN TELEPHONE & TELEGRAPH**, RICHMOND					930,8
	AQUEOUS INORGANIC TREATMENT	M071-M079	905,988	0	905,988	
	AQUEOUS ORGANIC TREATMENT	M081-M089	24,858	0	24,858	
22	TXD083472266 **ARCO CHEMICAL COMPANY (CHANNELVIEW)**, CHANNELVIEW					894,2
	UNDERGROUND INJECTION	M134	706,006	31,547	737,553	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	96,248	60,405	156,653	
23	OHD042157644 **BP CHEMICALS INC**, LIMA					830,9
	UNDERGROUND INJECTION	M134	828,894	0	828,894	
	OTHER TREATMENT	M121-M129	1,261	0	1,261	
	INCINERATION	M041-M049	761	0	761	
24	LAD065470916 **WITCO CHEMICAL CORP**, TAFT					776,
	UNDERGROUND INJECTION	M134	776,715	0	776,715	
25	LAD001890367 **E.I. DUPONT DE NEMOURS & CO.**, LAPLACE					701,
	UNDERGROUND INJECTION	M134	691,552	0	691,552	
	INCINERATION	M041-M049	7,183	2,813	9,997	
	OTHER RECOVERY	M031-M039	182	0	182	
	OTHER TREATMENT	M121-M129	182	0	182	
26	LAD008179707 **MOBIL OIL CORPORATION**, CHALMETTE					696,
	UNDERGROUND INJECTION	M134	695,562	0	695,562	
	OTHER RECOVERY	M031-M039	907	0	907	
27	CAD097030993 **MORRIS INDUSTRIES INC**, VERNON					693,
	AQUEOUS INORGANIC TREATMENT	M071-M079	693,661	0	693,661	
28	MSD008186587 **MORTON INTERNATIONAL, INC.**, MOSS POINT					670,
	UNDERGROUND INJECTION	M134	342,473	0	342,473	
	AQUEOUS INORGANIC TREATMENT	M071-M079	324,880	0	324,880	
	LANDFILL	M132	3,367	0	3,367	
29	TXD000751172 **BP CHEMICALS INC**, GREEN LAKE					654,
	UNDERGROUND INJECTION	M134	652,911	0	652,911	
	LANDFILL	M132	1,022	0	1,022	
	OTHER TREATMENT	M121-M129	886	0	886	

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[1] Quantity managed only by storage is not included.

ıibit 2-23. Fifty Largest RCRA Hazardous Waste Management Facilities in the U.S., 1989 (All Quantities in U.S. Tons) (Continued)

ANK	EPA ID SITE NAME, CITY / MANAGEMENT METHOD		GENERATED ON SITE	RECEIVED FROM OFF SITE	METHOD TOTAL	TOTAL MANAGED[1]
30	ARD043195429 **GREAT LAKES CHEMICAL CORPORATION**, EL DORADO					651,360
	UNDERGROUND INJECTION	M134	651,360	0	651,360	
31	WVD056866312 **MOBAY CORPORATION**, NATRIUM					583,977
	AQUEOUS ORGANIC TREATMENT	M081-M089	578,782	0	578,782	
	INCINERATION	M041-M049	4,820	375	5,195	
32	CAD008274938 **KAISER STEEL RESOURCES INC.**, FONTANA					546,289
	OTHER TREATMENT	M121-M129	0	546,289	546,289	
33	TXD007376700 **HOECHST CELANESE CHEMICAL GROUP, INC.**, PAMPA					489,627
	LAND TREATMENT	M131	441,627	0	441,627	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	30,285	0	30,285	
	SURFACE IMPOUNDMENT	M133	17,322	0	17,322	
	INCINERATION	M041-M049	393	0	393	
34	TXD026040709 **HOECHST CELANESE CHEMICAL GROUP, INC.**, BAY CITY					483,656
	UNDERGROUND INJECTION	M134	477,806	0	477,806	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	5,765	0	5,765	
	LANDFILL	M132	85	0	85	
35	TXD078432457 **HOECHST CELANESE CHEMICAL GROUP, INC.**, PASADENA					427,227
	UNDERGROUND INJECTION	M134	216,211	0	216,211	
	INCINERATION	M041-M049	205,403	0	205,403	
	SOLVENTS RECOVERY	M021-M029	5,589	0	5,589	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	24	0	24	
36	IND005159199 **INLAND STEEL COMPANY**, EAST CHICAGO					425,665
	UNDERGROUND INJECTION	M134	425,008	657	425,665	
37	NCD057454670 **OCCIDENTAL CHEM. CORP.-CASTLE HAYNE PLT**, CASTLE HAYNE					413,171
	OTHER TREATMENT	M121-M129	413,171	0	413,171	
38	OHD005050273 **CENTRAL FOUNDRY DIV GMC**, DEFIANCE					407,000
	STABILIZATION	M111-M119	407,000	0	407,000	
39	ILD006278170 **ALLIED-SIGNAL INC**, METROPOLIS					404,540
	OTHER TREATMENT	M121-M129	242,966	0	242,966	
	AQUEOUS INORGANIC TREATMENT	M071-M079	161,574	0	161,574	
40	IND003913423 **BETHLEHEM STEEL CORP. BURNS HARBOR**, BURNS HARBOR					403,769
	UNDERGROUND INJECTION	M134	403,769	0	403,769	
41	CA7210020759 **RIVERBANK ARMY AMMUNITION PLANT**, RIVERBANK					385,260
	AQUEOUS INORGANIC TREATMENT	M071-M079	385,260	0	385,260	
42	ILD042075333 **CABOT CORPORATION**, TUSCOLA					369,628
	UNDERGROUND INJECTION	M134	369,628	0	369,628	
43	ALD000622464 **CHEMICAL WASTE MANAGEMENT INC**, EMELLE					360,463
	LANDFILL	M132	0	299,211	299,211	
	STABILIZATION	M111-M119	15,801	26,609	42,409	
	FUEL BLENDING	M061	461	17,800	18,261	
	OTHER TREATMENT	M121-M129	0	580	580	
	INCINERATION	M041-M049	0	0	0	
44	MID006013643 **PARKE DAVIS & CO**, HOLLAND					340,641
	OTHER TREATMENT	M121-M129	340,641	0	340,641	
45	TXD044452324 **GAF CORPORATION TEXAS CITY**, TEXAS CITY					327,017
	OTHER TREATMENT	M121-M129	327,001	0	327,001	
	UNDERGROUND INJECTION	M134	16	0	16	
46	FLD004106811 **KAISER ALUMINUM & CHEMICAL CORP**, MULBERRY					320,134
	UNDERGROUND INJECTION	M134	320,134	0	320,134	

(Continued on next page)

[1] Quantity managed only by storage is not included.

Exhibit 2-23. Fifty Largest RCRA Hazardous Waste Management Facilities in the U.S., 1989 (All Quantities in U.S. Tons) (Continued)

RANK	EPA ID SITE NAME, CITY / MANAGEMENT METHOD		GENERATED ON SITE	RECEIVED FROM OFF SITE	METHOD TOTAL	TOTAL MANAGED[1]
47	IND016584641 **MIDWEST STEEL COMPANY**, PORTAGE					307,4
	STABILIZATION	M111-M119	182,506	0	182,506	
	UNDERGROUND INJECTION	M134	113,843	0	113,843	
	SLUDGE TREATMENT	M101-M109	10,310	0	10,310	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	753	753	
48	NYD049836679 **CWM CHEMICAL SERVICES INC.**, MODEL CITY					304,8
	LANDFILL	M132	0	277,136	277,136	
	OTHER TREATMENT	M121-M129	0	26,840	26,840	
	LAND TREATMENT	M131	885	0	885	
49	OHD005108477 **ARISTECH CHEMICAL CORPORATION**, HAVERHILL					300,0
	UNDERGROUND INJECTION	M134	271,323	0	271,323	
	INCINERATION	M041-M049	28,707	0	28,707	
50	TXD026481523 **GATX TERMINALS CORPORATION**, GALENA PARK					291,9
	OTHER TREATMENT	M121-M129	291,942	0	291,942	
TOTAL			179,132,737	1,598,769		180,731,5

[1] Waste only managed by storage is not included.

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

›it 2-24. Fifty RCRA TSD Facilities that Manage the Largest Quantities of Wastes Received from Off Site, Ranked by Quantity of Waste Received, 1989

<	EPA ID	SITE NAME	CITY	MANAGEMENT METHOD		QUANTITY MANAGED[1]
1	CAD008274938	KAISER STEEL RESOURCES INC.	FONTANA	OTHER TREATMENT	M121-M129	546,289
2	ALD000622464	CHEMICAL WASTE MANAGEMENT INC	EMELLE	LANDFILL	M132	299,211
				STABILIZATION	M111-M119	26,609
				FUEL BLENDING	M061	17,800
				OTHER TREATMENT	M121-M129	580
				INCINERATION	M041-M049	0
3	NYD049836679	CWM CHEMICAL SERVICES INC.	MODEL CITY	LANDFILL	M132	277,136
				OTHER TREATMENT	M121-M129	26,840
4	PAD002395887	ZINC CORP. OF AMERICA	PALMERTON	METALS RECOVERY (FOR REUSE)	M011-M019	272,129
5	IND078911146	CHEMICAL WASTE MANAGEMENT OF INDIANA	FORT WAYNE	LANDFILL	M132	218,259
6	LAD000777201	CHEMICAL WASTE MANAGEMENT INC	CARLYSS	LANDFILL	M132	208,701
				OTHER RECOVERY	M031-M039	4,604
				OTHER DISPOSAL	M137	447
7	NJD002385730	DUPONT E I CHAMBERS WORKS	DEEPWATER	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	120,611
				OTHER TREATMENT	M121-M129	85,015
				INCINERATION	M041-M049	176
				LANDFILL	M132	167
				INVALID SYSTEM TYPE		21
8	MID048090633	WAYNE DISPOSAL, INC.	BELLEVILLE	LANDFILL	M132	199,896
9	CAD097854541	GNB INCORPORATED/GOULD INC. METALS	LOS ANGELES	METALS RECOVERY (FOR REUSE)	M011-M019	153,642
0	IND000714840	KA STEEL CHEMICALS, INC	GARY	AQUEOUS INORGANIC TREATMENT	M071-M079	142,828
1	MID000724831	MICHIGAN DISPOSAL, INC.	BELLEVILLE	STABILIZATION	M111-M119	114,149
2	PAD004835146	MILL SERVICE, INC. - YUKON PLANT	YUKON	AQUEOUS INORGANIC TREATMENT	M071-M079	109,917
				SLUDGE TREATMENT	M101-M109	524
3	ILD000805812	PEORIA DISPOSAL CO #1	PEORIA	LANDFILL	M132	104,340
4	OHD020273819	CHEMICAL WASTE MANAGEMENT INC	VICKERY	UNDERGROUND INJECTION	M134	103,251
.5	TXD000838896	CHEMICAL WASTE MGMT	PORT ARTHUR	UNDERGROUND INJECTION	M134	100,454
.6	OKD065438376	U.S. POLLUTION CONTROL, INC.	WAYNOKA	LANDFILL	M132	63,166
				STABILIZATION	M111-M119	24,836
				OTHER TREATMENT	M121-M129	5,184
				LAND TREATMENT	M131	2,440
				AQUEOUS INORGANIC TREATMENT	M071-M079	261
17	TXD083472266	ARCO CHEMICAL COMPANY (CHANNELVIEW)	CHANNELVIEW	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	60,405
				UNDERGROUND INJECTION	M134	31,547
18	IND093219012	HERITAGE ENVIRONMENTAL SERVICES INC	INDIANAPOLIS	AQUEOUS INORGANIC TREATMENT	M071-M079	57,051
				OTHER TREATMENT	M121	25,181
				FUEL BLENDING	M061	6,374
				OTHER RECOVERY	M031	2,379
19	OHD000724088	BY-PRODUCTS MANAGEMENT OF OHIO INC	CLEVELAND	OTHER TREATMENT	M121-M129	86,309
20	SCD070375985	GSX SERVICES OF SOUTH CAROLINA INC.	PINEWOOD	LANDFILL	M132	85,878
21	MND006148092	GOPHER SMELTING COMPANY	EAGAN	METALS RECOVERY (FOR REUSE)	M011-M019	80,000
22	MID074259565	DYNECOL INC	DETROIT	METALS RECOVERY (FOR REUSE)	M011-M019	58,497
				STABILIZATION	M111-M119	12,776
				SLUDGE TREATMENT	M101-M109	3,283
				AQUEOUS INORGANIC TREATMENT	M071-M079	1,878
				OTHER TREATMENT	M121-M129	191
23	PAD010154045	ENVIRITE CORPORATION	YORK	AQUEOUS INORGANIC TREATMENT	M071-M079	45,943
				STABILIZATION	M111-M119	29,864
24	KSD007482029	VULCAN MATERIALS COMPANY	WICHITA	UNDERGROUND INJECTION	M134	75,003
25	TXD000719518	DISPOSAL SYSTEMS INC	DEER PARK	UNDERGROUND INJECTION	M134	65,665
				OTHER TREATMENT	M121-M129	3,372
				AQUEOUS ORGANIC TREATMENT	M081-M089	2,730
				SOLVENTS RECOVERY	M021-M029	2,223
				AQUEOUS INORGANIC TREATMENT	M071-M079	375
26	IND980503890	HERITAGE ENVIRONMENTAL SERVICES (HES)	ROACHDALE	LANDFILL	M132	69,421
27	MID980615298	PETRO-CHEM PROCESSING INC	DETROIT	FUEL BLENDING	M061	66,849
28	OHD980569438	GSX CHEMICAL SERVICES OF OHIO INC	CLEVELAND	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	36,315
				OTHER TREATMENT	M121-M129	26,269
				STABILIZATION	M111-M119	2,259
				AQUEOUS INORGANIC TREATMENT	M071-M079	35

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Waste only managed by storage is not included.

Exhibit 2-24. Fifty RCRA TSD Facilities that Manage the Largest Quantities of Wastes Received from Off Site, Ranked by Qu of Waste Received, 1989 (Continued)

RANK	EPA ID	SITE NAME	CITY	MANAGEMENT METHOD		QUAN MANA
29	OKD000402396	CHEMICAL RESOURCES, INC.	TULSA	UNDERGROUND INJECTION	M134	64
30	UTD991301748	U.S. POLLUTION CONTROL, INC. GRASSY MTN.	TOOELE COUNTY	LANDFILL	M132	33
				STABILIZATION	M111-M119	19
				OTHER TREATMENT	M121-M129	7
				LAND TREATMENT	M131	
				INVALID SYSTEM TYPE		
				AQUEOUS INORGANIC TREATMENT	M071-M079	
31	CAT080011059	PETROLEUM RECYCLING CORPORATION	SIGNAL HILL	OTHER RECOVERY	M031-M039	61
32	PAD085690592	WASTE CONVERSION INC	HATFIELD	AQUEOUS INORGANIC TREATMENT	M071-M079	34
				STABILIZATION	M111-M119	13
				OTHER TREATMENT	M121-M129	11
				INVALID SYSTEM TYPE		
33	ILD000666206	ENVIRITE CORP	HARVEY	AQUEOUS INORGANIC TREATMENT	M071-M079	37
				SLUDGE TREATMENT	M101-M109	21
				OTHER TREATMENT	M121-M129	
34	MOD054018288	CONTINENTAL CEMENT COMPANY, INC.	HANNIBAL	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	40
				METALS RECOVERY (FOR REUSE)	M011-M019	16
				INVALID SYSTEM TYPE		
35	TXD000742304	GIBRALTER CHEMICAL RESOURCES, INC.	WINONA	UNDERGROUND INJECTION	M134	39
				FUEL BLENDING	M061	12
				SOLVENTS RECOVERY	M021-M029	3
				AQUEOUS INORGANIC TREATMENT	M071-M079	1
36	TXD055141378	ROLLINS ENVIRONMENTAL SERVICES TX INC	DEER PARK	INCINERATION	M041-M049	52
				LANDFILL	M132	4
				ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	
37	MID005379607	LAFARGE CORP.	ALPENA	FUEL BLENDING	M061	55
38	ARD981512270	ASH GROVE CEMENT COMPANY	FOREMAN	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	55
39	TXD007926496	NORTH TX CEMENT CO	MIDLOTHIAN	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	55
40	MOD029729688	SAFETY-KLEEN, INC.	CLARKSVILLE	FUEL BLENDING	M061	53
41	TXD097673149	EMPAK INC DEER PARK	DEER PARK	UNDERGROUND INJECTION	M134	47
				AQUEOUS ORGANIC TREATMENT	M081-M089	3
42	PAD002389559	KEYSTONE CEMENT COMPANY	BATH	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	51
43	ILD010284248	CID #1	CALUMET CITY	LANDFILL	M132	30
				AQUEOUS INORGANIC TREATMENT	M071-M079	13
				OTHER TREATMENT	M121-M129	6
				INVALID SYSTEM TYPE		
44	ILD040891368	HORSEHEAD RESOURCE DEVELOPMENT	CHICAGO	METALS RECOVERY (FOR REUSE)	M011-M019	49
45	LAD008086506	PPG INDUSTRIES INC.	WESTLAKE	OTHER RECOVERY	M031-M039	44
				INCINERATION	M041-M049	3
46	KYD053348108	SAFETY-KLEEN CORP.	NEW CASTLE	OTHER TREATMENT	M121-M129	47
47	ARD981057870	RINECO CHEMICAL INDUSTRIES	BENTON	FUEL BLENDING	M061	45
				SOLVENTS RECOVERY	M021-M029	
				INVALID SYSTEM TYPE		
48	OHD004178612	RESEARCH OIL COMPANY	CLEVELAND	AQUEOUS INORGANIC TREATMENT	M071-M079	33
				OTHER TREATMENT	M121-M129	8
				SOLVENTS RECOVERY	M021-M029	1
49	IND000780544	FOUR COUNTY LANDFILL	ROCHESTER	LANDFILL	M132	41
50	IND072040348	ELI LILLY & CO-CLINTON LABS	CLINTON	INCINERATION	M041-M049	31
				SOLVENTS RECOVERY	M021-M029	8

[1] Waste only managed by storage is not included.

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Forty of the 60 largest TSD facilities were in the chemicals and allied products industry (two-digit SIC Code 28). This industry accounted for 172.2 million tons or 87.6 percent of the total quantity of RCRA hazardous waste managed nationwide. The remaining 20 facilities managed relatively small quantities of hazardous waste. Two facilities in the petrochemicals and coal products industry (two-digit SIC Code 29) cumulatively accounted for 3.1 million tons, or 1.6 percent of the total managed. Three sites in the electronic and other electric equipment industry (two-digit SIC Code 36) managed 2.7 million tons, or 1.3 percent of the total. The fabricated metal products industry (two-digit SIC Code 34) had 4 sites that managed 1.6 million tons, or 0.8 percent of the total, while 4 sites in the primary metals industry (two-digit SIC Code 33) managed 1.5 million tons, or 0.8 percent of the total. The electric, gas, and sanitary services industry (two-digit SIC Code 49) had 4 sites that managed 1.5 million tons, or 0.8 percent of the total.

Exhibits 2-25 and 2-26 illustrate the overall predominance of RCRA hazardous on-site RCRA hazardous waste management. Exhibit 2-25 shows that almost 60 percent of the TSD facilities managed waste generated on site only, while an additional 17 percent of the TSD facilities managed wastes that were generated both on and off site. Twenty-four percent of TSD facilities only managed RCRA hazardous wastes received from off site. Exhibit 2-26 shows that 96 percent of all RCRA hazardous waste was managed at the site where it was generated. Only 4 percent of all RCRA hazardous waste was shipped to off-site TSD facilities, including commercial waste management facilities. Exhibits 2-25 and 2-26 together suggest that the average quantity of RCRA hazardous waste managed at on-site facilities was much larger than the quantity managed at TSD facilities that received waste from off site.

Exhibit 2-25. Percentage of Facilities Managing RCRA Hazardous Waste Generated Only On Site, Only Off Site, and Both Sources, 1989

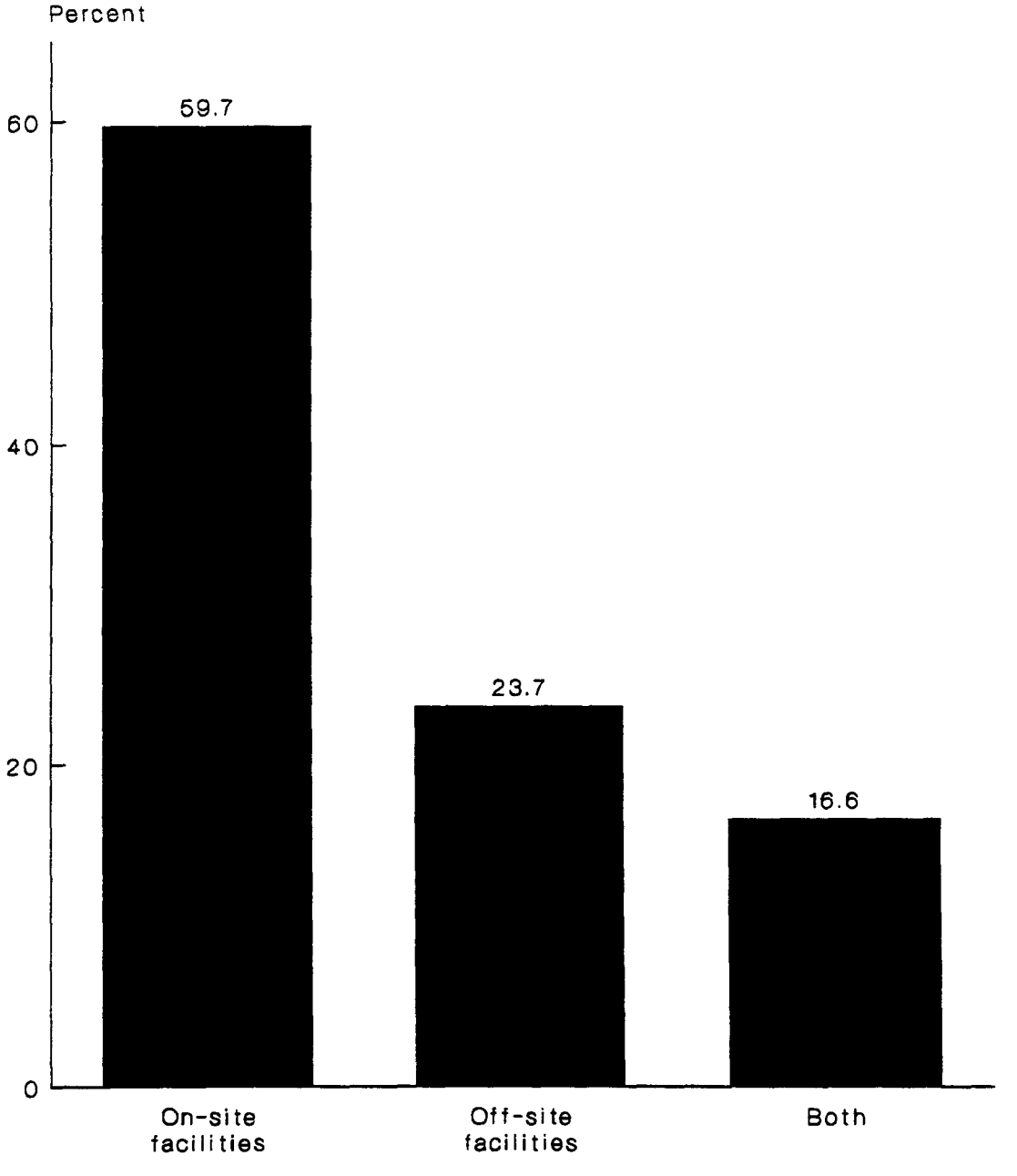
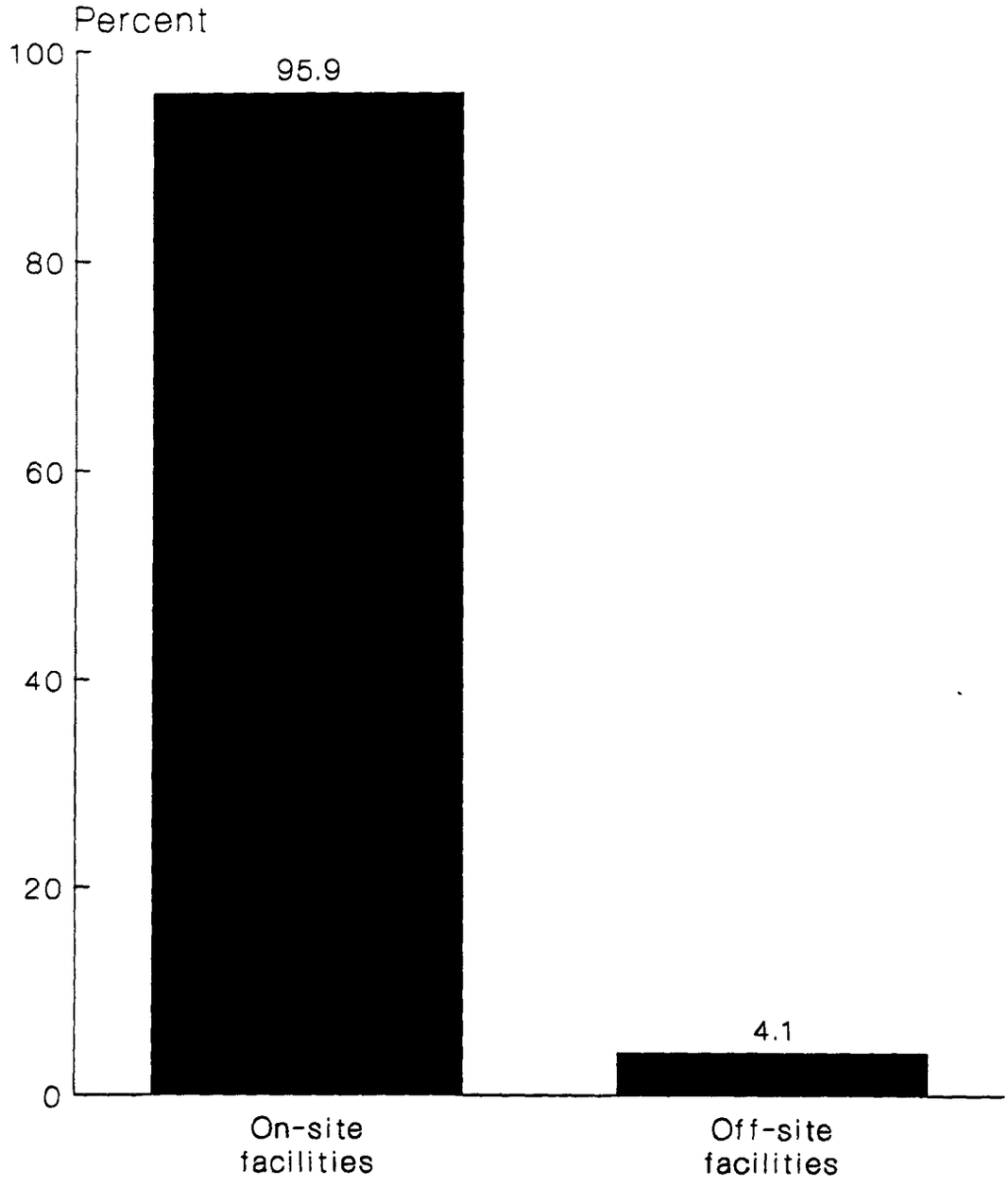


Exhibit 2-26. Relative Amounts of RCRA Hazardous Wastes Managed On Site and Off Site, 1989



2.5 RCRA HAZARDOUS WASTE MANAGEMENT METHODS

The management methods presented in this section represent the primary management methods of RCRA hazardous waste. Exhibits 2-27, 2-28 and 2-29 list quantities of RCRA hazardous waste by management method and the number of TSD facilities using each method. Exhibit 2-27 is sorted by system type code. Exhibit 2-28 is sorted in descending order of the quantity of RCRA hazardous waste managed. Exhibit 2-29 is sorted in descending order of the number of TSD facilities using the management method. These exhibits show that a total of 1,200 facilities managed a total of 196.5 million tons of RCRA hazardous waste.[2,3]

A large percentage (76%) of the RCRA hazardous waste was managed by various forms of aqueous treatment. This treatment was almost entirely wastewater treatment that took place in a system that included at least one unit that was subject to RCRA permitting requirements (e.g., a surface impoundment). The next highest management category was underground injection wells (14%). The type of waste injected into wells was also predominantly hazardous wastewater.

[2] It is important to note that Exhibits 2-27, 2-28 and 2-29 enumerate waste quantities and facility counts for 17 different management types, and in addition they include the category "invalid" system type. The invalid system type was applied in cases where the States indicated that wastes were managed on site, but the management method was incorrectly reported (e.g., a nonexistent system type code such as M200 was used.) This was the case with 118 facilities.

[3] Note that the number of TDR facilities (1,200) plus the number of storage-only facilities (1,770) do not sum to the total number of TSD facilities (3,078). This occurred because several States indicated that sites were TSD facilities, but failed to provide any data on the management methods they used or quantities of hazardous waste managed on site.

Exhibit 2-27. Quantity of RCRA Hazardous Waste Managed by Management Method, 1989

MANAGEMENT METHOD	SYSTEM TYPE CODE	QUANTITY MANAGED (tons)	PERCENTAGE OF QUANTITY	NUMBER OF FACILITIES[1]	PERCENTAGE OF FACILITIES
METALS RECOVERY (FOR REUSE)	M011-M019	1,362,362	0.7	56	4.7
SOLVENTS RECOVERY	M021-M029	485,790	0.2	193	16.1
OTHER RECOVERY	M031-M039	290,616	0.1	98	8.2
INCINERATION	M041-M049	1,280,216	0.7	221	18.4
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	864,618	0.4	82	6.8
FUEL BLENDING	M061	691,138	0.4	76	6.3
AQUEOUS INORGANIC TREATMENT	M071-M079	10,416,235	5.3	220	18.3
AQUEOUS ORGANIC TREATMENT	M081-M089	58,601,949	29.8	42	3.5
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	80,911,585	41.2	25	2.1
SLUDGE TREATMENT	M101-M109	120,135	0.1	41	3.4
STABILIZATION	M111-M119	1,068,268	0.5	45	3.8
OTHER TREATMENT	M121-M129	9,390,962	4.8	446	37.2
LAND TREATMENT	M131	598,302	0.3	51	4.3
LANDFILL	M132	2,275,783	1.2	86	7.2
SURFACE IMPOUNDMENT	M133	34,256	<0.05	11	0.9
UNDERGROUND INJECTION	M134	27,956,284	14.2	59	4.9
OTHER DISPOSAL	M137	8,136	<0.05	29	2.4
INVALID SYSTEM TYPE		144,218	0.1	118	9.8
TOTAL		196,500,866	100.0	1,200	100.0

[1] Facilities with only storage units are excluded from this report.

NOTES: Columns may not sum to total because facilities may have multiple handling methods.
Columns may not sum due to rounding.

Exhibit 2-28. Management Method, by Quantity of RCRA Hazardous Waste Managed, 1989

MANAGEMENT METHOD	SYSTEM TYPE CODE	QUANTITY MANAGED (tons)	PERCENT-AGE OF QUANTITY	NUMBER OF FACILITIES[1,2]	PERCENTAGE OF FACILITIES[2]
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	80,911,585	41.2	25	1.3
AQUEOUS ORGANIC TREATMENT	M081-M089	58,601,949	29.8	42	2.2
UNDERGROUND INJECTION	M134	27,956,284	14.2	59	3.1
AQUEOUS INORGANIC TREATMENT	M071-M079	10,416,235	5.3	220	11.6
OTHER TREATMENT	M121-M129	9,390,962	4.8	446	23.5
LANDFILL	M132	2,275,783	1.2	86	4.5
METALS RECOVERY (FOR REUSE)	M011-M019	1,362,362	0.7	56	2.9
INCINERATION	M041-M049	1,280,216	0.7	221	11.6
STABILIZATION	M111-M119	1,068,268	0.5	45	2.4
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	864,618	0.4	82	4.3
FUEL BLENDING	M061	691,138	0.4	76	4.0
LAND TREATMENT	M131	598,302	0.3	51	2.7
SOLVENTS RECOVERY	M021-M029	485,790	0.2	193	10.2
OTHER RECOVERY	M031-M039	290,616	0.1	98	5.2
INVALID SYSTEM TYPE		144,218	0.1	118	6.2
SLUDGE TREATMENT	M101-M109	120,135	0.1	41	2.2
SURFACE IMPOUNDMENT	M133	34,256	<0.05	11	0.6
OTHER DISPOSAL	M137	8,136	<0.05	29	1.5
TOTAL		196,500,853	100.0	1,200	100.0

[1] Facilities with only storage units are excluded from this report.
[2] Column may not sum to total because facilities may have multiple handling methods.

NOTE: Columns may not sum due to rounding.

Exhibit 2-29. Management Method and Quantity of RCRA Hazardous Waste Managed, by Number of Facilities, 1989

MANAGEMENT METHOD	SYSTEM TYPE CODE	QUANTITY MANAGED (tons)	PERCENT-AGE OF QUANTITY	NUMBER OF FACILITIES[1,2]	PERCENTAGE OF FACILITIES[2]
OTHER TREATMENT	M121-M129	9,390,962	4.8	446	23.5
AQUEOUS INORGANIC TREATMENT	M071-M079	10,416,235	5.3	220	11.6
INCINERATION	M041-M049	1,280,216	0.7	221	11.6
SOLVENTS RECOVERY	M021-M029	485,790	0.2	193	10.2
INVALID SYSTEM TYPE		144,218	0.1	118	6.2
OTHER RECOVERY	M031-M039	290,616	0.1	98	5.2
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	864,618	0.4	82	4.3
LANDFILL	M132	2,275,783	1.2	86	4.5
FUEL BLENDING	M061	691,138	0.4	76	4.0
UNDERGROUND INJECTION	M134	27,956,284	14.2	59	3.1
METALS RECOVERY (FOR REUSE)	M011-M019	1,362,362	0.7	56	2.9
LAND TREATMENT	M131	598,302	0.3	51	2.7
AQUEOUS ORGANIC TREATMENT	M081-M089	58,601,949	29.8	42	2.2
SLUDGE TREATMENT	M101-M109	120,135	0.1	41	2.2
STABILIZATION	M111-M119	1,068,268	0.5	45	2.4
OTHER DISPOSAL	M137	8,136	<0.05	29	1.5
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	80,911,585	41.2	25	1.3
SURFACE IMPOUNDMENT	M133	34,256	<0.05	11	0.6
TOTAL		196,500,853	100.0	1,200	100.0

[1] Facilities with only storage units are excluded from this report.
[2] Column may not sum to total because facilities may have multiple handling methods.

NOTE: Columns may not sum due to rounding.

Exhibit 2-27 also shows the percentage of RCRA hazardous waste managed in landfills, by incineration, or by recovery and recycling (metals, solvent, and other). Approximately 2.3 million tons or 1.2 percent of the total quantity managed was disposed in 86 landfill facilities, while approximately 1.3 million tons or 0.7 percent of the total quantity managed was incinerated[4] at 221 facilities. Among the three recovery methods, approximately 2.1 million tons or 1 percent of the total quantity managed was recovered and recycled. Under most conditions, recovery and recycling processes are not subject to RCRA permitting requirements. Recovery appears in Exhibit 2-27, because the RCRA hazardous waste was managed in a unit subject to RCRA permitting requirements (predominantly RCRA storage units) prior to recovering the waste. Since recovery and recycling hazardous waste in units exempt from RCRA permitting requirements need not be reported if there was no prior storage in a unit subject to RCRA permitting requirements, the actual quantity of RCRA hazardous waste recovered and recycled was greater than the quantity shown in the exhibit.

Exhibits 2-30, 2-31 and 2-32 present the quantities and facility counts by management methods for RCRA hazardous waste received from off site. Exhibit 2-30 is sorted by system type code. Exhibit 2-31 is sorted in descending order by the quantity of waste managed. Exhibit 2-32 is sorted in descending order by the number of TSD facilities that employ the management method. These exhibits show that a total of 7.9 million tons of RCRA hazardous waste received from off site was managed at 484 facilities.

The largest quantity of RCRA hazardous waste received from off site was disposed in landfills, accounting for more than 26 percent of the national total quantity. Of the remaining 5 largest quantity management methods, "other treatment" (which is often used as an "unknown" code) was 16 percent, metals recovery (for reuse) was 9 percent, aqueous inorganic treatment was 8 percent, and underground Injection was 7 percent of the national total quantity. The distribution of TSD facility counts is dominated by "other treatment" and invalid system types, both of which are often provided by States unable to readily translate their management

[4] Incineration includes those quantities of waste that are treated by incinerators with RCRA permits. Incineration does not include fuel blending or energy recovery, the two other treatment categories associated with thermal combustion about which the biennial report collects data.

Exhibit 2-30. Quantity of RCRA Hazardous Waste Managed, by Management Method, Limited to Waste Received from Off Site, 1989

MANAGEMENT METHOD	SYSTEM TYPE CODE	QUANTITY MANAGED (tons)	PERCENT-AGE OF QUANTITY	NUMBER OF FACILITIES[1,2]	PERCENTAGE OF FACILITIES[2]
METALS RECOVERY (FOR REUSE)	M011-M019	738,799	9.3	34	7.0
SOLVENTS RECOVERY	M021-M029	373,600	4.7	86	17.8
OTHER RECOVERY	M031-M039	157,737	2.0	35	7.2
INCINERATION	M041-M049	360,482	4.5	88	18.2
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	443,239	5.6	28	5.8
FUEL BLENDING	M061	516,307	6.5	59	12.2
AQUEOUS INORGANIC TREATMENT	M071-M079	644,762	8.1	67	13.8
AQUEOUS ORGANIC TREATMENT	M081-M089	39,957	0.5	17	3.5
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	212,318	2.7	13	2.7
SLUDGE TREATMENT	M101-M109	25,785	0.3	13	2.7
STABILIZATION	M111-M119	327,406	4.1	28	5.8
OTHER TREATMENT	M121-M129	1,297,700	16.3	138	28.5
LAND TREATMENT	M131	31,302	0.4	10	2.1
LANDFILL	M132	2,103,280	26.4	51	10.5
SURFACE IMPOUNDMENT	M133	0	0.0	1	0.2
UNDERGROUND INJECTION	M134	585,947	7.4	16	3.3
OTHER DISPOSAL	M137	3,067	<0.05	8	1.7
INVALID SYSTEM TYPE		100,880	1.3	115	23.8
TOTAL		7,962,585	100.0	484	100.0

[1] Facilities with only storage units are excluded from this report.
[2] Column may not sum to total because facilities may have multiple handling methods.

NOTE: Columns may not sum due to rounding.

Exhibit 2-31. Management Method, by Quantity of RCRA Hazardous Waste Managed, Limited to Waste Received from Off Site, 1989

MANAGEMENT METHOD	SYSTEM TYPE CODE	QUANTITY MANAGED (tons)	PERCENT-AGE OF QUANTITY	NUMBER OF FACILITIES[1,2]	PERCENTAGE OF FACILITIES[2]
LANDFILL	M132	2,103,280	26.4	51	10.5
OTHER TREATMENT	M121-M129	1,297,700	16.3	138	28.5
METALS RECOVERY (FOR REUSE)	M011-M019	738,799	9.3	34	7.0
AQUEOUS INORGANIC TREATMENT	M071-M079	644,762	8.1	67	13.8
UNDERGROUND INJECTION	M134	585,947	7.4	16	3.3
FUEL BLENDING	M061	516,307	6.5	59	12.2
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	443,239	5.6	28	5.8
SOLVENTS RECOVERY	M021-M029	373,600	4.7	86	17.8
INCINERATION	M041-M049	360,482	4.5	88	18.2
STABILIZATION	M111-M119	327,406	4.1	28	5.8
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	212,318	2.7	13	2.7
OTHER RECOVERY	M031-M039	157,737	2.0	35	7.2
INVALID SYSTEM TYPE		100,880	1.3	115	23.8
AQUEOUS ORGANIC TREATMENT	M081-M089	39,957	0.5	17	3.5
LAND TREATMENT	M131	31,302	0.4	10	2.1
SLUDGE TREATMENT	M101-M109	25,785	0.3	13	2.7
OTHER DISPOSAL	M137	3,067	<0.05	8	1.7
SURFACE IMPOUNDMENT	M133	0	0.0	1	0.2
TOTAL		7,962,585	100.0	484	100.0

[1] Facilities with only storage units are excluded from this report.
[2] Column may not sum to total because facilities may have multiple handling methods.

NOTE: Columns may not sum due to rounding.

Exhibit 2-32. Management Method and Quantity of RCRA Hazardous Waste Managed, by Number of Facilities, Limited to Waste Received from Off Site, 1989

MANAGEMENT METHOD	SYSTEM TYPE CODE	QUANTITY MANAGED (tons)	PERCENTAGE OF QUANTITY	NUMBER OF FACILITIES[1,2]	PERCENTAGE OF FACILITIES[2]
OTHER TREATMENT	M121-M129	1,297,700	16.3	138	28.5
INVALID SYSTEM TYPE		100,880	1.3	115	23.8
INCINERATION	M041-M049	360,482	4.5	88	18.2
SOLVENTS RECOVERY	M021-M029	373,600	4.7	86	17.8
AQUEOUS INORGANIC TREATMENT	M071-M079	644,762	8.1	67	13.8
FUEL BLENDING	M061	516,307	6.5	59	12.2
LANDFILL	M132	2,103,280	26.4	51	10.5
OTHER RECOVERY	M031-M039	157,737	2.0	35	7.2
METALS RECOVERY (FOR REUSE)	M011-M019	738,799	9.3	34	7.0
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	443,239	5.6	28	5.8
STABILIZATION	M111-M119	327,406	4.1	28	5.8
AQUEOUS ORGANIC TREATMENT	M081-M089	39,957	0.5	17	3.5
UNDERGROUND INJECTION	M134	585,947	7.4	16	3.3
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	212,318	2.7	13	2.7
SLUDGE TREATMENT	M101-M109	25,785	0.3	13	2.7
LAND TREATMENT	M131	31,302	0.4	10	2.1
OTHER DISPOSAL	M137	3,067	<0.05	8	1.7
SURFACE IMPOUNDMENT	M133	0	0.0	1	0.2
TOTAL		7,962,585	100.0	484	100.0

[1] Facilities with only storage units are excluded from this report.
[2] Column may not sum to total because facilities may have multiple handling methods.

NOTE: Columns may not sum due to rounding.

system codes into the EPA code set. Among the remaining system types, incineration, solvents recovery, aqueous inorganic treatment, fuel blending, and landfills predominate, with each system type being present at more than 50 facilities.

To further describe the types of wastes that were managed by different management methods, Exhibit 2-33 lists 18 distinct methods together with the four largest waste types managed by each method. In descending order, the following processes were used to manage more than two million tons of RCRA hazardous waste: aqueous organic and inorganic treatment, aqueous organic treatment, underground injection, aqueous inorganic treatment, other treatment, stabilization, and landfill. Note that "RCRA" appears twice in Exhibit 2-33 as a waste type; these were RCRA wastes of an unidentified type.

A combination of aqueous organic and inorganic treatment processes was used to treat more RCRA hazardous waste than any other method, accounting for more than 81 million tons of waste, almost all of which was wastewater. General mixtures of waste types (MOMX) accounted for almost all of the total quantity of that waste.

Aqueous organic treatment was used to manage 58.6 million tons of RCRA hazardous waste, almost all of which was wastewater. While not shown in Exhibit 2-33, the specific process that was used to manage the majority of the waste was biological treatment. Almost all of the wastes managed in this way were waste types MOMX (general mixtures), K048 (dissolved air flotation from petroleum refining), and KOMX (mixtures of wastes from specific sources).

Underground injection of wastewater was used to manage 28 million tons of RCRA hazardous waste. The predominant waste types injected were general mixtures (MOMX), corrosive waste (D002), reactive waste (D003), and characteristic mixtures (DOMX). These were almost entirely wastewaters.

Exhibit 2-33. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by Management Method, 1989

SYSTEM TYPE CODE	MANAGEMENT METHOD	TOTAL QUANTITY MANAGED (tons)	WASTE TYPE[1]	QUANTITY MANAGED (tons)[1]
M011-M019	METALS RECOVERY (FOR REUSE)	1,362,362	D007	617,422
			K061	360,237
			DOMX*	164,586
			D008	132,949
M021-M029	SOLVENTS RECOVERY	485,790	D001	103,292
			F005	49,839
			MOMX*	45,588
			RCRA	43,664
M031-M039	OTHER RECOVERY	290,616	D001	122,636
			K019	38,600
			K048	24,067
			K022	17,950
M041-M049	INCINERATION	1,280,216	MOMX*	421,786
			DOMX*	202,213
			D001	114,433
			FOMX*	68,578
M051-M059	ENERGY RECOVERY (REUSE AS FUEL)	864,618	MOMX*	250,821
			D001	248,428
			RCRA	148,140
			FOMX*	112,046
M061	FUEL BLENDING	691,138	MOMX*	255,826
			FOMX*	111,723
			F003	107,425
			D001	98,471
M071-M079	AQUEOUS INORGANIC TREATMENT	10,416,235	D002	120,605
			DOMX*	470,753
			F006	688,588
			D007	573,670
M081-M089	AQUEOUS ORGANIC TREATMENT	58,601,949	FOMX*	566,872
			MOMX*	17,272,827
			K048	7,808,800
			KOMX*	578,624
M091-M099	AQUEOUS ORGANIC AND INORGANIC TREATMENT	80,911,585	MOMX*	80,539,599
			DOMX*	148,286
			D002	108,320
			F006	35,917
M101-M109	SLUDGE TREATMENT	120,135	F006	34,029
			MOMX*	30,388
			K051	25,382
			K048	10,590
M111-M119	STABILIZATION	1,068,268	D008	435,165
			F006	248,543
			MOMX*	126,780
			K061	55,389
M121-M129	OTHER TREATMENT	9,390,962	D002	4,278,566
			FOMX*	2,274,616
			D007	602,969
			DOMX*	547,877

(Continued on next page)

[1] CBI data are included in Total Quantity Managed but excluded from Quantity Managed and Waste Type.

Exhibit 2-33. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by Management Method, 1989 (Continued)

SYSTEM TYPE CODE	MANAGEMENT METHOD	TOTAL QUANTITY MANAGED (tons)	WASTE TYPE[1]	QUANTITY MANAGED (tons)[1]
M131	LAND TREATMENT	598,302	D007	354,752
			D002	89,373
			K049	34,092
			K048	31,270
M132	LANDFILL	2,275,783	D008	253,274
			DOMX*	242,168
			MOMX*	227,869
			F006	225,675
M133	SURFACE IMPOUNDMENT	34,256	D002	17,322
			DOMX*	7,107
			KOMX*	3,216
			K071	1,565
M134	UNDERGROUND INJECTION	27,956,284	MOMX*	8,757,444
			D002	6,619,607
			D003	3,457,253
			DOMX*	3,244,900
M137	OTHER DISPOSAL	8,136	U112	3,374
			MOMX*	2,377
			D001	1,274
			D003	812
	INVALID SYSTEM TYPE	144,218	D007	31,521
			D001	20,068
			LABP	19,920
			MOMX*	14,940

[1] CBI data are included in Total Quantity Managed but excluded from Quantity Managed and Waste Type.

Metals recovery was used to manage 1.4 million tons of RCRA hazardous waste. The specific waste types that had the largest quantities of waste managed through metals recovery were characteristic chromium wastes (D007), emission control dust/sludge from the primary production of steel in electric furnaces (K061), and characteristic mixtures (DOMX), and lead characteristic waste (D008).

A total of 1.3 million tons of RCRA hazardous waste was incinerated. The largest waste type that was incinerated was general mixed waste (MOMX). While not shown in Exhibit 2-33, wastes characterized as both ignitable and spent solvent were the major waste types that were incinerated, and more liquids were incinerated than solids or sludges. Due to the inherent heat content of ignitable wastes and solvents, incineration was a common method chosen for disposing such wastes.

While only a combined total of 2.3 million tons of RCRA hazardous wastes was managed in landfills, by land treatment, and in surface impoundments (to be closed as a landfill), the quantities of wastes managed by these methods may have a relatively greater impact on the environment than similar quantities of wastes that were managed in wastewater treatment processes. Characteristic lead waste (D008) was the largest hazardous waste type that was managed in landfills. The second and third largest waste types landfilled were, respectively, characteristic mixtures (DOMX) and general mixtures (MOMX). Wastewater treatment sludge (F006) was the fourth largest waste type that was landfilled. Sludge resulting from the treatment of hazardous wastewaters often contains heavy metals, and is sent off site for stabilization and subsequent disposal in landfills.

Characteristic chromium wastes (D007) and corrosive wastes (D002) were the two largest waste types that were managed by land treatment. The petroleum refining industry also contributed significantly to the total quantity of land-treated waste, including slop oil emulsion solids (K049), and dissolved air flotation float (K048).

The predominant waste type managed in surface impoundments (to be closed as a landfill) was corrosive characteristic waste (D002).

Exhibits 2-34 through 2-45 present State data for the following 4 management methods: disposal in landfills, incineration, disposal in underground injection wells, and disposal in surface impoundments. These 4 methods are singled out because of their potential impact on the environment, and because they are an important part of overall RCRA hazardous waste management.

Exhibits 2-34 and 2-35 list the States along with the associated quantities of RCRA hazardous wastes disposed in landfills in 1989 and the number of facilities using this waste management method. Exhibit 2-34 lists the States in alphabetical order, and Exhibit 2-35 lists the States in descending order of quantity managed. Twenty-nine States had 86 facilities that operated a RCRA hazardous waste landfill, cumulatively disposing of 2.3 million tons. Alabama, with 353,580 tons, and Indiana, with 330,758 tons, were the States that managed the largest quantities of RCRA hazardous wastes in landfills. These States were followed by New York (277,156 tons), Louisiana (266,640 tons), and Michigan (200,175 tons). These 5 States accounted for nearly 63 percent of the total RCRA hazardous waste disposed in landfills. Texas had the largest number of landfills with 20 facilities, followed by Indiana with 7 facilities. The map in Exhibit 2-38 illustrates, by State, the range of quantities of RCRA hazardous waste disposed in landfills in the nation.

Thirty-nine of the 55 States used incineration as a RCRA hazardous waste management method during 1989. Exhibits 2-37 and 2-38 show the quantity of RCRA hazardous waste incinerated. Exhibit 2-37 lists the States in alphabetical order, and Exhibit 2-38 ranks the States by the quantity of RCRA hazardous waste incinerated. Nearly 1.3 million tons of RCRA hazardous waste were incinerated in the U.S. during 1989. Facilities located in Texas incinerated the greatest quantity of RCRA hazardous waste (521,822 tons), followed by Ohio (176,810 tons) and Louisiana (113,607 tons). Twenty-four of the 39 States incinerated less

Exhibit 2-34. States Disposing RCRA Hazardous Waste in Landfills, 1989

STATE	HAZARDOUS WASTE			TSD FACILITIES	
	RANK	QUANTITY (tons)	PERCENT	NUMBER	PERCENT
ALABAMA	1	353,580	15.5	5	5.8
ARIZONA	17	262	<0.05	1	1.2
ARKANSAS	20	188	<0.05	1	1.2
CALIFORNIA*	16	2,167	0.1	5	5.8
COLORADO	19	213	<0.05	1	1.2
CONNECTICUT	18	261	<0.05	2	2.3
IDAHO*	29	0	<0.05	1	1.2
ILLINOIS	6	172,641	7.6	6	7.0
INDIANA	2	330,758	14.5	7	8.1
KANSAS	27	4	<0.05	1	1.2
LOUISIANA	4	266,640	11.7	3	3.5
MICHIGAN	5	200,175	8.8	3	3.5
MINNESOTA	22	27	<0.05	5	5.8
MISSISSIPPI	15	3,367	0.1	2	2.3
MISSOURI	13	5,700	0.3	3	3.5
NEVADA	12	15,760	0.7	1	1.2
NEW HAMPSHIRE	28	0	0.0	1	1.2
NEW JERSEY	21	167	<0.05	1	1.2
NEW YORK	3	277,156	12.2	2	2.3
NORTH DAKOTA	25	7	<0.05	1	1.2
OHIO*	14	3,643	0.2	3	3.5
OKLAHOMA	8	63,206	2.8	2	2.3
OREGON*	23	25	<0.05	2	2.3
SOUTH CAROLINA	7	85,878	3.8	1	1.2
TEXAS	9	52,391	2.3	20	23.3
UTAH	10	40,581	1.8	2	2.3
VERMONT	26	6	<0.05	1	1.2
WASHINGTON	24	14	<0.05	1	1.2
WEST VIRGINIA	11	17,334	0.8	2	2.3
TOTAL		2,275,783	100.0	86	100.0

* Some sites in these states claimed their data as Confidential Business Information (CBI). The national total quantity includes hazardous waste landfilled at the CBI sites. The state quantity does not include hazardous waste landfilled at CBI sites. The number of TSD facilities includes CBI sites.

NOTES: States not listed did not dispose of hazardous wastes in landfills during 1989.
Columns may not sum due to rounding.

Exhibit 2-35. Rank Ordering of States Disposing RCRA Hazardous Waste in Landfills, 1989

STATE	HAZARDOUS WASTE			TSD FACILITIES	
	RANK	QUANTITY (tons)	PERCENT	NUMBER	PERCENT
ALABAMA	1	353,580	15.5	5	5.8
INDIANA	2	330,758	14.5	7	8.1
NEW YORK	3	277,156	12.2	2	2.3
LOUISIANA	4	266,640	11.7	3	3.5
MICHIGAN	5	200,175	8.8	3	3.5
ILLINOIS	6	172,641	7.6	6	7.0
SOUTH CAROLINA	7	85,878	3.8	1	1.2
OKLAHOMA	8	63,206	2.8	2	2.3
TEXAS	9	52,391	2.3	20	23.3
UTAH	10	40,581	1.8	2	2.3
WEST VIRGINIA	11	17,334	0.8	2	2.3
NEVADA	12	15,760	0.7	1	1.2
MISSOURI	13	5,700	0.3	3	3.5
OHIO*	14	3,643	0.2	3	3.5
MISSISSIPPI	15	3,367	0.1	2	2.3
CALIFORNIA*	16	2,167	0.1	5	5.8
ARIZONA	17	262	<0.05	1	1.2
CONNECTICUT	18	261	<0.05	2	2.3
COLORADO	19	213	<0.05	1	1.2
ARKANSAS	20	188	<0.05	1	1.2
NEW JERSEY	21	167	<0.05	1	1.2
MINNESOTA	22	27	<0.05	5	5.8
OREGON*	23	25	<0.05	2	2.3
WASHINGTON	24	14	<0.05	1	1.2
NORTH DAKOTA	25	7	<0.05	1	1.2
VERMONT	26	6	<0.05	1	1.2
KANSAS	27	4	<0.05	1	1.2
NEW HAMPSHIRE	28	0	0.0	1	1.2
IDAHO*	29	0	0.0	1	1.2
TOTAL		2,275,783	100.0	86	100.0

* Some sites in these states claimed their data as Confidential Business Information (CBI). The national total quantity includes hazardous waste landfilled at the CBI sites. The state quantity does not include hazardous waste landfilled at CBI sites. The number of TSD facilities includes CBI sites.

NOTES: States not listed did not dispose of hazardous wastes in landfills during 1989.
Columns may not sum due to rounding.

Exhibit 2-36. Total Quantity of RCRA Hazardous Waste Disposed in Landfills, by State, 1989

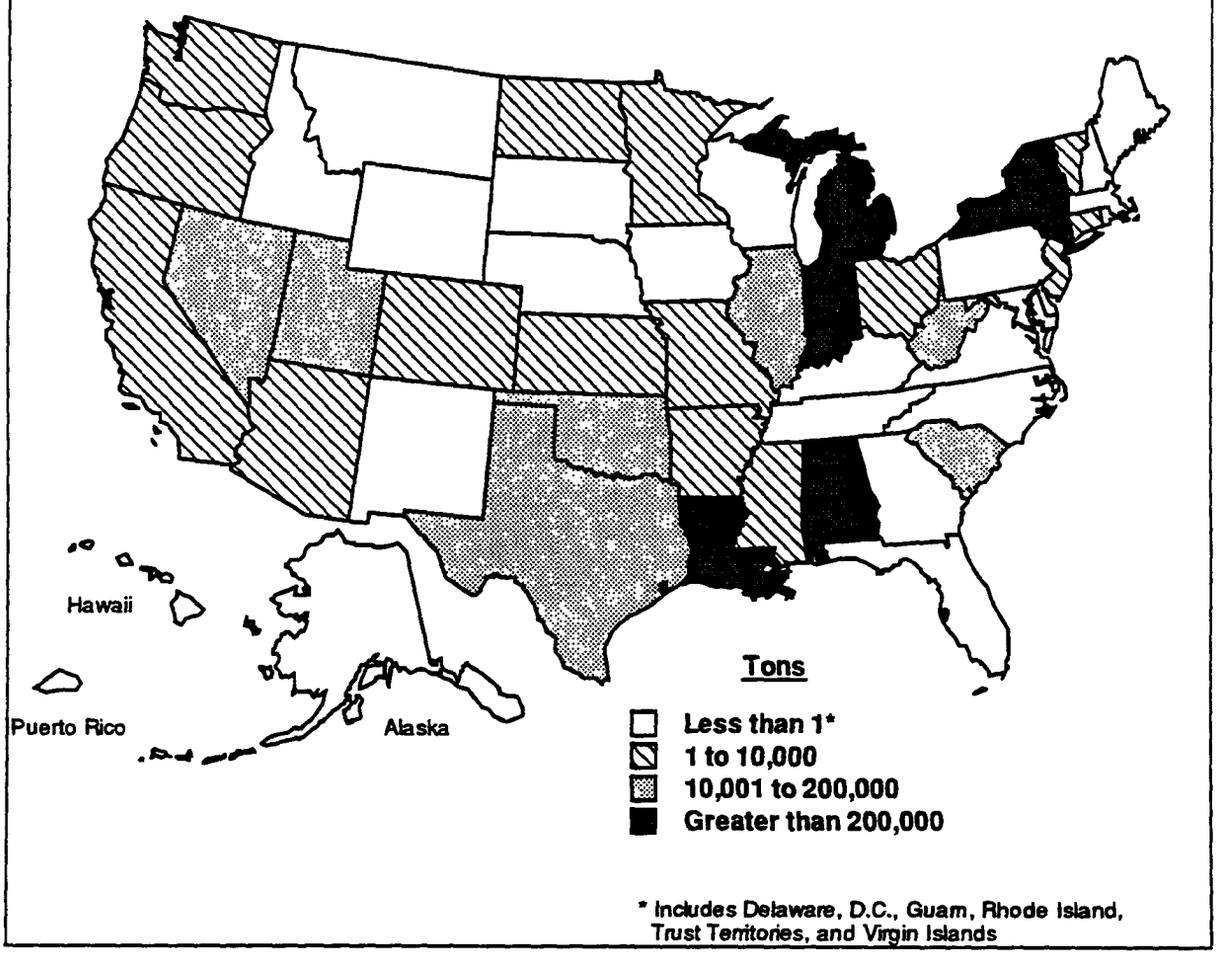


Exhibit 2-37. States Managing RCRA Hazardous Waste by Incineration, 1989

STATE	HAZARDOUS WASTE			TSD FACILITIES	
	RANK	QUANTITY (tons)	PERCENT	NUMBER	PERCENT
ALABAMA	19	4,122	0.3	6	2.7
ARIZONA	30	266	<0.05	5	2.3
ARKANSAS	9	35,578	2.8	8	3.6
CALIFORNIA	5	57,645	4.5	15	6.8
COLORADO	31	111	<0.05	1	0.5
CONNECTICUT	18	5,254	0.4	6	2.7
DELAWARE	26	888	0.1	1	0.5
GEORGIA	15	11,779	0.9	3	1.4
HAWAII	38	1	<0.05	1	0.5
IDAHO	37	2	<0.05	1	0.5
ILLINOIS	12	28,668	2.2	13	5.9
INDIANA	10	35,358	2.8	9	4.1
IOWA	22	3,014	0.2	3	1.4
KANSAS	21	3,100	0.2	4	1.8
KENTUCKY	24	1,256	0.1	1	0.5
LOUISIANA	3	113,607	8.9	12	5.4
MARYLAND	17	6,261	0.5	3	1.4
MICHIGAN	13	28,102	2.2	6	2.7
MINNESOTA	20	3,886	0.3	7	3.2
MISSISSIPPI	33	78	<0.05	2	0.9
MISSOURI	4	69,003	5.4	10	4.5
NEVADA	32	100	<0.05	1	0.5
NEW HAMPSHIRE	39	0	0.0	1	0.5
NEW JERSEY	29	359	<0.05	6	2.7
NEW MEXICO	35	10	<0.05	1	0.5
NEW YORK	6	43,916	3.4	10	4.5
NORTH DAKOTA	27	441	<0.05	1	0.5
OHIO	2	176,810	13.8	20	9.0
OKLAHOMA	25	898	0.1	4	1.8
OREGON	34	26	<0.05	1	0.5
PENNSYLVANIA	16	8,881	0.7	5	2.3
PUERTO RICO	7	38,162	3.0	5	2.3
SOUTH CAROLINA	8	35,767	2.8	4	1.8
TEXAS	1	521,822	40.8	24	10.9
UTAH	28	394	<0.05	4	1.8
VERMONT	36	3	<0.05	1	0.5
VIRGINIA	14	13,288	1.0	4	1.8
WEST VIRGINIA	11	28,699	2.2	8	3.6
WISCONSIN	23	2,659	0.2	4	1.8
TOTAL		1,280,216	100.0	221	100.0

NOTES: States not listed did not manage hazardous waste by incineration during 1989.
Columns may not sum due to rounding.

Exhibit 2-38. Rank Ordering of States Managing RCRA Hazardous Waste by Incineration, 1989

STATE	HAZARDOUS WASTE			TSD FACILITIES	
	RANK	QUANTITY (tons)	PERCENT	NUMBER	PERCENT
TEXAS	1	521,822	40.8	24	10.9
OHIO	2	176,810	13.8	20	9.0
LOUISIANA	3	113,607	8.9	12	5.4
MISSOURI	4	69,003	5.4	10	4.5
CALIFORNIA	5	57,645	4.5	15	6.8
NEW YORK	6	43,916	3.4	10	4.5
PUERTO RICO	7	38,162	3.0	5	2.3
SOUTH CAROLINA	8	35,767	2.8	4	1.8
ARKANSAS	9	35,578	2.8	8	3.6
INDIANA	10	35,358	2.8	9	4.1
WEST VIRGINIA	11	28,699	2.2	8	3.6
ILLINOIS	12	28,668	2.2	13	5.9
MICHIGAN	13	28,102	2.2	6	2.7
VIRGINIA	14	13,288	1.0	4	1.8
GEORGIA	15	11,779	0.9	3	1.4
PENNSYLVANIA	16	8,881	0.7	5	2.3
MARYLAND	17	6,261	0.5	3	1.4
CONNECTICUT	18	5,254	0.4	6	2.7
ALABAMA	19	4,122	0.3	6	2.7
MINNESOTA	20	3,886	0.3	7	3.2
KANSAS	21	3,100	0.2	4	1.8
IOWA	22	3,014	0.2	3	1.4
WISCONSIN	23	2,659	0.2	4	1.8
KENTUCKY	24	1,256	0.1	1	0.5
OKLAHOMA	25	898	0.1	4	1.8
DELAWARE	26	888	0.1	1	0.5
NORTH DAKOTA	27	441	<0.05	1	0.5
UTAH	28	394	<0.05	4	1.8
NEW JERSEY	29	359	<0.05	6	2.7
ARIZONA	30	266	<0.05	5	2.3
COLORADO	31	111	<0.05	1	0.5
NEVADA	32	100	<0.05	1	0.5
MISSISSIPPI	33	78	<0.05	2	0.9
OREGON	34	26	<0.05	1	0.5
NEW MEXICO	35	10	<0.05	1	0.5
VERMONT	36	3	<0.05	1	0.5
IDAHO	37	2	<0.05	1	0.5
HAWAII	38	1	<0.05	1	0.5
NEW HAMPSHIRE	39	0	0.0	1	0.5
TOTAL		1,280,216	99.9	221	100.0

NOTES: States not listed did not manage hazardous waste by incineration during 1989.
Columns may not sum due to rounding.

than 10,000 tons each. Nationwide, there were 221 incineration facilities in operation in 1989, 24 of which were in Texas, which had the largest number of incineration facilities. The map in Exhibit 2-39 illustrates, by State, the range of quantities of RCRA hazardous wastes incinerated in the nation.

Only 12 of the 55 States used underground injection wells to dispose of RCRA hazardous waste in 1989. The data for each State, showing the quantity injected into the wells, along with the number of TSD facilities using this waste management method, are presented in Exhibits 2-40 and 2-41. Exhibit 2-40 lists the States in alphabetical order, and Exhibit 2-41 lists the States in descending order of quantity managed.

Texas, with 12.2 million tons, and Louisiana, with 8.3 million tons, injected the bulk of the RCRA hazardous waste that was disposed in underground injection wells. Together, they accounted for 73 percent of the 28 million tons injected. By comparison, Michigan and Oklahoma, the States with the lowest quantity figures, together injected 125,108 tons, which together accounted for only 0.4 percent of the total quantity injected. During 1989, underground injection was used by a total of 59 facilities, the largest number of which were in Texas with 26 facilities, followed by Louisiana with 12 facilities. The map in Exhibit 2-42 illustrates, by State, the range of quantities of RCRA hazardous waste injected into underground wells in the nation.

Exhibits 2-43 and 2-44 list the States with the quantity of RCRA hazardous waste disposed in surface impoundments (to be closed as landfills) and the number of TSD facilities using this waste management method. Exhibit 2-43 lists the States in alphabetical order, and Exhibit 2-44 lists the States in descending order of quantity managed. This quantity represents only waste that first entered the surface impoundment in 1989; it does not include waste stored in the impoundments from prior years. A total of 11 facilities in the nation managed a total of 34,256 tons in disposal surface impoundments. Texas, with 2 facilities, had by far the largest

Exhibit 2-39. Total Quantity of RCRA Hazardous Waste Incinerated, by State, 1989

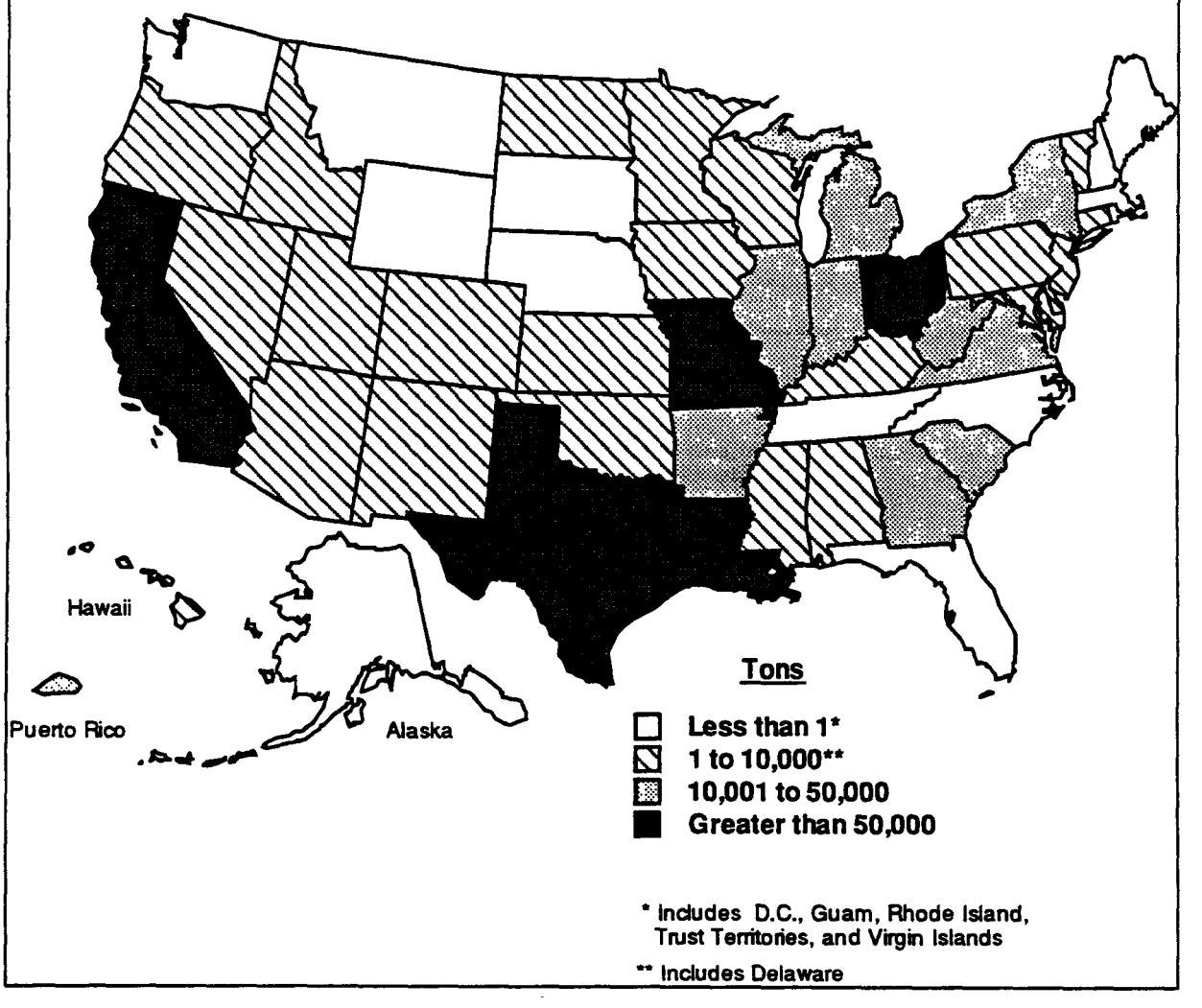


Exhibit 2-40. States Disposing RCRA Hazardous Waste in Underground Injection Wells, 1989

STATE	HAZARDOUS WASTE			TSD FACILITIES	
	RANK	QUANTITY (tons)	PERCENT	NUMBER	PERCENT
ARKANSAS	7	681,490	2.4	2	3.4
FLORIDA	10	320,134	1.1	1	1.7
ILLINOIS	8	487,527	1.7	3	5.2
INDIANA	6	945,336	3.4	5	8.6
KANSAS	3	1,666,025	6.0	1	1.7
LOUISIANA	2	8,278,900	29.6	12	20.7
MICHIGAN	12	60,405	0.2	1	1.7
MISSISSIPPI	9	342,473	1.2	1	1.7
OHIO	5	1,330,688	4.8	4	6.9
OKLAHOMA	11	64,703	0.2	1	1.7
TENNESSEE	4	1,583,784	5.7	1	1.7
TEXAS	1	12,194,749	43.6	26	44.8
CBI*	13	70	<0.05	1	1.7
TOTAL		27,956,288	100.0	59	100.0

* A State not listed above had at least one site that claimed its data as Confidential Business Information.

NOTES: States not listed did not dispose of hazardous waste in underground injection wells during 1989. Columns may not sum due to rounding.

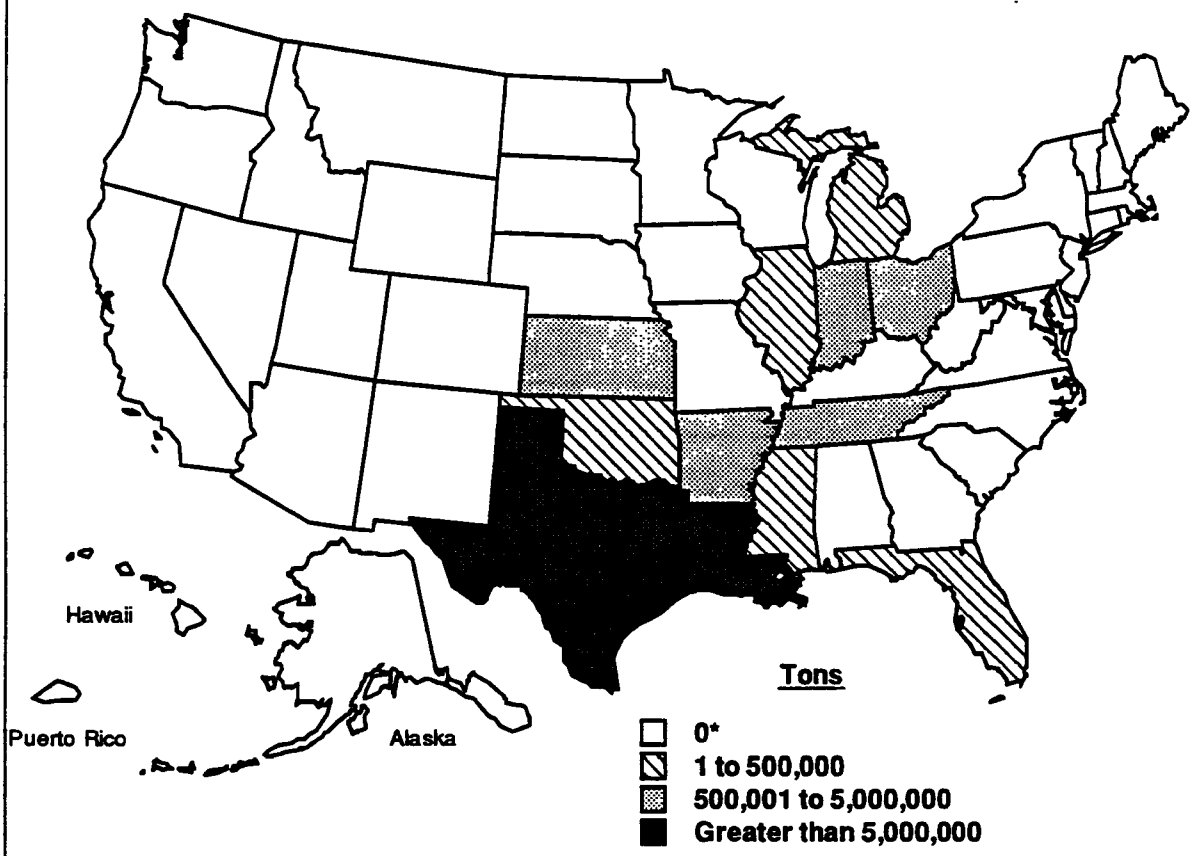
Exhibit 2-41. Rank Ordering of States Disposing RCRA Hazardous Waste in Underground Injection Wells, 1989

STATE	HAZARDOUS WASTE			TSD FACILITIES	
	RANK	QUANTITY (tons)	PERCENT	NUMBER	PERCENT
TEXAS	1	12,194,749	43.6	26	44.8
LOUISIANA	2	8,278,900	29.6	12	20.7
KANSAS	3	1,666,025	6.0	1	1.7
TENNESSEE	4	1,583,784	5.7	1	1.7
OHIO	5	1,330,688	4.8	4	6.9
INDIANA	6	945,336	3.4	5	8.6
ARKANSAS	7	681,490	2.4	2	3.4
ILLINOIS	8	487,527	1.7	3	5.2
MISSISSIPPI	9	342,473	1.2	1	1.7
FLORIDA	10	320,134	1.1	1	1.7
OKLAHOMA	11	64,703	0.2	1	1.7
MICHIGAN	12	60,405	0.2	1	1.7
CBI*	13	70	<0.05	1	1.7
TOTAL		27,956,288	100.0	59	100.0

* A State not listed above had at least one site that claimed its data as Confidential Business Information.

NOTES: States not listed did not dispose of hazardous waste in underground injection wells during 1989. Columns may not sum due to rounding.

Exhibit 2-42. Total Quantity of RCRA Hazardous Waste Disposed in Underground Injection Wells, by State, 1989



* Includes Delaware, D.C., Guam, Rhode Island, Trust Territories, and Virgin Islands

Exhibit 2-43. States Disposing RCRA Hazardous Waste in Surface Impoundments, 1989

STATE	HAZARDOUS WASTE			TSD FACILITIES	
	RANK	QUANTITY (tons)	PERCENT	NUMBER	PERCENT
ALABAMA	3	1,565	4.6	1	9.1
ARKANSAS	7	675	2.0	1	9.1
CONNECTICUT	8	553	1.6	1	9.1
GEORGIA	6	861	2.5	1	9.1
KANSAS	4	1,500	4.4	1	9.1
OHIO	2	7,013	20.5	2	18.2
TEXAS	1	20,643	60.3	2	18.2
WEST VIRGINIA	5	1,446	4.2	1	9.1
CBI*	9	<0.5	<0.05	1	9.1
TOTAL		34,256	100.0	11	100.0

* A State not listed above had at least one site that claimed its data as Confidential Business Information.

NOTES: States not listed did not dispose of hazardous waste in surface impoundments during 1989. Columns may not sum due to rounding.

Exhibit 2-44. Rank Ordering of States Disposing RCRA Hazardous Waste in Surface Impoundments, 1989

STATE	HAZARDOUS WASTE			TSD FACILITIES	
	RANK	QUANTITY (tons)	PERCENT	NUMBER	PERCENT
TEXAS	1	20,643	60.3	2	18.2
OHIO	2	7,013	20.5	2	18.2
ALABAMA	3	1,565	4.6	1	9.1
KANSAS	4	1,500	4.4	1	9.1
WEST VIRGINIA	5	1,446	4.2	1	9.1
GEORGIA	6	861	2.5	1	9.1
ARKANSAS	7	675	2.0	1	9.1
CONNECTICUT	8	553	1.6	1	9.1
CBI*	9	<0.5	<0.05	1	9.1
TOTAL		34,256	100.0	11	100.0

* A State not listed above had at least one site that claimed its data as Confidential Business Information.

NOTES: States not listed did not dispose of hazardous waste in surface impoundments during 1989. Columns may not sum due to rounding.

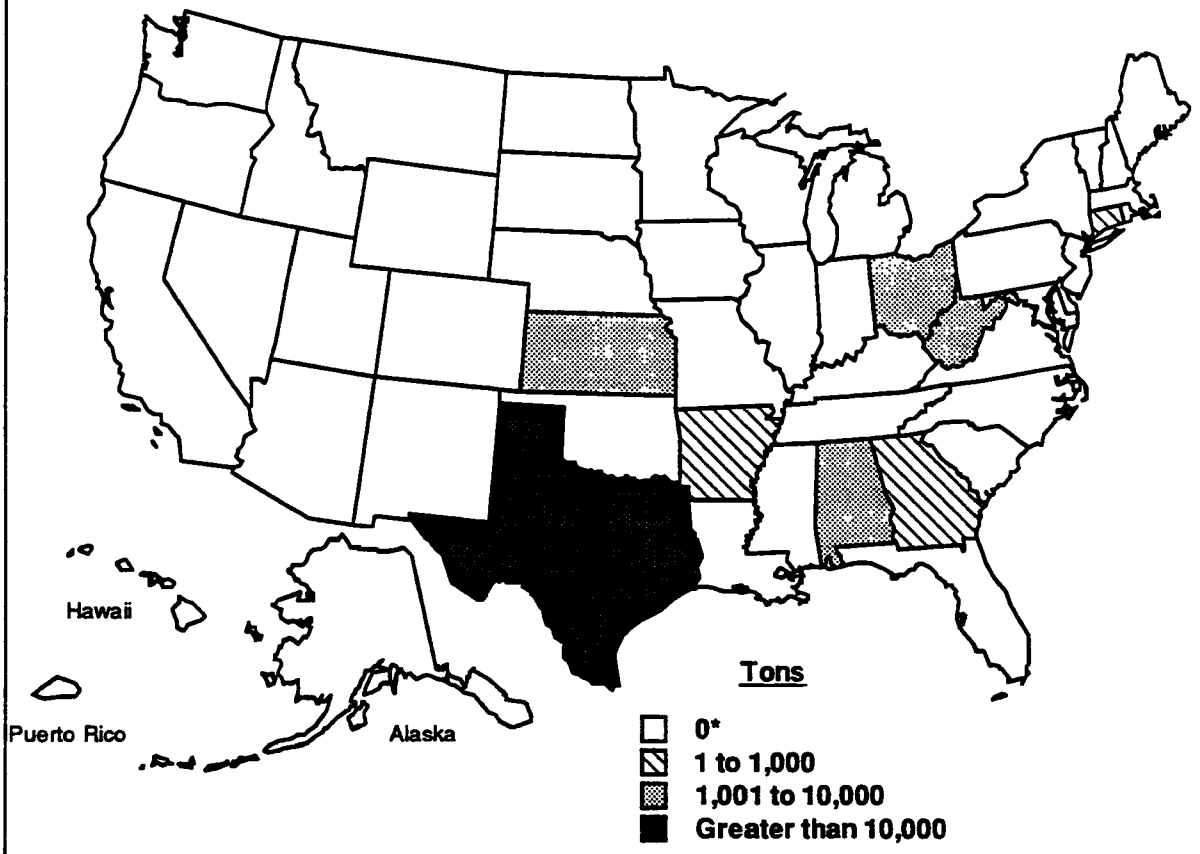
quantity with 20,643 tons, accounting for 60.3 percent of the total amount managed by this method in the nation. The map in Exhibit 2-45 illustrates, by State, the range of quantities of RCRA hazardous waste disposed in surface impoundments in the nation.

2.6 HAZARDOUS WASTE STATE IMPORTS AND EXPORTS

RCRA hazardous waste imports from other States and exports to other States are discussed in Section 2-6. The quantities of RCRA hazardous wastes that were imported and exported by each State are presented in Exhibit 2-46. All but one State, the Virgin Islands, exported hazardous waste to one or more States for management, while 47 States imported hazardous waste from other States for management. Eight States did not import any RCRA hazardous waste. The three leading RCRA hazardous waste importing States were Ohio with 402,061 tons, Pennsylvania with 356,702 tons, and Alabama with 333,661 tons. The three leading RCRA hazardous waste exporting States were Pennsylvania with 426,113 tons, Ohio with 326,339 tons, and Texas with 298,396 tons. Approximately 4 million tons or 2 percent of the 197.5 million tons of RCRA hazardous waste generated were shipped (i.e., gross total exports) by generators to out-of-state TSD facilities for management.

The difference between the total RCRA hazardous waste imported and the total RCRA hazardous waste exported is also indicated in Exhibit 2-46. This quantity is defined to be "net imports." A positive quantity indicates that the State was a net importer of RCRA hazardous waste; a negative quantity indicates that the State was a net exporter of RCRA hazardous waste. Of the 55 States, 17 were net importers of RCRA hazardous waste, 37 were net exporters, and 1 State, the Virgin Islands, neither imported nor exported RCRA hazardous waste. The three largest net importing States were Indiana with 181,170 tons, Alabama with 176,160 tons, and South Carolina with 113,117 tons. The largest net exporter was California with 176,340 tons, followed by Texas with 108,820 tons, Wisconsin with 87,803 tons, and Connecticut with 87,248 tons.

Exhibit 2-45. Total Quantity of RCRA Hazardous Waste Disposed in Surface Impoundments, by State, 1989



* Includes Delaware, D.C., Guam, Rhode Island, Trust Territories, and Virgin Islands

Exhibit 2-46. RCRA Hazardous Waste Imports and Exports, by State, 1989

STATE	TOTAL IMPORTS (tons)	TOTAL EXPORTS (tons)	NET IMPORTS (imports-exports)
ALABAMA	333,661	157,501	176,160
ALASKA	0	3,470	-3,470
ARIZONA	778	23,415	-22,637
ARKANSAS	115,352	99,014	16,338
CALIFORNIA	28,556	204,896	-176,340
COLORADO	1,984	33,044	-31,061
CONNECTICUT	21,253	108,501	-87,248
DELAWARE	1	14,084	-14,083
DISTRICT OF COLUMBIA	0	2,409	-2,409
FLORIDA	16,617	60,915	-44,298
GEORGIA	18,188	89,459	-71,272
GUAM	0	203	-203
HAWAII	149	1,449	-1,300
IDAHO	37,524	1,579	35,945
ILLINOIS	285,886	244,472	41,414
INDIANA	313,484	132,313	181,170
IOWA	2,330	21,402	-19,071
KANSAS	26,167	40,820	-14,653
KENTUCKY	92,282	66,109	26,173
LOUISIANA	238,750	150,058	88,691
MAINE	0	52,635	-52,635
MARYLAND	7,731	68,913	-61,182
MASSACHUSETTS	0	25,444	-25,444
MICHIGAN	199,634	227,860	-28,225
MINNESOTA	12,581	38,805	-26,224
MISSISSIPPI	18,649	43,415	-24,765
MISSOURI	96,944	105,154	-8,210
MONTANA	0	2,497	-2,497
NEBRASKA	19,115	8,374	10,742
NEVADA	15,142	1,954	13,188
NEW HAMPSHIRE	211	13,100	-12,889
NEW JERSEY	165,933	218,015	-52,082
NEW MEXICO	16	5,252	-5,236
NEW YORK	141,488	149,938	-8,450
NORTH CAROLINA	36,168	43,530	-7,363
NORTH DAKOTA	660	3,651	-2,991
OHIO	402,061	326,339	75,722
OKLAHOMA	113,781	47,713	66,068
OREGON	57,330	18,817	38,513
PENNSYLVANIA	356,702	426,113	-69,411
PUERTO RICO	6	8,636	-8,630
RHODE ISLAND	13,707	5,201	8,506
SOUTH CAROLINA	151,652	38,535	113,117
SOUTH DAKOTA	122	1,372	-1,250
TENNESSEE	67,541	41,335	26,206
TEXAS	189,576	298,396	-108,820
TRUST TERRITORIES	2	24	-22
UTAH	46,639	6,505	40,135
VERMONT	100	13,840	-13,740
VIRGINIA	53,109	40,988	12,121
WASHINGTON	15,501	57,476	-41,975
WEST VIRGINIA	1,774	63,767	-61,993
WISCONSIN	23,387	111,190	-87,803
WYOMING	0	2,954	-2,954
TOTAL	3,740,225	3,972,853	-232,628

NOTE: Columns may not sum due to rounding.

Exhibit 2-47 displays the quantities of RCRA hazardous wastes that were imported and exported, by EPA region. Each of the 10 regions was both an importer and an exporter. Region 5 was the largest net importer, and Region 3 was the largest net exporter.

Exhibit 2-48 presents, by State, the total imports and exports for each State relative to the total quantity managed and the total quantity generated by that State. Fourteen of the 55 States exported more than half of their RCRA hazardous waste. Conversely, 8 States imported more than 50 percent of the RCRA hazardous waste managed.

Exhibit 2-47. RCRA Hazardous Waste Imports and Exports, by EPA Region, 1989

EPA REGION	TOTAL IMPORTS (tons)	TOTAL EXPORTS (tons)	NET IMPORTS (imports-exports)
1	12,226	139,673	-127,446
2	262,481	320,355	-57,874
3	358,917	555,160	-196,243
4	386,755	258,578	128,177
5	697,929	476,892	221,037
6	296,021	182,481	113,539
7	138,048	169,703	-31,655
8	42,252	43,925	-1,674
9	21,948	194,644	-172,696
10	99,687	36,622	63,065
TOTAL	2,316,266	2,378,033	-61,767

NOTE: Columns may not sum due to rounding.

Exhibit 2-48. RCRA Hazardous Waste Generation, Imports, Exports, and Management, by State, 1989

STATE	TOTAL GENERATED (tons)	IMPORTS		EXPORTS		TOTAL MANAGED (tons)[1]
		AMOUNT (tons)	PERCENT OF QUANTITY MANAGED	AMOUNT (tons)	PERCENT OF QUANTITY GENERATED	
ALABAMA	403,701	333,661	59.1	157,501	39.0	564,
ALASKA	3,664	0	0.0	3,470	94.7	
ARIZONA	124,595	778	0.8	23,415	18.8	95,
ARKANSAS	805,150	115,352	1.0	99,014	12.3	824,
CALIFORNIA	4,670,579	28,556	0.6	204,896	4.4	4,978,
COLORADO	117,347	1,984	2.4	33,044	28.2	81,
CONNECTICUT	1,390,314	21,253	5.8	108,501	7.8	366,
DELAWARE	19,766	1	<0.05	14,084	71.3	3,
DISTRICT OF COLUMBIA	2,357	0	0.0	2,409	102.2	
FLORIDA	411,832	16,617	4.6	60,915	14.8	359,
GEORGIA	2,615,210	18,188	0.7	89,459	3.4	2,551,
GUAM	573	0	0	203	35.5	
HAWAII	2,149	149	18.6	1,449	67.4	
IDAHO	15,062	37,524	81.7	1,579	10.5	45
ILLINOIS	1,381,799	285,886	19.8	244,472	17.7	1,441
INDIANA	1,843,015	313,484	15.5	132,313	7.2	2,021
IOWA	76,240	2,330	3.1	21,402	28.1	74
KANSAS	1,713,963	26,167	1.5	40,820	2.4	1,700
KENTUCKY	149,612	92,282	63.4	66,109	44.2	145,
LOUISIANA	9,094,768	238,750	2.6	150,058	1.6	9,205
MAINE	52,528	0	0.0	52,635	100.2	
MARYLAND	265,227	7,731	3.7	68,913	26.0	211,
MASSACHUSETTS	34,142	0	0.0	25,444	74.5	
MICHIGAN	35,143,264	199,634	0.6	227,860	0.6	35,067,
MINNESOTA	239,098	12,581	3.6	38,805	16.2	348
MISSISSIPPI	717,291	18,649	2.7	43,415	6.1	697
MISSOURI	384,289	96,944	33.5	105,154	27.4	289
MONTANA	4,978	0	0.0	2,497	50.2	2
NEBRASKA	72,209	19,115	22.8	8,374	11.6	83
NEVADA	4,685	15,142	74.8	1,954	41.7	20
NEW HAMPSHIRE	18,211	211	3.5	13,100	71.9	5
NEW JERSEY	47,096,658	165,933	0.4	218,015	0.5	46,931
NEW MEXICO	10,961	16	0.3	5,252	47.9	6
NEW YORK	406,910	141,488	33.7	149,938	36.8	419
NORTH CAROLINA	586,338	36,168	6.4	43,530	7.4	565
NORTH DAKOTA	28,840	660	2.6	3,651	12.7	25
OHIO	2,727,383	402,061	14.8	326,339	12.0	2,710
OKLAHOMA	205,382	113,781	49.8	47,713	23.2	228
OREGON	27,954	57,330	87.8	18,817	67.3	65
PENNSYLVANIA	1,246,706	356,702	31.3	426,113	34.2	1,139
PUERTO RICO	246,161	6	<0.05	8,636	3.5	243
RHODE ISLAND	5,565	13,707	106.3	5,201	93.5	12
SOUTH CAROLINA	106,224	151,652	86.3	38,535	36.3	175
SOUTH DAKOTA	1,088	122	<0.05	1,372	126.1	
TENNESSEE	34,363,940	67,541	0.2	41,335	0.1	34,533
TEXAS	28,171,860	189,576	0.7	298,396	1.1	27,788
TRUST TERRITORIES	23	2	100.0	24	105.4	
UTAH	211,563	46,639	18.1	6,505	3.1	258
VERMONT	13,481	100	94.4	13,840	102.7	
VIRGIN ISLANDS	5,757	0	0.0	0	0.0	5
VIRGINIA	5,227,092	53,109	1.0	40,988	0.8	5,324
WASHINGTON	228,323	15,501	9.1	57,476	25.2	170
WEST VIRGINIA	14,390,206	1,774	<0.05	63,767	0.4	14,335
WISCONSIN	411,897	23,387	6.3	111,190	27.0	371
WYOMING	3,180	0	0.0	2,954	92.9	
TOTAL	197,501,112	3,740,225	1.9	3,972,853	2.0	196,500

[1] Quantity managed only by storage is excluded.

NOTE: Columns may not sum due to rounding.

3. WASTE MINIMIZATION

3.1 INTRODUCTION

3.1.1 Waste Minimization

Waste minimization means the reduction, to the extent feasible, of hazardous waste that is generated or subsequently treated, stored, or disposed. Waste minimization includes any source reduction or recycling activity undertaken by a generator that results in: (1) the reduction of total volume or quantity of a hazardous waste; (2) the reduction of toxicity of a hazardous waste; or (3) both, as long as the reduction is consistent with the goal of minimizing present and future threats to human health and the environment.

Source reduction means the reduction or elimination of a hazardous waste at the source, usually within a process. Source reduction measures include process modifications, feedstock substitutions, improvements in feedstock purity, housekeeping and management practices, increases in the efficiency of machinery, and recycling within a process. Source reduction implies any action that reduces the toxicity or the amount of waste exiting a process.

Recycling means the use or reuse of waste as an effective substitute for a commercial product, or as an ingredient or feedstock in an industrial process. It also refers to the reclamation of useful constituent fractions within a waste material or the removal of contaminants from a waste to allow it to be reused. As used in this Report, recycling implies use, reuse, or reclamation of a waste, either on site or off site, after it has been generated.

3.1.2 Data Collection Instrument

The EPA 1989 Hazardous Waste Report (or an essentially identical State version) was the waste minimization data collection instrument used in more than 30 States for the 1989 reporting cycle. Twenty-one States used a version of the EPA Waste Minimization Report in combination with a State form to report generation and management, while two States used no forms that resembled either EPA Report format. The forms in the EPA Reports requested information from RCRA hazardous waste generators and TSD facilities on their waste minimization efforts. Qualitative information was collected on the Report's Form IC (Identification and Certification) or Form WMIC (Waste Minimization Identification and Certification), and quantitative information was collected on Form GM (Generation and Management) or Form WM (Waste Minimization). States that used EPA Hazardous Waste Report forms asked respondents to report the information on Forms IC and GM, and States that used their own forms for hazardous waste information used the separate EPA Waste Minimization Report that contained Forms WMIC and WM. Either Form IC or Form WMIC was to be completed by every RCRA hazardous waste generator or TSD facility. This form asked respondents whether they began or expanded waste minimization activities during 1988 or 1989, and to identify any factors that limited the sites' development of waste minimization activities. Form GM was to be completed to characterize every waste generated in 1989 and any associated waste minimization activity. Form WM was to be completed only by generators and TSD facilities that engaged in an activity during 1989 that resulted in waste minimization.

Forms IC and WMIC collect site-wide information whereas Forms GM and WM collect information on individual RCRA hazardous wastes.

3.1.3 Sites Reporting Waste Minimization Data

Waste Minimization data collection is incomplete after the 1989 biennial report cycle. All States have provided some data, but no data were received for an unknown number of sites. This problem exists in varying degrees in every State that used a separate data collection instrument for waste minimization, rather than the integrated EPA Hazardous Waste Report booklet. Problems arise due to nonresponse to the separate waste minimization data collection, and different waste minimization mailing lists. As a result of these implementation problems, the data presented in this Chapter will underrepresent the actual amount of waste minimization activity that occurred.

3.2 WASTE MINIMIZATION REPORTERS

Data analyses on waste minimization reporters are presented on both a site level and a waste level within the States, and by industry category using the Standard Industrial Classification (SIC) code. The waste minimization activities included in this section pertain only to new activities implemented during 1989 and excludes all on-going waste minimization activities that were implemented prior to 1989.

Data from sites that claimed CBI are not included in any exhibits in this chapter. The impact of the exclusion of the 19 CBI sites on the data presented below is minimal.

3.2.1 Waste Minimization Analyses on a State Basis

Exhibit 3-1 presents, by State, the quantity of hazardous waste generated (197.4 million tons); the quantity and percentage of the total waste generated by those sites that engaged in waste minimization activities (98.1 million tons or 50 percent); the total number of generators and TSD facilities that filed a 1989 Hazardous Waste Report (20,713 sites); and the number and percentage of those sites that reported on either Form GM or WM that they engaged in one or more waste minimization activity during 1989 (6,067 sites or 29 percent). These 6,067 sites accounted for 50 percent of the total RCRA hazardous waste generation in the nation, indicating that many of the largest generators in the nation did engage in waste minimization activity in 1989.

Exhibit 3-2 is similar to Exhibit 3-1 except the data are presented on a waste[1] basis instead of a site basis. Nationally, of the 147,295 RCRA hazardous wastes reported in 1989, only 11,434 wastes, or 8 percent, were subjected to a waste minimization activity. This means that, at the 6,067 sites that reported a waste minimization activity in 1989, there were 11,434 wastes, or, on average, 1.9 wastes per site, that were minimized. Moreover, the quantity associated with the wastes that were involved in a waste minimization activity was only 8.2 million tons, or 4 percent of the total quantity of hazardous waste generated in the nation. The largest quantities of RCRA hazardous wastes, mostly wastewaters, were not often the targets of waste minimization activities.

While more than 1 site in 4 engaged in a waste minimization activity (Exhibit 3-1), fewer than 1 in 12 wastes were subject to waste minimization. Similarly, while nearly one-half of the national quantity of RCRA hazardous waste was generated at sites that engaged in waste

[1] An individual waste in the Biennial Reporting System (BRS) database corresponds to one Form GM in the EPA 1989 Hazardous Waste Report package. See Appendix E for a sample Form GM.

Exhibit 3-1. Number of Generators and Treatment, Storage, Disposal (TSD) Facilities and Quantity Generated, for Sites that Reported Waste Minimization Activity, by State, 1989

STATE	QUANTITY GENERATED BY SITES SUBMITTING WASTE REPORTS (tons)	WASTE MINIMIZATION REPORTERS		NUMBER OF SITES SUBMITTING WASTE REPORTS	WASTE MINIMIZATION REPORTERS	
		QUANTITY GENERATED (tons)	PERCENT		NUMBER	PERCENT
AK	3,698	507	13.7	55	19	34.5
AL	403,814	86,622	21.5	244	75	30.7
AR	805,171	711,873	88.4	57	25	43.9
AZ	124,595	15,254	12.2	176	103	58.5
CA	4,643,441	716,149	15.4	2,428	615	25.3
CO	117,365	92,300	78.6	158	60	38.0
CT	1,390,462	1,279,291	92.0	513	179	34.9
DC	2,357	514	21.8	11	2	18.2
DE	19,766	7,234	36.6	59	20	33.9
FL	411,832	35,366	8.6	371	96	25.9
GA	2,615,210	2,302,049	88.0	382	137	35.9
GU	573	152	26.5	10	1	10.0
HI	2,135	95	4.4	39	6	15.4
IA	98,818	65,021	65.8	137	50	36.5
ID	13,590	6,463	47.6	22	5	22.7
IL	1,383,950	1,062,777	76.8	1,435	415	28.9
IN	1,843,015	1,439,024	78.1	698	264	37.8
KS	1,713,963	1,697,009	99.0	192	57	29.7
KY	149,612	34,777	23.2	349	86	24.6
LA	9,094,768	7,316,768	80.5	448	101	22.5
MA	34,142	16,818	49.3	494	141	28.5
MD	265,242	86,521	32.6	390	69	17.7
ME	52,528	613	1.2	46	6	13.0
MI	35,144,452	34,258,923	97.5	882	307	34.8
MN	239,213	190,410	79.6	274	153	55.8
MO	385,483	234,796	60.9	305	109	35.7
MS	717,306	703,809	98.1	155	58	37.4
MT	4,979	3,106	62.4	30	10	33.3
NC	586,338	575,249	98.1	696	524	75.3
ND	28,840	26,210	90.9	18	6	33.3
NE	72,211	62,844	87.0	73	39	53.4
NH	18,211	8,630	47.4	111	39	35.1
NJ	47,096,658	80,793	0.2	1,439	374	26.0
NM	10,964	5,715	52.1	49	18	36.7
NV	4,695	1,817	38.7	36	6	16.7
NY	406,910	150,114	36.9	850	254	29.9
OH	2,617,712	1,976,246	75.5	1,187	438	36.9
OK	205,451	151,722	73.8	148	48	32.4
OR	27,825	8,457	30.4	76	34	44.7
PA	1,247,032	257,505	20.6	1,047	320	30.6
PR	264,820	226,080	85.4	86	32	37.2
RI	5,565	0	0.0	193	0	0.0
SC	106,224	0	0.0	402	6	1.5
SD	1,088	205	18.8	12	3	25.0
TN	34,363,940	1,599,621	4.7	451	111	24.6
TT	23	3	13.0	2	1	50.0
TX	28,171,901	24,995,794	88.7	1,641	242	14.7
UT	211,573	17,023	8.0	94	33	35.1
VA	5,230,197	1,036,216	19.8	289	80	27.7
VI	5,757	0	0.0	1	0	0.0
VT	13,481	5,678	42.1	44	12	27.3
WA	228,328	169,376	74.2	726	92	12.7
WI	411,897	79,481	19.3	559	146	26.1
WV	14,390,206	14,326,415	99.6	102	29	28.4
WY	3,180	2,829	89.0	21	11	52.4
TOTAL	197,412,510	98,128,261	49.7	20,713	6,067	29.3

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Exhibit 3-2. Number and Quantity of Wastes Minimized, by Waste Reported, by State, 1989

STATE	TOTAL QUANTITY GENERATED (tons)	WASTES MINIMIZED		TOTAL NUMBER OF WASTES REPORTED	WASTES MINIMIZED	
		QUANTITY GENERATED (tons)	PERCENT		NUMBER	PERCENT
AK	3,698	271	7.3	462	49	10.6
AL	403,814	60,882	15.1	1,882	179	9.5
AR	805,171	663,225	82.4	409	39	9.5
AZ	124,595	4,177	3.4	2,561	198	7.7
CA	4,643,441	227,286	4.9	12,901	1,332	10.3
CO	117,365	76,291	65.0	1,114	149	13.4
CT	1,390,462	30,038	2.2	5,156	451	8.7
DC	2,357	830	35.2	198	25	12.6
DE	19,766	7,710	39.0	1,192	61	5.1
FL	411,832	27,584	6.7	1,748	177	10.1
GA	2,615,210	27,230	1.0	3,351	249	7.4
GU	573	151	26.4	301	24	8.0
HI	2,135	28	1.3	508	20	3.9
IA	98,818	49,985	50.6	855	106	12.4
ID	13,590	135	1.0	314	93	29.6
IL	1,383,950	151,666	11.0	7,517	560	7.4
IN	1,843,015	579,763	31.5	4,254	408	9.6
KS	1,713,963	1,609,654	93.9	946	103	10.9
KY	149,612	26,476	17.7	366	124	33.9
LA	9,094,768	591,060	6.5	1,660	187	11.3
MA	34,142	8,701	25.5	2,962	260	8.8
MD	265,242	12,036	4.5	3,344	226	6.8
ME	52,528	157	0.3	266	14	5.3
MI	35,144,452	278,080	0.8	4,305	607	14.1
MN	239,213	19,171	8.0	2,252	342	15.2
MO	385,483	60,488	15.7	2,153	252	11.7
MS	717,306	351,498	49.0	660	116	17.6
MT	4,979	941	18.9	135	14	10.4
NC	586,338	120,290	20.5	3,844	404	10.5
ND	28,840	25,663	89.0	87	12	13.8
NE	72,211	60,561	83.9	496	75	15.1
NH	18,211	3,276	18.0	1,207	125	10.4
NJ	47,096,658	24,142	0.1	8,873	607	6.8
NM	10,964	1,745	15.9	786	64	8.1
NV	4,695	1,164	24.8	505	41	8.1
NY	406,910	60,308	14.8	3,144	453	14.4
OH	2,617,712	353,500	13.5	7,244	661	9.1
OK	205,451	15,103	7.4	744	82	11.0
OR	27,825	5,647	20.3	491	74	15.1
PA	1,247,032	101,779	8.2	7,701	745	9.7
PR	264,820	57,460	21.7	769	128	16.6
RI	5,565	0	0.0	660	0	0.0
SC	106,224	0	0.0	1,537	10	0.7
SD	1,088	72	6.6	53	5	9.4
TN	34,363,940	30,878	0.1	446	225	50.4
TT	23	3	13.0	22	2	9.1
TX	28,171,901	2,117,110	7.5	9,116	464	5.1
UT	211,573	11,219	5.3	1,250	117	9.4
VA	5,230,197	23,483	0.4	2,836	191	6.7
VI	5,757	0	0.0	5	0	0.0
VT	13,481	317	2.4	471	23	4.9
WA	228,328	10,725	4.7	27,037	203	0.8
WI	411,897	18,853	4.6	3,246	278	8.6
WV	14,390,206	251,500	1.7	913	60	6.6
WY	3,180	1,935	60.8	40	20	50.0
TOTAL	197,412,510	8,162,245	4.1	147,295	11,434	7.8

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

minimization activities, the wastes that were the targets of source reduction or recycling comprised only 4 percent of the national generation quantity.

3.2.2 Waste Minimization Analyses by SIC Code

Exhibit 3-3 presents, by SIC code, the quantity of RCRA hazardous waste generated at sites that engaged in waste minimization activities and the percentage of the total quantity represented by these sites. Also shown in this exhibit is the number and percentage of sites that engaged in a waste minimization activity during 1989. The SIC code used in this and exhibits that follow characterizes the primary industrial activities at the site as a whole, not the specific industrial activity associated with the generation of particular wastes.

Of the 20,713 total number of sites, at least 11,946 sites, or 58 percent, were within the manufacturing industry (SIC codes 20 - 39). Industries in the manufacturing sector dominated both the site counts and the quantity generated. Nearly 58 percent of sites (11,946) in the manufacturing sector accounted for almost 98 percent (193,182,463 tons) of the RCRA hazardous waste generated. Manufacturing sites also made up 75 percent of those reporting waste minimization in 1989. Approximately 38 percent of the sites in the manufacturing industry engaged in waste minimization compared to the national average of 29 percent. Sites in the wholesale trade (SIC codes 50 - 51) and services (SIC codes 70 - 89) industries engaged in waste minimization at rates of 15 and 19 percent, respectively, well below the national average of 29 percent.

Exhibit 3-4 is similar to Exhibit 3-3 except the data are presented on a waste basis instead of a site basis. Over 61 percent of the RCRA hazardous wastes reported (90,516 of 147,295) were generated by sites in the manufacturing industry. The manufacturing industry accounted for 75 percent of the number of wastes reported minimized. Manufacturing sites were almost twice as likely to report a waste minimization activity as sites outside that sector (9.5 percent versus 5.1 percent).

Exhibit 3-3. Number of Generators and Treatment, Storage, Disposal (TSD) Facilities and Quantity Generated, for Sites that Reported Waste Minimization Activity, by SIC Code, 1989

SIC CODE	QUANTITY GENERATED BY SITES SUBMITTING WASTE REPORTS (tons)	WASTE MINIMIZATION REPORTERS		NUMBER OF SITES SUBMITTING WASTE REPORTS	WASTE MINIMIZATION REPORTERS	
		QUANTITY GENERATED (tons)	PERCENT		NUMBER	PERCENT
unknown	1,034,991	186,197	18.0	4,533	725	16.0
01	24	0	0.0	2	0	0.0
02	7,503	69	0.9	6	2	33.3
07	139	27	19.4	15	3	20.0
08	270	265	98.1	4	2	50.0
09	22	0	0.0	6	0	0.0
10	464	223	48.1	21	5	23.8
12	629	376	59.8	17	10	58.8
13	23,161	16,461	71.1	113	13	11.5
14	524	196	37.4	25	3	12.0
15	798	63	7.9	18	2	11.1
16	2,716	37	1.4	77	2	2.6
17	5,314	561	10.6	63	18	28.6
20	40,508	33,733	83.3	122	37	30.3
21	180	22	12.2	5	2	40.0
22	65,109	8,197	12.6	104	34	32.7
23	1,175	706	60.1	17	5	29.4
24	22,851	5,427	23.7	231	71	30.7
25	138,457	61,299	44.3	285	137	48.1
26	62,409	37,131	59.5	346	123	35.5
27	35,282	13,572	38.5	340	120	35.3
28	175,727,960	87,055,060	49.5	2,381	905	38.0
29	3,903,810	3,633,064	93.1	267	80	30.0
30	234,082	160,690	68.6	582	213	36.6
31	6,751	803	11.9	25	10	40.0
32	119,348	85,097	71.3	265	90	34.0
33	3,853,780	2,195,371	57.0	912	293	32.1
34	3,249,929	836,003	25.7	2,371	898	37.9
35	336,332	231,668	68.9	830	328	39.5
36	3,664,120	1,562,291	42.6	1,418	636	44.9
37	1,622,608	1,197,992	73.8	1,007	386	38.3
38	73,607	58,970	80.1	253	120	47.4
39	24,165	7,872	32.6	185	66	35.7
40	9,012	2,608	28.9	65	15	23.1
41	8,003	5,686	71.0	80	12	15.0
42	358,459	19,496	5.4	211	35	16.6
43	38	7	18.4	2	1	50.0
44	5,723	3,716	6.49	26	3	11.5
45	121,548	115,892	95.3	75	30	40.0
46	5,423	1,952	36.0	53	23	43.4
47	5,096	2,570	50.4	41	13	31.7
48	1,621	28	1.7	144	15	10.4
49	1,716,893	363,393	21.2	756	172	22.5
50	84,390	18,735	22.2	271	33	12.2
51	56,401	6,371	11.3	350	58	16.6
52	110	14	12.7	5	1	20.0
53	0	0	0.0	3	0	0.0
55	1,892	165	8.7	237	12	5.1
57	28	0	0.0	2	0	0.0
58	67	0	0.0	1	0	0.0
59	454	132	29.1	11	3	27.3
60	862	0	0.0	5	0	0.0
63	0	0	0.0	2	0	0.0
65	126	0	0.0	21	0	0.0
67	655	0	0.0	2	0	0.0
70	21	0	0.0	7	0	0.0
72	2,091	588	28.1	148	18	12.2
73	258,053	96,771	37.5	127	30	23.6
75	2,921	122	4.2	145	18	12.4
76	4,316	669	15.5	66	11	16.7
78	1,105	995	90.0	9	3	33.3
79	59	13	22.0	6	3	50.0
80	1,939	674	34.8	102	17	16.7
81	0	0	0.0	1	1	100.0
82	4,103	653	15.9	187	31	16.6
84	0	0	0.0	1	0	0.0

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Exhibit 3-3. Number of Generators and Treatment, Storage, Disposal (TSD) Facilities and Quantity Generated, for Sites that Reported Waste Minimization Activity, by SIC Code, 1989 (Continued)

SIC CODE	QUANTITY GENERATED BY SITES SUBMITTING WASTE REPORTS (tons)	WASTE MINIMIZATION REPORTERS		NUMBER OF SITES SUBMITTING WASTE REPORTS	WASTE MINIMIZATION REPORTERS	
		QUANTITY GENERATED (tons)	PERCENT		NUMBER	PERCENT
87	5,594	2,415	43.2	131	42	32.1
88	2	0	0.0	1	0	0.0
89	50,114	1,343	2.7	40	10	25.0
91	4,434	2,639	59.5	63	25	39.7
92	248	40	16.1	12	3	25.0
94	534	0	0.0	4	1	25.0
95	33,268	17,275	51.9	45	6	13.3
96	11,383	10,890	95.7	23	5	21.7
97	245,551	39,486	16.1	150	52	34.7
99	150,954	23,478	15.6	227	26	11.5
TOTAL	197,412,510	98,128,261	49.7	20,713	6,067	29.3

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Exhibit 3-4. Number and Quantity of Waste Minimized by Waste Reported, by SIC Code, 1989

SIC CODE	TOTAL QUANTITY GENERATED (tons)	WASTES MINIMIZED		TOTAL NUMBER OF WASTES REPORTED	WASTES MINIMIZED	
		QUANTITY GENERATED (tons)	PERCENT		NUMBER	PERCENT
unknown	1,034,991	33,865	3.3	16,005	1,079	6.7
01	24	0	0.0	1	0	0.0
02	7,503	42	0.6	51	2	3.9
07	139	20	14.4	29	4	13.8
08	270	228	84.4	53	3	5.7
09	22	0	0.0	27	0	0.0
10	464	37	8.0	180	8	4.4
12	629	230	36.6	36	12	33.3
13	23,161	1,341	5.8	304	17	5.6
14	524	176	33.6	72	3	4.2
15	798	57	7.1	219	2	0.9
16	2,716	17	0.6	294	4	1.4
17	5,314	354	6.7	467	36	7.7
20	40,508	4,471	11.0	1,123	78	6.9
21	180	0	0.0	38	0	0.0
22	65,109	4,117	6.3	577	48	8.3
23	1,175	131	11.1	60	7	11.7
24	22,851	3,601	15.8	1,020	84	8.2
25	138,457	4,076	2.9	939	130	13.8
26	62,409	16,484	26.4	1,810	166	9.2
27	35,282	11,259	31.9	1,362	173	12.7
28	175,727,960	5,978,525	3.4	22,043	1,875	8.5
29	3,903,810	176,908	4.5	1,707	160	9.4
30	234,082	11,079	4.7	2,848	337	11.8
31	6,751	630	9.3	73	15	20.5
32	119,348	39,994	33.5	1,411	144	10.2
33	3,853,780	880,393	22.8	5,334	469	8.8
34	3,249,929	258,539	8.0	12,048	1,611	13.4
35	336,332	113,642	33.8	5,052	657	13.0
36	3,664,120	224,883	6.1	14,516	1,435	9.9
37	1,622,608	79,863	4.9	14,375	835	5.8
38	73,607	9,148	12.4	3,216	259	8.1
39	24,165	3,809	15.8	966	82	8.5
40	9,012	616	6.8	328	25	7.6
41	8,003	105	1.3	423	13	3.1
42	358,459	17,798	5.0	1,439	72	5.0
43	38	1	2.6	33	1	3.0
44	5,723	2,997	52.4	150	7	4.7
45	121,548	1,088	0.9	1,166	78	6.7
46	5,423	1,490	27.5	94	46	48.9
47	5,096	511	10.0	192	24	12.5
48	1,621	26	1.6	151	24	15.9
49	1,716,893	201,993	11.8	6,152	316	5.1
50	84,390	7,348	8.7	3,052	44	1.4
51	56,401	3,467	6.1	1,821	109	6.0
52	110	11	10.0	9	1	11.1
55	1,892	121	6.4	545	23	4.2
57	28	0	0.0	6	0	0.0
58	67	0	0.0	4	0	0.0
59	454	75	16.5	188	4	2.1
60	862	0	0.0	3	0	0.0
65	126	0	0.0	75	0	0.0
67	655	0	0.0	16	0	0.0
70	21	0	0.0	24	0	0.0
72	2,091	279	13.3	936	20	2.1
73	258,053	30,159	11.7	2,087	44	2.1
75	2,921	62	2.1	596	24	4.0
76	4,316	207	4.8	366	21	5.7
78	1,105	32	2.9	46	3	6.5
79	59	4	6.8	33	4	12.1
80	1,939	373	19.2	2,464	59	2.4
81	0	0	0.0	1	1	100.0
82	4,103	352	8.6	4,153	179	4.3
87	5,594	1,094	19.6	1,616	123	7.6
88	2	0	0.0	1	0	0.0
89	50,114	1,051	2.1	512	17	3.3
91	4,434	858	19.4	1,158	42	3.6

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Exhibit 3-4. Number and Quantity of Waste Minimized by Waste Reported, by SIC Code, 1989 (Continued)

SIC CODE	TOTAL QUANTITY GENERATED (tons)	WASTES MINIMIZED		TOTAL NUMBER OF WASTES REPORTED	WASTES MINIMIZED	
		QUANTITY GENERATED (tons)	PERCENT		NUMBER	PERCENT
92	248	24	9.7	88	5	5.7
94	534	0	0.0	9	1	11.1
95	33,268	17,218	51.8	522	102	19.5
96	11,383	132	1.2	601	19	3.2
97	245,551	1,628	0.7	5,868	177	3.0
99	150,954	13,207	8.7	2,111	71	3.4
TOTAL	197,412,510	8,162,245	4.1	147,295	11,434	7.8

NOTE: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Exhibit 3.5 presents a comparable site-level analysis of the largest of the manufacturing industry SIC groups, the chemical and allied products industry (SIC 28). SIC 28 includes only 11 percent of the generators in the nation, yet it accounts for about 89 percent of the total RCRA hazardous waste generated in the nation. The exhibit makes clear the overwhelming predominance of 3 SIC categories within the two-digit group. Collectively, the plastics materials, and resins (SIC 2821), cyclic crudes and intermediates (SIC 2865), and industrial organic chemicals not elsewhere classified (SIC 2869) industries generated 79 percent of the nation's RCRA hazardous waste. In terms of waste minimization activities, these industries slightly exceeded the site-participation rates for SIC 28 and manufacturing as a whole (43 percent vs. 38 percent). Their rates were substantially higher than the national average of 29 percent.

Exhibit 3-6 presents the waste-level analysis of only the chemical and allied products industry (SIC 28). The most interesting finding is that the large volume wastes generated by the largest sites are infrequently the target of the waste minimization activities. For the 3 four-digit industries listed above (2821, 2865, 2869), only 1.5 percent of the RCRA waste hazardous waste quantity generated is subject to waste minimization activities. This compares to 4.1 percent of the RCRA hazardous waste quantity nationally, and 3.4 percent of the quantity for SIC 28. The large volume wastes not minimized are primarily wastewaters.

3.3 WASTE MINIMIZATION PROGRAMS

3.3.1 Creation and Expansion of Waste Minimization Programs

Exhibit 3-7 shows the percentage of sites that created or expanded source reduction or recycling programs in 1988 or 1989. Unlike the data presented in Section 3.2, the data in this section pertain to 1988 or 1989 (instead of 1989 only).

Exhibit 3-5. Number of Generators and Treatment, Storage, Disposal (TSD) Facilities and Quantity Generated for Sites that Reported Waste Minimization Activity, for Chemical and Allied Products (SIC Code 28), 1989

SIC CODE	QUANTITY GENERATED BY SITES SUBMITTING WASTE REPORTS (tons)	WASTE MINIMIZATION REPORTERS		NUMBER OF SITES SUBMITTING WASTE REPORTS	WASTE MINIMIZATION REPORTERS	
		QUANTITY GENERATED (tons)	PERCENT		NUMBER	PERCENT
2800	57,316	0	0.0	5	0	0.0
2812	1,796,348	1,689,160	94.0	57	29	50.9
2813	284,707	281,223	98.8	30	12	40.0
2815	6,385	0	0.0	9	0	0.0
2816	2,254,205	2,245,334	99.6	36	11	30.6
2818	1,769	698	39.5	7	2	28.6
2819	3,947,284	3,120,777	79.1	322	107	33.2
2821	46,575,934	46,377,154	99.6	303	137	45.2
2822	2,758,382	2,053,498	74.4	26	8	30.8
2823	87	19	21.8	3	1	33.3
2824	21,760	18,014	82.8	21	8	38.1
2830	2,636	689	26.1	2	1	50.0
2831	566	35	6.2	7	1	14.3
2832	0	0	0.0	1	1	100.0
2833	2,385,898	2,360,205	98.9	44	21	47.7
2834	323,985	125,420	38.7	123	53	43.1
2835	201	104	51.7	13	4	30.8
2836	2,547	0	0.0	7	0	0.0
2841	15,168	2,873	18.9	43	16	37.2
2842	22,637	1,692	7.5	34	9	26.5
2843	11,884	6,131	51.6	20	9	45.0
2844	6,184	517	8.4	29	10	34.5
285X	34	0	0.0	1	0	0.0
2850	522	396	75.9	4	2	50.0
2851	179,855	66,934	37.2	450	163	36.2
2859	33	0	0.0	1	0	0.0
2861	3,356	200	6.0	8	4	50.0
2863	59	59	100.0	1	1	100.0
2865	47,766,362	1,034,476	2.2	51	19	37.3
2869	62,352,760	27,199,055	43.6	251	102	40.6
2873	714	687	96.2	14	6	42.9
2874	397	0	0.0	5	0	0.0
2875	6,653	445	6.7	5	2	40.0
2879	730,606	423,493	58.0	75	30	40.0
2889	63	0	0.0	1	0	0.0
2890	10,634	179	1.7	2	1	50.0
2891	9,775	3,895	39.8	77	27	35.1
2892	4,078,844	26,192	0.6	33	15	45.5
2893	9,586	3,771	39.3	105	39	37.1
2894	11	11	100.0	1	1	100.0
2895	2	2	100.0	1	1	100.0
2898	392	392	100.0	1	1	100.0
2899	101,422	11,332	11.2	152	51	33.6
TOTAL	175,727,960	87,055,060	49.5	2,381	905	38.0

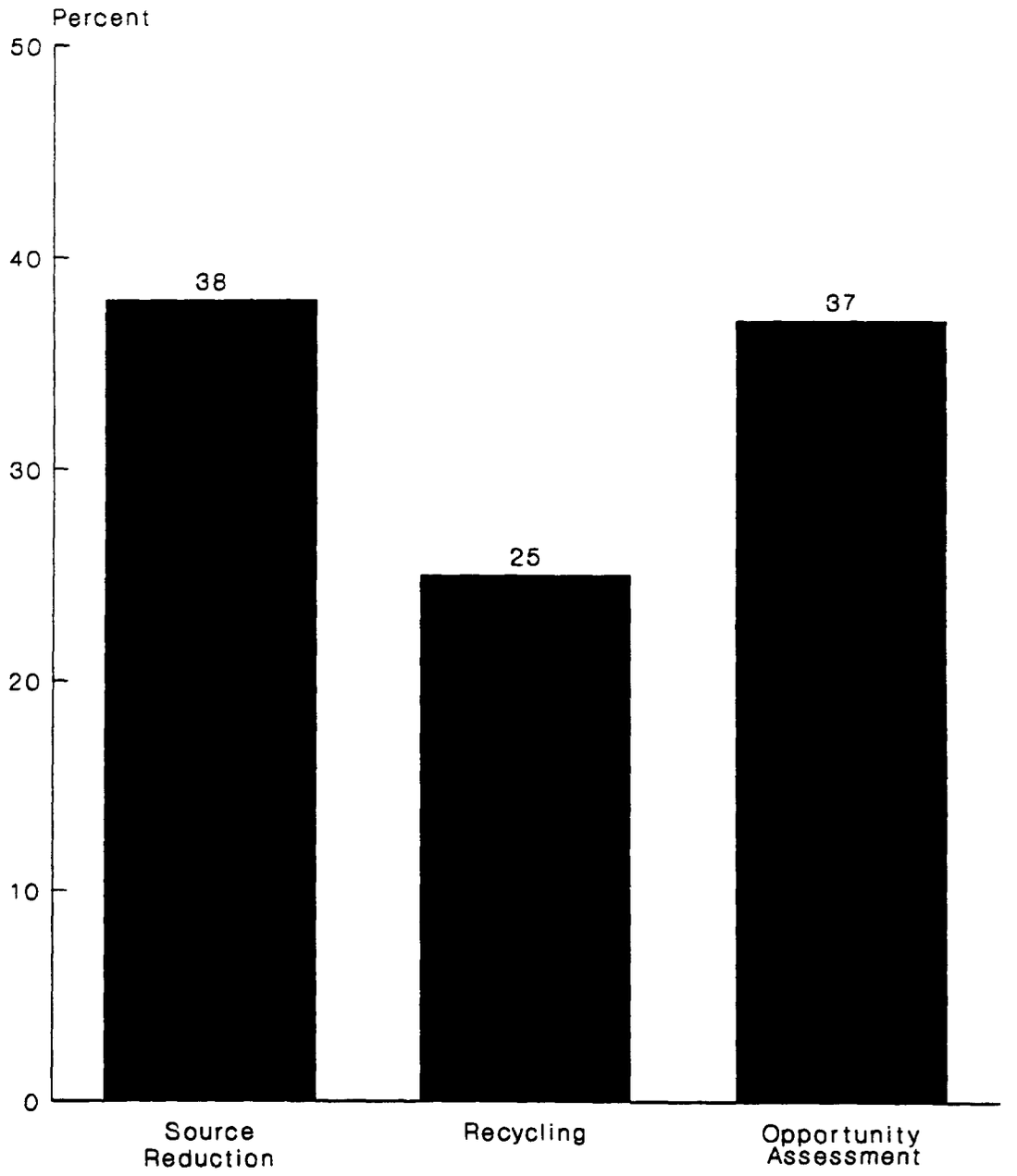
NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Exhibit 3-6. Number and Quantity of Waste Minimized by Waste Reported, for Chemical and Allied Products (SIC Code 28), 1989

SIC CODE	TOTAL QUANTITY GENERATED (tons)	WASTE MINIMIZED		TOTAL NUMBER OF WASTES REPORTED	WASTE MINIMIZED	
		QUANTITY GENERATED (tons)	PERCENT		NUMBER	PERCENT
2800	57,316	0	0.0	29	0	0.0
2812	1,796,348	1,612,118	89.7	1,100	65	5.9
2813	284,707	789	0.3	211	16	7.6
2815	6,385	0	0.0	148	0	0.0
2816	2,254,205	248,132	11.0	256	16	6.3
2818	1,769	57	3.2	144	1	0.7
2819	3,947,284	844,485	21.4	3,326	241	7.2
2821	46,575,934	96,121	0.2	2,986	316	10.6
2822	2,758,382	642,566	23.3	167	28	16.8
2823	87	19	21.8	38	1	2.6
2824	21,760	17,497	80.4	231	14	6.1
2830	2,636	182	6.9	157	3	1.9
2831	566	35	6.2	244	1	0.4
2832	0	0	0.0	2	0	0.0
2833	2,385,898	14,366	0.6	741	63	8.5
2834	323,985	56,262	17.4	1,169	148	12.7
2835	201	34	16.9	142	9	6.3
2836	2,547	0	0.0	124	0	0.0
2841	15,168	2,343	15.4	277	25	9.0
2842	22,637	1,111	4.9	160	15	9.4
2843	11,884	3,198	26.9	128	22	17.2
2844	6,184	273	4.4	183	19	10.4
285X	34	0	0.0	2	0	0.0
2850	522	327	62.6	8	2	25.0
2851	179,855	38,586	21.5	3,617	239	6.6
2859	33	0	0.0	2	0	0.0
2861	3,356	16	0.5	66	8	12.1
2863	59	5	8.5	3	1	33.3
2865	47,766,362	575,609	1.2	446	39	8.7
2869	62,352,760	1,756,216	2.8	3,136	252	8.0
2873	714	108	15.1	78	6	7.7
2874	397	0	0.0	8	0	0.0
2875	6,653	333	5.0	14	2	14.3
2879	730,606	52,262	7.2	373	45	12.1
2889	63	0	0.0	4	0	0.0
2890	10,634	0	0.0	17	0	0.0
2891	9,775	2,705	27.7	410	54	13.2
2892	4,078,844	1,498	<0.05	666	45	6.8
2893	9,586	2,255	23.5	287	63	22.0
2894	11	0	0.0	1	0	0.0
2895	2	2	100.0	3	1	33.3
2898	392	392	100.0	2	2	100.0
2899	101,422	8,622	8.5	937	113	12.1
TOTAL	175,727,960	5,978,525	3.4	22,043	1,875	8.5

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Exhibit 3-7. Percent of Sites that Indicated Waste Minimization Activities, during 1988 or 1989



Note: CBI data are excluded from this exhibit.

Of the 20,713 generators and TSD facilities that filed a 1989 Hazardous Waste Report or 1989 Waste Minimization Report, 44 percent of the sites began or expanded either a source reduction or a recycling activity. Thirty-eight percent of these sites reported beginning or expanding a source reduction activity during 1988 or 1989. Twenty-five percent began or expanded a recycling activity. Nineteen percent reported beginning or expanding both source reduction and recycling activities.

3.3.2 Conducting Opportunity Assessments

An opportunity assessment is a procedure that identifies practices that can be implemented to either reduce the generation of RCRA hazardous waste or the quantity of waste that must subsequently be managed. As shown in Exhibit 3-7, approximately 37 percent of sites reported conducting an opportunity assessment in 1988 or 1989.

3.3.3 Effects of Waste Minimization Activities

A total of 11,434 waste minimization activities were reported by the 6,067 sites that engaged in one or more of these activities in 1988 or 1989. In an attempt to identify the cross-media effects of waste minimization activities, respondents were asked to report the effects of source reduction and recycling activities on the toxicity of the waste that was minimized and on the quantity or toxicity of any emissions into the air, water or land. The sites reported that 94 percent of their activities did not result in either an increase in the toxicity of the minimized waste or an increase in the quantity or toxicity of any emissions into the air, water or land.

3.4 SOURCE REDUCTION

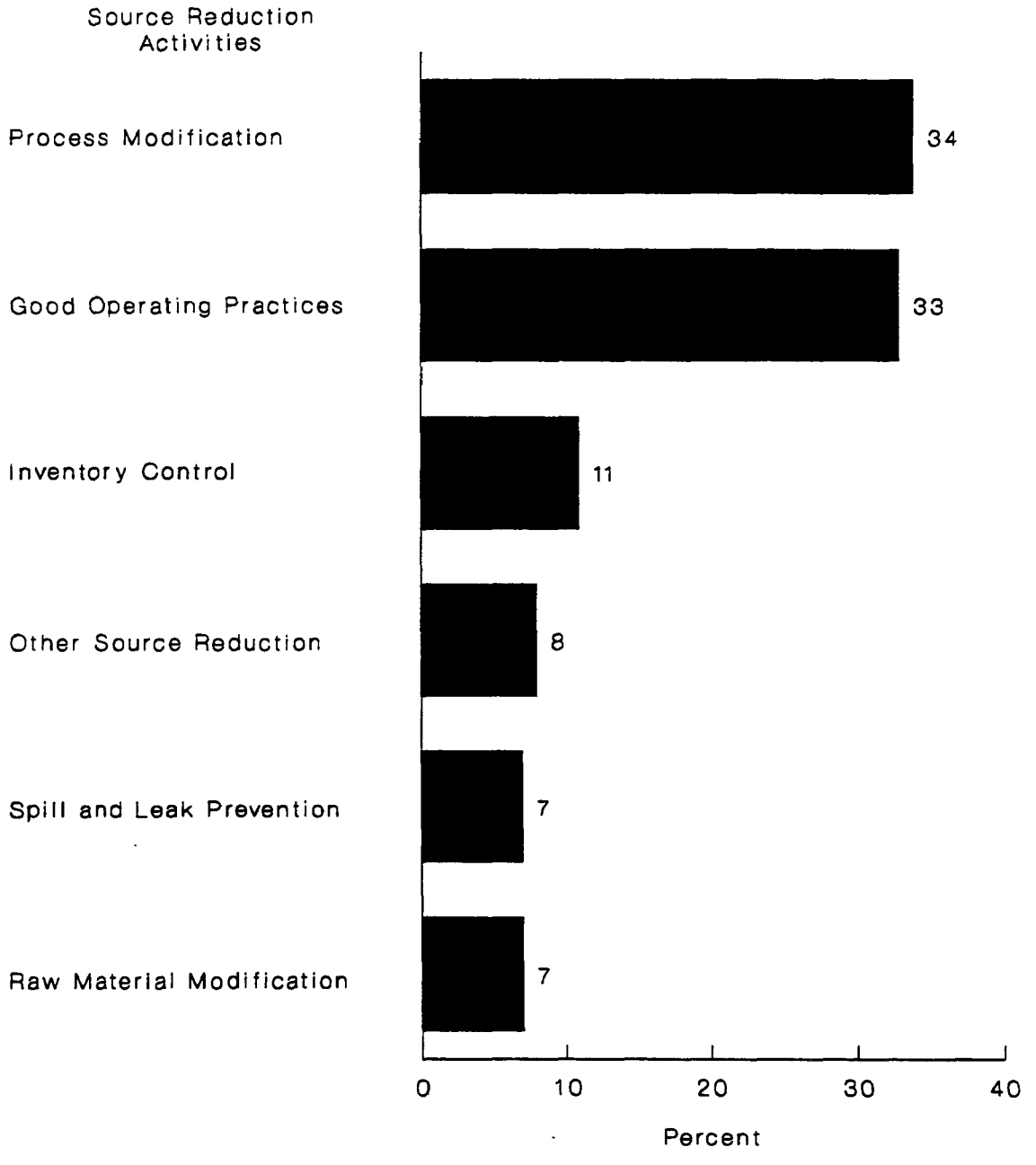
3.4.1 Methods Employed

A total of 6,067 sites reported engaging in waste minimization activities in 1988 or 1989. These sites reported conducting a total of 11,434 different waste minimization activities. More than 90 percent of these 11,434 waste minimization activities involved source reduction, compared to only 16 percent that involved recycling. Six percent involved both source reduction and recycling. These percentages are based on the number and kind of activities that took place. They do not address the amount of change in waste volume or toxicity that resulted from the waste minimization activity.

Exhibit 3-8 lists various methods of source reduction that were employed to minimize RCRA hazardous waste in 1989. Process modifications and good operating practices, cited by 34 percent and 33 percent of the sites respectively, were the most frequently reported categories of source reduction activity. Examples of process modifications include: modifying equipment, layout, or piping; better control on operating conditions; change from solvents to aqueous cleaners; and closed-loop recycling. Examples of good operating practices include: improved maintenance scheduling; segregation of hazardous waste from non-hazardous waste; and segregation of recyclable waste from non-recyclable waste.

Inventory control was reported by 11 percent of the sites as a method of source reduction. Examples include: instituting procedures to ensure that materials do not stay in inventory beyond shelf-life; better labelling procedures; and exchanging materials that would otherwise be discarded.

Exhibit 3-8. Primary Source Reduction Activities Undertaken to Minimize RCRA Hazardous Waste, 1989



Note: CBI data are excluded from this exhibit.

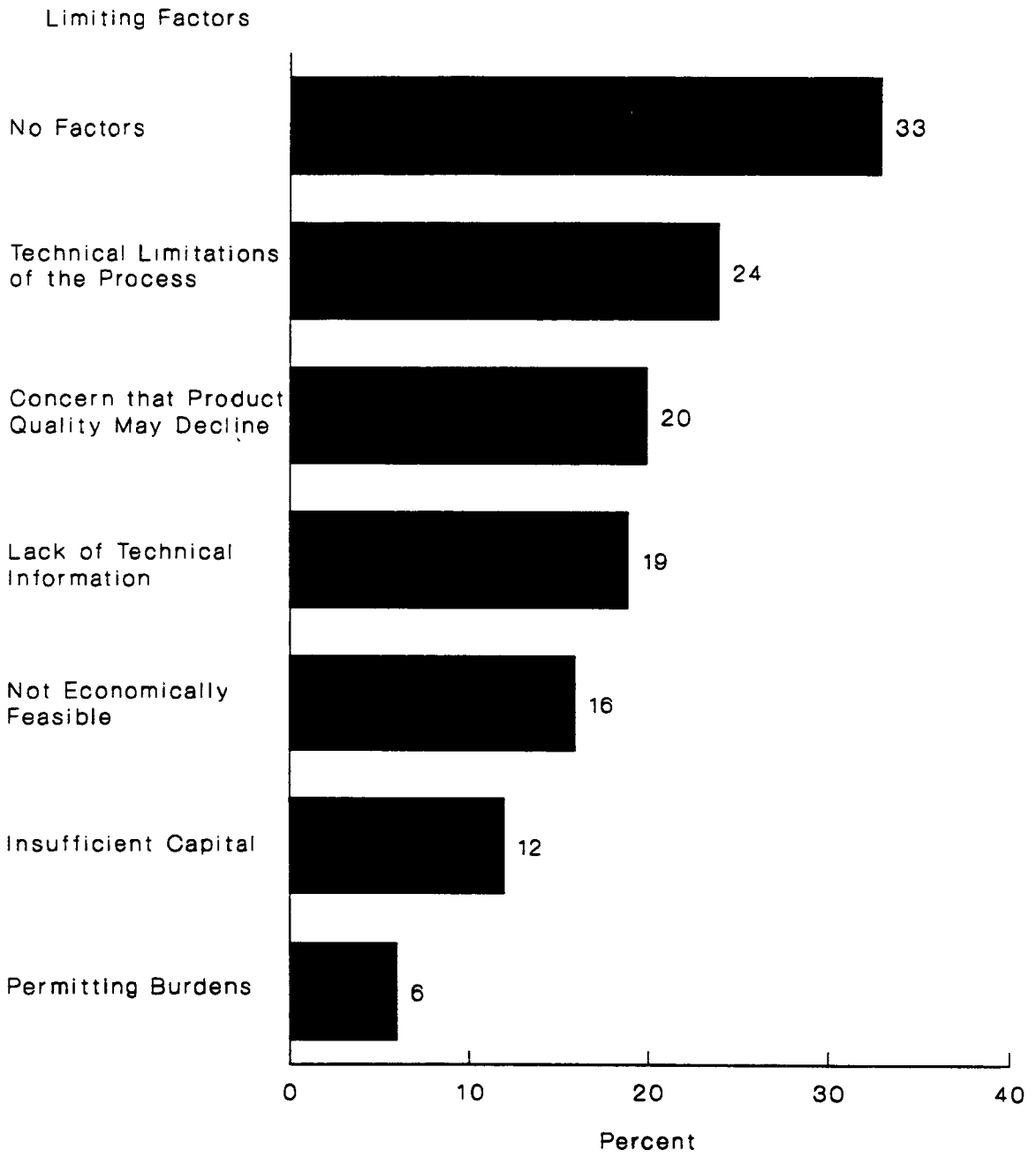
3.4.2 Factors Limiting Source Reduction

All generators and TSD facilities were asked to identify, from a list of potential factors, those factors that may have limited the site from initiating new source reduction activities during 1988 or 1989. Exhibit 3-9 identifies those factors that limited the initiation of new source reduction activities. Approximately one-third of the sites reported that no factors limited them from initiating new source reduction activities. Technical limitations of production processes were cited by 24 percent of the sites as being a limiting factor, followed by concern that product quality may decline as a result of source reduction (20 percent), lack of technical information on source reduction techniques that applied to the sites' specific production processes (19 percent), and source reduction being economically infeasible (16 percent). The burden of permitting requirements was cited by only 6 percent of the sites, indicating that permitting does not represent a significant limitation to the implementation of source reduction activities.

3.4.3 Types of RCRA Hazardous Waste Minimized

At least 41 percent of the wastes minimized by source reduction activities were ignitable characteristic wastes (EPA waste code D001) and/or solvents (EPA waste codes F001, F002, F003, F005). Nine percent were corrosive wastes (EPA waste code D002).

Exhibit 3-9. Factors Delaying or Preventing Implementation of Source Reduction Opportunities, 1988 or 1989



Notes: Multiple responses were allowed.
CBI data are excluded from this exhibit.

3.5 RECYCLING

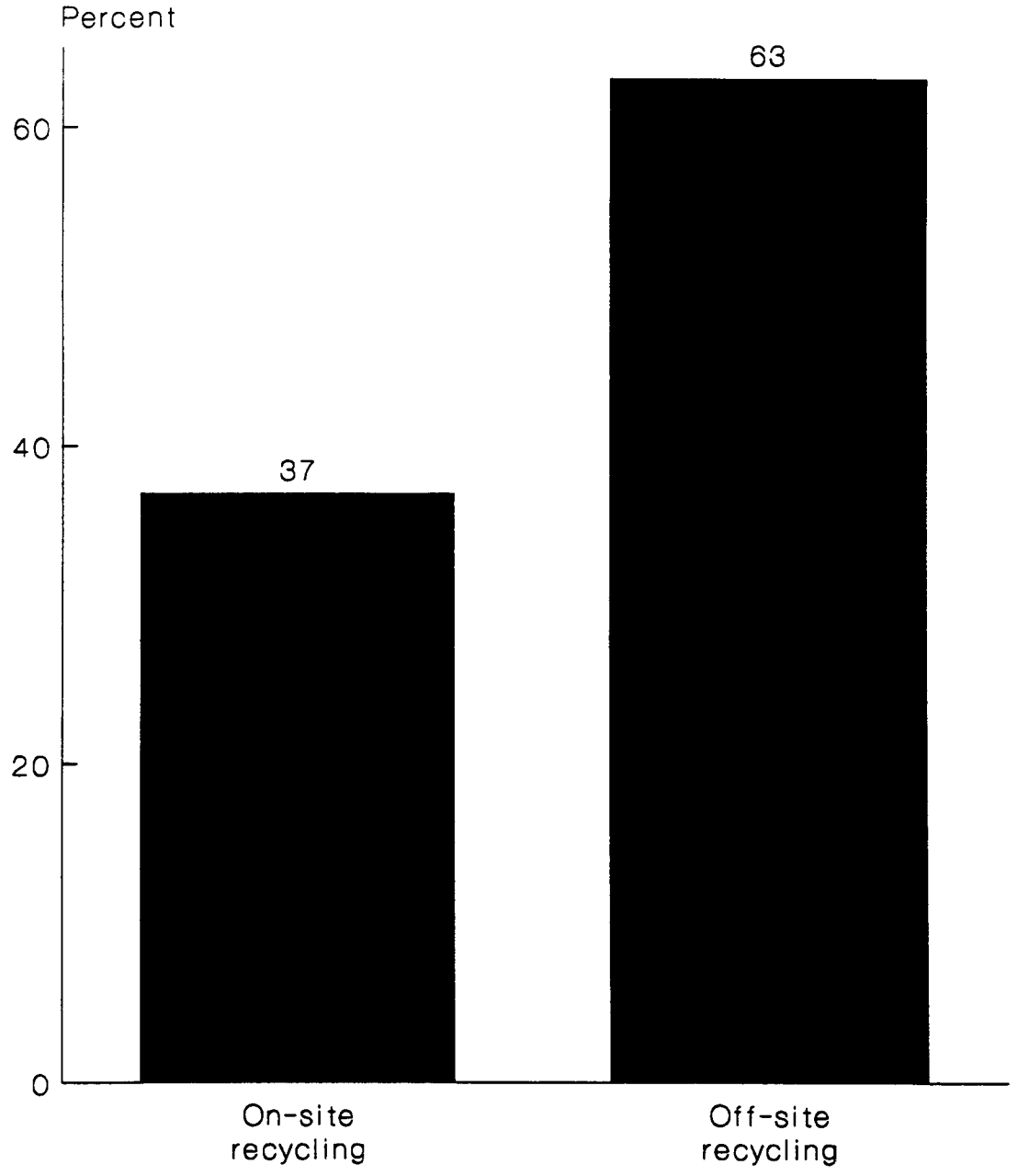
3.5.1 Recycling Location

Recycling can be implemented at the site generating the waste or at an off-site location, such as a commercial recycling facility. As shown in Exhibit 3-10, nearly two-thirds (63 percent) of the new recycling activities that began in 1989 involved shipping the waste to an off-site recycling facility.

3.5.2 Factors Limiting Recycling

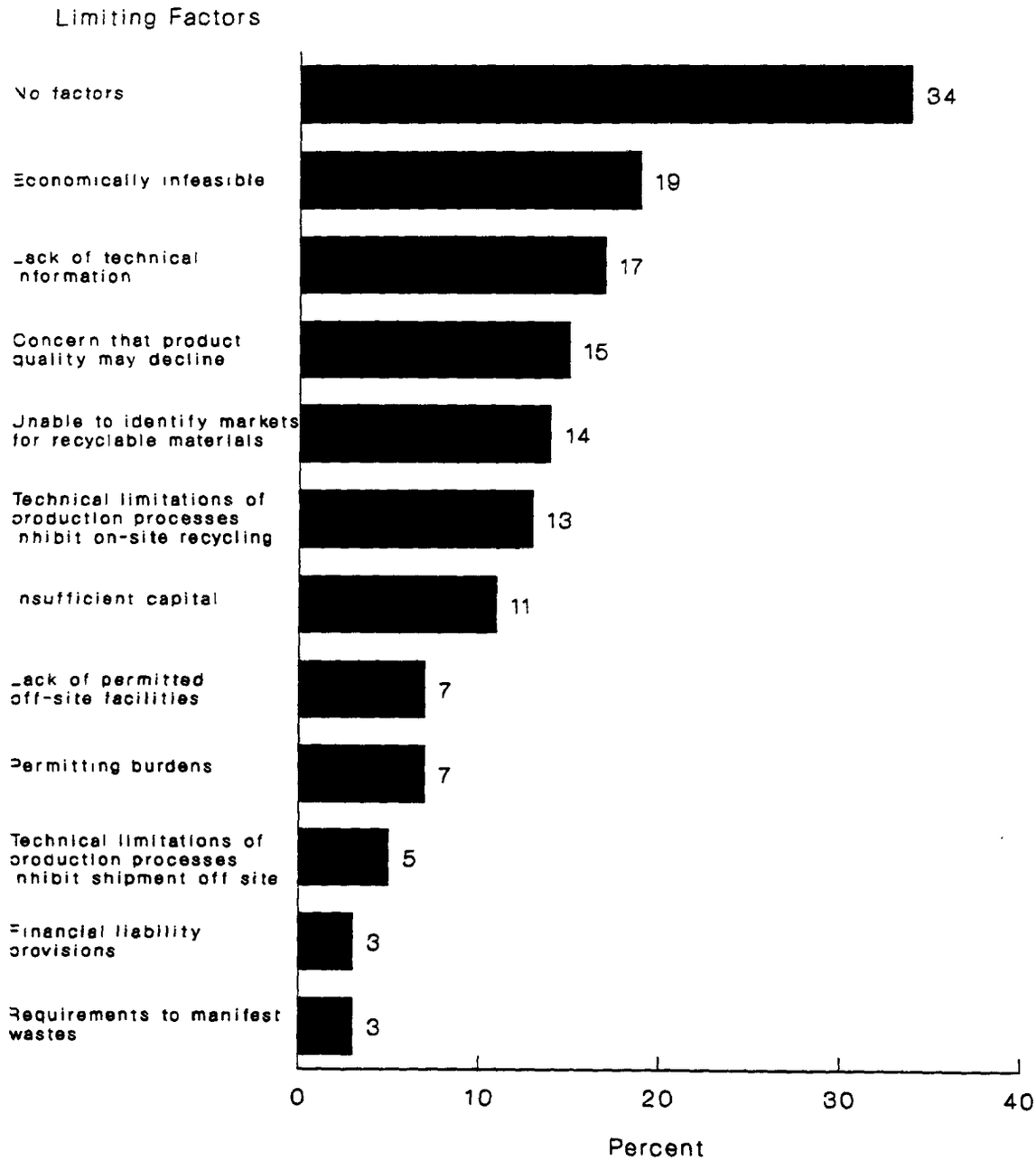
All generators and TSD facilities were asked to identify, from a list of potential factors, those factors which may have limited the site from initiating new on-site or off-site recycling activities during 1988 or 1989. Exhibit 3-11 identifies those factors that delayed or prevented the implementation of recycling activities. Approximately 34 percent of the sites reported no factors limited them from implementing new recycling activities. Nineteen percent of the sites indicated that implementation of recycling activities was not economically feasible, that is, the cost savings in waste management or production would not recover the capital investment. As with source reduction, the lack of technical information (17 percent) and concerns that product quality may decline (15 percent) were also significant factors that limited recycling opportunities. Also similar to the findings on source reduction is the indication that few reporters (7 percent) were inhibited by the burden of permitting requirements.

Exhibit 3-10. Percent of New Waste Recycling Activities Begun On Site or Off Site, 1989



Note: CBI data are excluded from this exhibit.

Exhibit 3-11. Factors Delaying or Preventing Implementation of Recycling Opportunities, 1988 or 1989



Notes: Multiple responses were allowed.
CBI data are excluded from this exhibit.

3.5.3 Types of RCRA Hazardous Waste Recycled

Nearly one-half of the RCRA hazardous wastes recycled were ignitable wastes (D001) and/or solvents (F001, F002, F003, F005). These wastes were primarily organic liquids and are relatively easily recovered via distillation. This finding is similar to the findings presented under source reduction activities.

4. COMPARISON OF 1989 DATA TO 1987 DATA

4.1 INTRODUCTION

This chapter compares the 1989 National Biennial Report data presented in Chapter 2 to the 1987 National Biennial Report data. The comparisons between the data include the following:

- Number of large quantity generators;
- Quantity of RCRA hazardous waste generated;
- Number of treatment, storage, and disposal facilities; and
- Quantity of RCRA hazardous waste managed.

Due to time constraints, Reports from sites that claimed CBI have been excluded from the analysis in this chapter. Therefore, counts of generators and TSD facilities, and quantities of RCRA hazardous waste generated and managed, will be marginally smaller in the discussion that follows than they are in the other chapters of this Report. The exclusion of CBI data has no significant impact on the analyses presented below.

4.2 NUMBER OF LARGE QUANTITY GENERATORS

Exhibit 4-1 presents, by EPA region, the total number of large quantity generators that were reported in 1987 and 1989. In 1987, there were 17,677 generators; in 1989 there were 20,217, excluding those that claimed CBI for their Reports. On a nationwide basis, this amounts to a moderate increase of 14.4 percent in the number of generators. There is, however, wide variation in the changes that occurred within individual regions. Six of the 10 regions show increases of more than 15 percent. The number of generators in Region 9 more than doubled, increasing from 1,154 in 1987 to 2,627 in 1989, an increase of nearly 128 percent. Only 2 regions, Region 1 and Region 2, had a decline of more than 15 percent. The

Exhibit 4-1. Comparison of RCRA Hazardous Waste Large Quantity Generators, by EPA Region, 1987 and 1989

HAZARDOUS WASTE GENERATORS			
REGION	1987 NUMBER OF GENERATORS	1989 NUMBER OF GENERATORS	PERCENT CHANGE
1	1,988	1,390	-30.1
2	2,870	2,359	-17.8
3	1,600	1,848	15.5
4	2,898	2,984	3.0
5	3,842	4,915	27.9
6	1,662	2,257	35.8
7	758	693	-8.6
8	239	292	22.2
9	1,154	2,627	127.6
10	666	852	27.9
TOTAL	17,677	20,217	14.4

NOTE: CBI data are excluded from this exhibit.

largest decline was in Region 1, where the number of generators reporting declined from 1,988 in 1987 to 1,390 in 1989, a decline of 30 percent.

Exhibit 4-2 presents the total number of generators by State. Between 1987 and 1989, 34 of 55 States reported an increase in the number of generators, 19 States reported a decrease, while 1 State, the Virgin Islands, reported no change. An additional State, the Trust Territories, was added to the database in 1989, and interyear comparisons are not possible. A comparison of the number of generators in the 54 States for which both 1987 and 1989 data are available, reveals that changes in the national total were dominated by increases of more than 200 in the number of generators reporting in California, Illinois, New Jersey, Ohio, Texas, and Washington. These increases were partially counterbalanced by decreases of more than 200 in the number of generators report in Massachusetts and New York. In percentage terms, 18 States showed variation of 50 percent or more in the number of generators reporting between 1987 and 1989. Of these States, 12 increased their generator counts by 50 percent or more, while 6 State declined in reported generators by at least 50 percent.

Exhibit 4-2 also shows that more than half of the States reported at least a 29 percent difference in the number of generators between 1987 and 1989 which is similar to the variation between 1985 and 1987. This large variation may be attributed to a number of factors. First, confusion exists about the regulatory definition of a large quantity generator. The Code of Federal Regulations defines a site as a large quantity generator if it generated 1.1 tons or more of RCRA hazardous waste in any calendar month. Many States, however, do not collect monthly generation quantity, only yearly generation numbers. Some States classify sites as large quantity generators if they generate 13.2 tons or more during the year, thus excluding those sites that met the RCRA criteria for fewer than 12 months.

Exhibit 4-2. Comparison of RCRA Hazardous Waste Generators, by State, 1987 and 1989

STATE	RCRA HAZARDOUS WASTE GENERATORS		
	1987 NUMBER OF GENERATORS	1989 NUMBER OF GENERATORS	PERCENT CHANGE
ALABAMA	369	224	-39.3
ALASKA	23	43	87.0
ARIZONA	245	175	-28.6
ARKANSAS	172	51	-70.3
CALIFORNIA	868	2,382	174.4
COLORADO	112	131	17.0
CONNECTICUT	547	506	-7.5
DELAWARE	47	59	25.5
DISTRICT OF COLUMBIA	4	11	175.0
FLORIDA	419	368	-12.2
GEORGIA	313	378	20.8
GUAM	8	10	25.0
HAWAII	14	26	85.7
IDAHO	25	19	-24.0
ILLINOIS	892	1,425	59.8
INDIANA	522	697	33.5
IOWA	140	131	-6.4
KANSAS	144	192	33.3
KENTUCKY	244	337	38.1
LOUISIANA	366	445	21.6
MAINE	100	46	-54.0
MARYLAND	260	385	48.1
MASSACHUSETTS	1,025	494	-51.8
MICHIGAN	859	824	-4.1
MINNESOTA	346	241	-30.3
MISSISSIPPI	136	153	12.5
MISSOURI	405	298	-26.4
MONTANA	14	28	100.0
NEBRASKA	69	72	4.3
NEVADA	19	32	68.4
NEW HAMPSHIRE	102	111	8.8
NEW JERSEY	643	1,434	123.0
NEW MEXICO	34	46	35.3
NEW YORK	2,149	848	-60.5
NORTH CAROLINA	666	684	2.7
NORTH DAKOTA	12	17	41.7
OHIO	708	1,169	65.1
OKLAHOMA	120	140	16.7
OREGON	178	76	-57.3
PENNSYLVANIA	894	1,004	12.3
PUERTO RICO	77	76	-1.3
RHODE ISLAND	127	191	50.4
SOUTH CAROLINA	404	394	-2.5
SOUTH DAKOTA	14	12	-14.3
TENNESSEE	347	446	28.5
TEXAS	970	1,575	62.4
TRUST TERRITORIES	0	2	-
UTAH	74	85	14.9
VERMONT	87	42	-51.7
VIRGIN ISLANDS	1	1	<0.05
VIRGINIA	311	287	-7.7
WASHINGTON	440	714	62.3
WEST VIRGINIA	84	102	21.4
WISCONSIN	515	559	8.5
WYOMING	13	19	46.2
TOTAL	17,677	20,217	14.4

NOTE: CBI data are excluded from this exhibit.

Exhibit 4-2, for example, shows that New York reported 2,149 generators in 1987 and only 848 in 1989. This large decrease in the number of generators was primarily due to the different methods used by New York in the 1989 and 1987 biennial reporting cycles to classify large quantity generators. In 1989, New York classified large quantity generators as sites that generated 13.2 tons or more during the calendar year. By comparison, in 1987, New York based its large quantity generator classifications on whether a site had generated 1.1 tons or more in any calendar month.

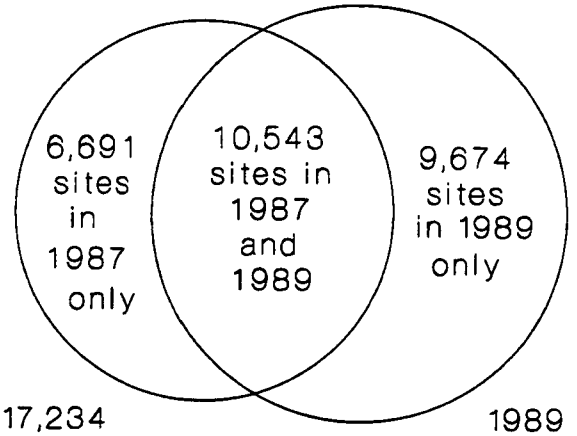
Another factor contributing to a large variation in the number of generators reporting in 1987 and 1989 was increased usage of EPA waste codes during 1989 to characterize waste. California, for example, as shown in Exhibit 4-2, reported a substantial increase from 868 generators in 1987 to 2,382 generators in 1989. In 1987, several hundred generators in California managing their waste exclusively off site used only California State waste codes in their waste manifest records. Because these generators did not use EPA waste codes, they were not included in the total number of California generators for 1987.

To further illustrate differences between the 1987 and 1989 data, analysis was performed on the overlap between sites that were classified as large quantity generators during 1987 and 1989. The results of this analysis are presented in Exhibit 4-3. Of the 17,234[1] sites classified as generators in 1987, 10,543 sites, or 61 percent, were also classified as generators in 1989. Conversely, of the 20,217 generators identified in 1989, 52 percent were also classified as generators in 1987. Defining "site overlap" as the number of sites in the intersection (sites present in both 1987 and 1989), divided by the union (sites present in 1987 and/or 1989), the site overlap was only 39 percent. One reason for this low overlap may have been the procedure used by the States to classify generators; in one year they may have used a

[1] This number is slightly different from the total number of generators reported in Exhibits 4-1 and 4-2 because a few States did not identify all the generators present in their State.

Exhibit 4-3. Comparison of Sites Classified as RCRA Hazardous Waste Generators, 1987 and 1989

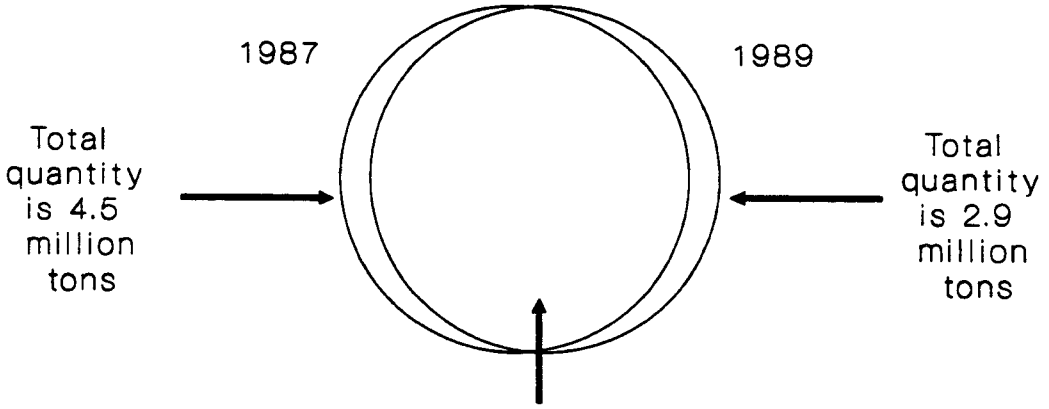
Site Overlap



1987 total sites = 17,234

1989 total sites = 20,217

Quantity Overlap



1987 total quantity is 233.8 million tons
1989 total quantity is 194.5 million tons

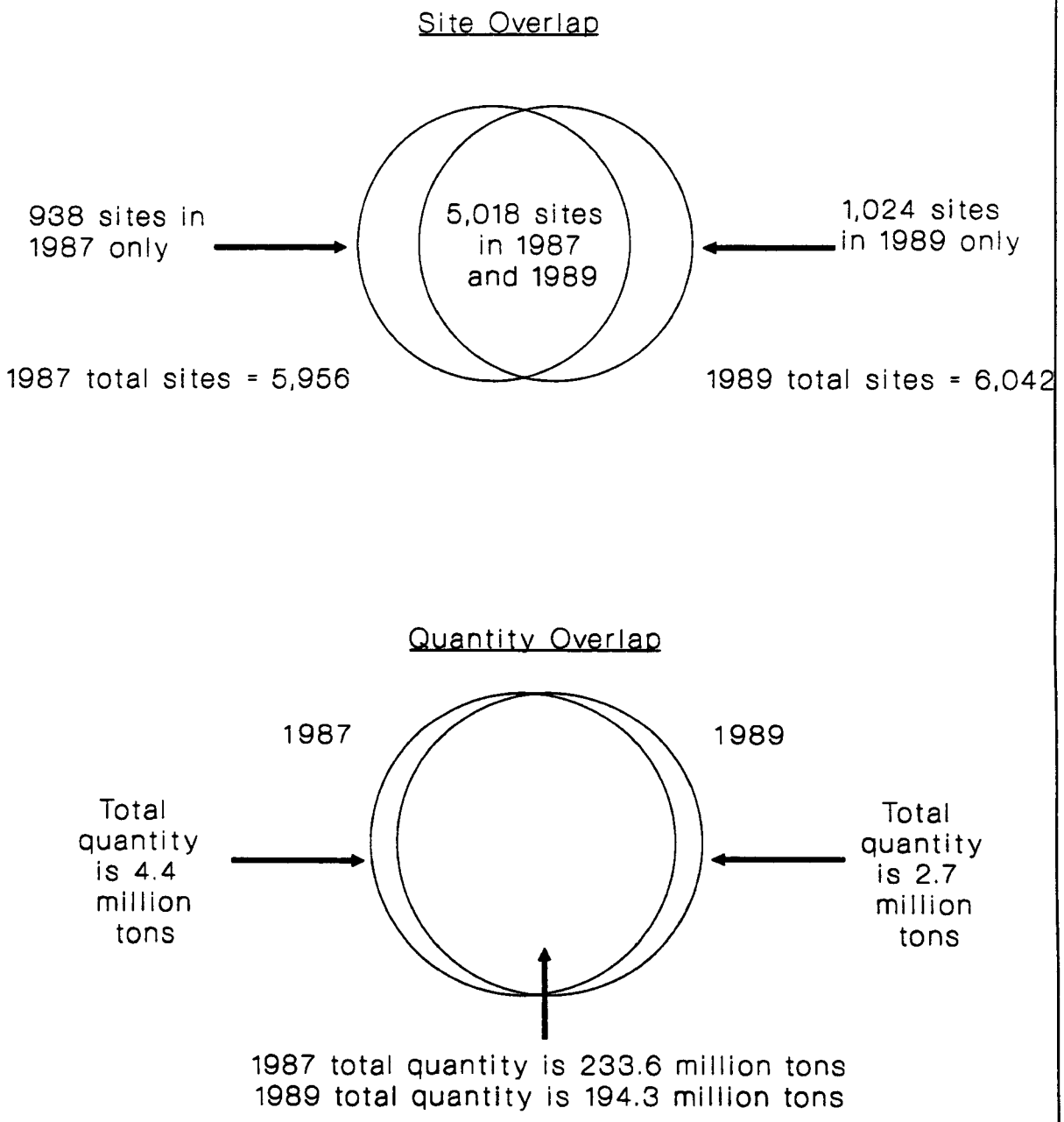
Note: CBI data are excluded from this exhibit.

generation quantity of 13.2 tons per year to distinguish between a regulated and non-regulated generator, and in another year they may have used a generation quantity of 1.1 tons per month.

Exhibit 4-3 also illustrates the average quantity of waste generated in 1987 and 1989 by sites that reported in both years. Defining "quantity overlap" as the average of the 1987 and 1989 quantities in the intersection (quantity generated by sites present in both 1987 and 1989) divided by the quantity in the union (quantity generated by sites present in 1987 and/or 1989), the quantity overlap is nearly 97 percent. Even though the generators present in both 1987 and 1989 represented a fraction of the total number of generators present in either year, they accounted for nearly all of the quantity of RCRA hazardous waste generated during the 2 years. The sites present in only one of the 2 years were relatively small RCRA hazardous waste generating sites and accounted for a small fraction of the total quantity generated in either year.

In an attempt to eliminate the inconsistencies introduced by generator classification, a comparative analysis for 1987 and 1989 data was performed on sites that generated 100 tons or more during each calendar year. Exhibit 4-4 shows that there were 5,956 generators of 100 or more tons in 1987 and 6,042 generators of comparable size in 1989. The percentage of sites present in both years is higher than previously reported, with approximately 84 percent of the 1987 sites present in 1989, and 83 percent of the 1989 sites present in 1987. The site overlap increased from 39 percent among all generators to 72 percent among the generators of 100 tons or more. This illustrates that most of the larger RCRA hazardous waste generating sites during 1987 were also identified as generators during 1989, though the quantity of hazardous waste generated for some sites was significantly different in the two years.

Exhibit 4-4. Comparison of Sites That Generated 100 Tons or More of RCRA Hazardous Waste, 1987 and 1989



Note: CBI data are excluded from this exhibit.

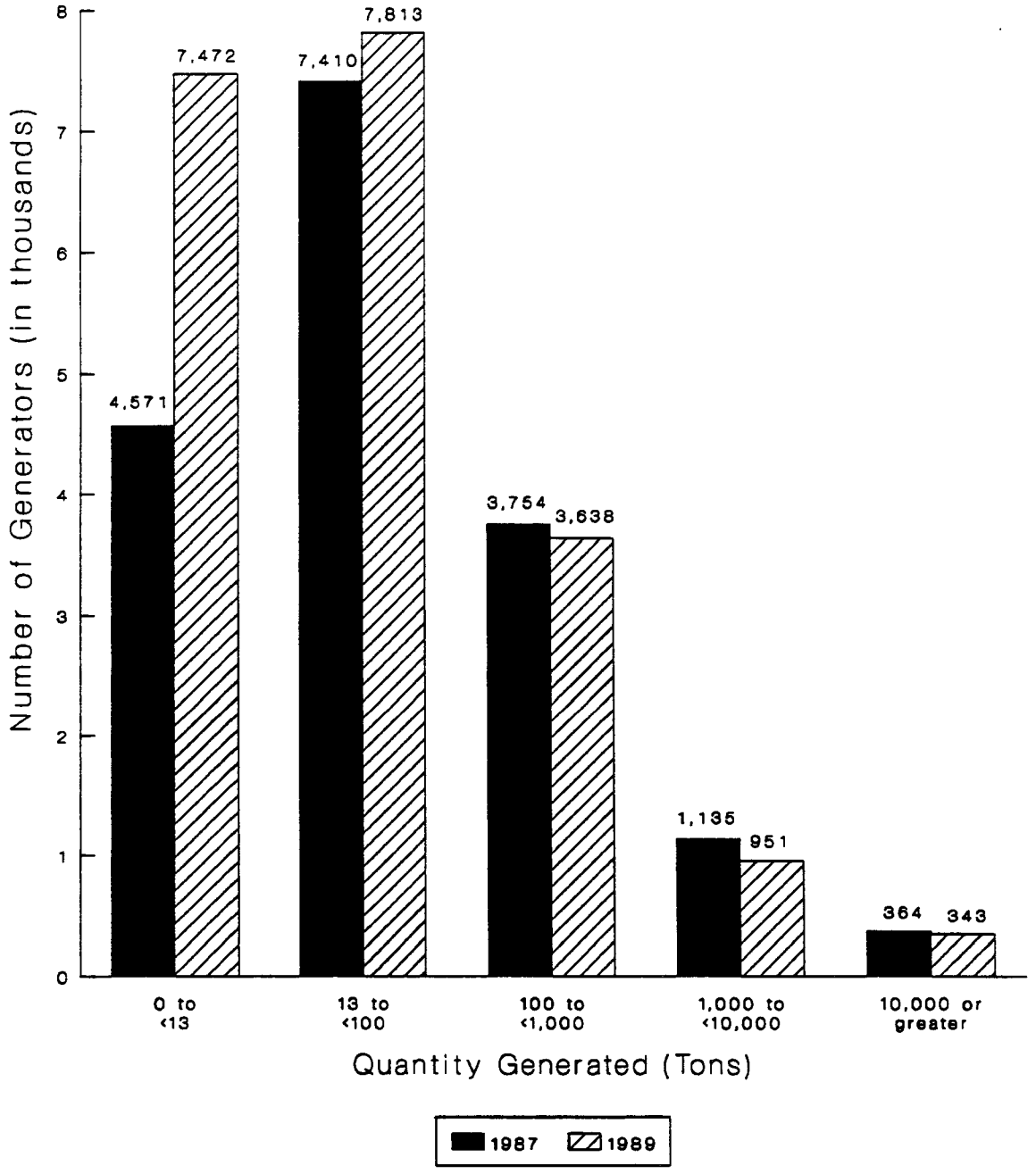
Exhibit 4-5 presents the number of generators in 1987 and 1989 according to different categories of RCRA hazardous waste quantity generated. In general, the distribution of generators among the 5 categories is very similar between the two years. There are substantially more generators in the two smaller categories (less than 13 tons and 13 to 100 tons) in 1989 than in 1987, while the 3 larger categories (100 to <1,000; 1,000 to <10,000; and 10,000 or greater) each included more sites in 1987 than in 1989.

Exhibit 4-6 presents the overlap rate between 1987 and 1989 for sites that generated more than 100 tons of RCRA hazardous waste, by State. A much higher proportion of these larger generators were present in both years than was the case with the full population of large quantity generators. Only 4 of the 53 States for which inter-year comparisons are possible had overlap rates less than 50 percent. Across all States, the overlap rate averaged 72 percent. Thirty States had overlap rates in excess of 72 percent, with 4 smaller States actually having overlap rates of 100 percent. This means that every one of the generators of 100 or more tons that reported in those 4 small States in 1987 also reported in 1989.

The overlap rates among generators of 100 tons or more is relatively high when compared to the overlap rate among all generators of RCRA hazardous waste. This suggests that much of the turnover in generators between years occurs among smaller sites. It is likely that a sizeable number of generators of less than 100 tons were large quantity generators in one year but not in the next. Another likely explanation is that States with low site overlap rates may have had problems implementing the data collection effort in 1987 and/or 1989. Common problem areas in data collection include improper identification of the reporting universe, out-of-date mailing lists, and poor nonresponse followup.

Although there was an increase in the number of generators in many States, the national total number of generators was dominated by generators from a few States. Due to differences in generator classification in some of the large States between 1987 and 1989, however, it is not possible, without further analysis, to accurately determine the magnitude and direction of change in the number of generators.

Exhibit 4-5. Number of RCRA Hazardous Waste Generators in 1987 and 1989, by Quantity Generated



Note: CBI data are excluded from this exhibit.

Exhibit 4-6. Comparison of Sites that Generated 100 Tons or More of RCRA Hazardous Waste, by State, 1987 and 1989

STATE	NUMBER OF SITES		SITES PRESENT ONLY IN 1987	SITES PRESENT IN BOTH 1987 AND 1989	SITES PRESENT ONLY IN 1989	SITE OVERLAP PERCENT[1]
	1987	1989				
ALASKA	3	5	0	3	2	60
ALABAMA	111	104	13	98	6	84
ARKANSAS	71	44	35	36	8	46
ARIZONA	47	49	5	42	7	78
CALIFORNIA	443	589	112	331	258	47
COLORADO	37	40	3	34	6	79
CONNECTICUT	209	201	19	190	11	86
DISTRICT OF COLUMBIA	1	2	0	1	1	50
DELAWARE	19	21	1	18	3	82
FLORIDA	104	103	15	89	14	75
GEORGIA	118	121	14	104	17	77
GUAM	3	3	0	3	0	100
HAWAII	4	4	4	0	4	0[2]
IOWA	43	38	8	35	3	76
IDAHO	9	8	2	7	1	70
ILLINOIS	441	465	42	399	66	79
INDIANA	231	232	38	193	39	71
KANSAS	48	45	7	41	4	79
KENTUCKY	122	129	12	110	19	78
LOUISIANA	202	128	84	118	10	56
MASSACHUSETTS	117	90	34	83	7	67
MARYLAND	73	76	9	64	12	75
MAINE	4	7	3	1	6	10
MICHIGAN	332	336	40	292	44	78
MINNESOTA	109	94	24	85	9	72
MISSOURI	151	130	31	120	10	75
MISSISSIPPI	57	58	9	48	10	72
MONTANA	7	9	1	6	3	60
NORTH CAROLINA	154	156	13	141	15	83
NORTH DAKOTA	3	3	1	2	1	50
NEBRASKA	22	25	0	22	3	88
NEW HAMPSHIRE	34	33	3	31	2	86
NEW JERSEY	295	294	56	239	55	68
NEW MEXICO	13	19	0	13	6	68
NEVADA	6	11	0	6	5	55
NEW YORK	257	254	46	211	43	70
OHIO	399	453	54	345	108	68
OKLAHOMA	60	63	5	55	8	81
OREGON	28	26	4	24	2	80
PENNSYLVANIA	430	420	58	372	48	78
PUERTO RICO	29	23	11	18	5	53
RHODE ISLAND	31	26	9	22	4	63
SOUTH CAROLINA	94	84	20	74	10	71
SOUTH DAKOTA	5	5	0	5	0	100
TENNESSEE	111	131	4	107	24	79
TEXAS	459	473	43	416	57	81
UTAH	32	36	2	30	6	79
VIRGINIA	100	99	10	90	9	83
VIRGIN ISLANDS	1	1	0	1	0	100
VERMONT	13	13	0	13	0	100
WASHINGTON	85	78	17	68	10	72
WISCONSIN	127	127	13	114	13	81
WEST VIRGINIA	48	54	2	46	8	82
WYOMING	4	4	2	2	2	33
TOTAL	5,956	6,042	938	5,018	1,024	72

[1] Overlap percent is defined as the number of sites present in both 1987 and 1989, divided by the number of sites present in 1987 and/or 1989, multiplied by 100.

[2] The overlap percent for Hawaii is zero because in 1987 all sites in Hawaii claimed CBI and their EPA ID's were replaced with fictitious identifiers, assigned to conceal the actual EPA ID's of the sites.

NOTE: CBI data are excluded from this exhibit.

4.3 QUANTITY OF RCRA HAZARDOUS WASTE GENERATED

Exhibit 4-7 presents, by EPA region, the quantities of RCRA hazardous waste that were generated during 1987 and 1989. The national totals (excluding data from sites that claimed CBI for their reports) show a moderate decrease of 17.2 percent, from 238.3 million tons in 1987 to 197.3 million tons in 1989. Examining the data by region shows much greater volatility in the quantity of waste generated in the two years. Regions 1 and 5 each reported increases in the quantity generated by more than 300 percent. Five of the 10 regions reported changes between years of 50 percent or more, with 2 regions declining and 3 increasing by that percentage. Three regions reported large declines in the quantity of RCRA hazardous waste generated, while 1 region reported a large increase. The decreases were in Region 3 (28.4 million tons), Region 6 (28.2 million tons), and Region 4 (17.9 million tons). The only large increase in generation quantity reported was in Region 5, with an increase of 32.1 million tons.

Exhibit 4-8 presents and compares the quantity of RCRA hazardous waste generated in each State. From 1987 to 1989, 28 States reported a decrease, and 26 States reported an increase in RCRA hazardous waste quantity generated. (The Trust Territories were not included in the 1987 database, so comparisons are possible for only 54 States.) Michigan and Tennessee each reported increases of approximately 33 million tons, while Connecticut and California reported increases in the range of 1 million tons. Georgia, Virginia, and Texas reported the largest decreases in the quantity generated, with declines of 37 million tons, 30 million tons, and 24 million tons, respectively. Five other States--Alabama, Kentucky, Louisiana, South Carolina, and West Virginia--reported decreases in the quantity generated of more than 1 million tons. A few sites in each of these States were responsible for the majority of the differences in RCRA hazardous waste generation. The declining quantities at several individual sites as well as several increases resulted from changes in the way in which large quantities of hazardous wastewaters were managed (and thus do not, in absolute terms, reflect new increases or decreases in generation). In some cases, sites that had previously managed their wastewaters in surface impoundments subject to RCRA permitting requirements have

Exhibit 4-7. Comparison of Total RCRA Hazardous Waste Quantity Generated, by EPA Region, 1987 and 1989

REGION	1987 TOTAL GENERATED (000 tons)	1989 TOTAL GENERATED (000 tons)	PERCENT CHANGE
1	324	1,514	367.3
2	48,734	47,755	-2.0
3	49,535	21,151	-57.3
4	57,215	39,354	-31.2
5	9,541	41,746	336.4
6	66,501	38,288	-42.4
7	1,488	2,247	51.0
8	372	367	-1.3
9	3,995	4,768	19.3
10	622	273	-56.1
TOTAL	238,327	197,355	-17.2

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Exhibit 4-8. Comparison of Total RCRA Hazardous Waste Quantity Generated, by State, 1987 and 1989

STATE	HAZARDOUS WASTE QUANTITY		
	1987 TOTAL GENERATED (000 tons)	1989 TOTAL GENERATED (000 tons)	PERCENT CHANGE
ALABAMA	3,049	404	-86.7
ALASKA	1	4	300.0
ARIZONA	470	125	-73.4
ARKANSAS	228	805	253.1
CALIFORNIA	3,523	4,636	31.6
COLORADO	124	117	-5.6
CONNECTICUT	187	1,390	643.3
DELAWARE	25	20	-20.0
DISTRICT OF COLUMBIA	1	2	100.0
FLORIDA	519	412	-20.6
GEORGIA	39,838	2,615	-93.4
GUAM	0	1	N/A
HAWAII	1	2	100.0
IDAHO	17	14	-17.6
ILLINOIS	1,969	1,382	-29.8
INDIANA	1,951	1,843	-5.5
IOWA	89	76	-14.6
KANSAS	1,241	1,714	38.1
KENTUCKY	5,851	150	-97.4
LOUISIANA	12,304	9,095	-26.1
MAINE	11	53	381.8
MARYLAND	76	265	248.7
MASSACHUSETTS	91	34	-62.6
MICHIGAN	2,305	35,143	1,424.6
MINNESOTA	76	239	214.5
MISSISSIPPI	1,296	717	-44.7
MISSOURI	149	384	157.7
MONTANA	6	5	-16.7
NEBRASKA	9	72	700.0
NEVADA	1	5	400.0
NEW HAMPSHIRE	17	18	5.9
NEW JERSEY	47,739	47,097	-1.3
NEW MEXICO	4	11	175.0
NEW YORK	778	407	-47.7
NORTH CAROLINA	928	586	-36.9
NORTH DAKOTA	11	29	163.6
OHIO	3,093	2,618	-15.4
OKLAHOMA	1,195	205	-82.8
OREGON	23	28	21.7
PENNSYLVANIA	775	1,247	60.9
PUERTO RICO	201	246	22.4
RHODE ISLAND	12	6	-50.0
SOUTH CAROLINA	4,850	106	-97.8
SOUTH DAKOTA	2	1	-50.0
TENNESSEE	884	34,364	3,787.3
TEXAS	52,770	28,172	-46.6
TRUST TERRITORIES	0	0	0.0
UTAH	226	212	-6.2
VERMONT	6	13	116.7
VIRGIN ISLANDS	15	6	-60.0
VIRGINIA	35,679	5,227	-85.3
WASHINGTON	581	228	-60.8
WEST VIRGINIA	12,979	14,390	10.9
WISCONSIN	148	412	178.4
WYOMING	3	3	0.0
TOTAL	238,327	197,355	-17.2

NOTE: CBI data are excluded from this exhibit.

changed to tank management that is sometimes exempt from RCRA permitting requirements. One increase occurred when a site changed from its 1987 management practice of discharging the hazardous wastewater to a sewer--and eventually to a POTW--to managing it on site in surface impoundments subject to RCRA permitting requirements in 1989. At least one of the large inter-year changes appears to be the result of an erroneous classification of a site's 1987 management practices as exempt from RCRA permitting requirements, when they were actually subject to RCRA permitting requirements.

As a measure of the degree of change in the quantity of RCRA hazardous waste generated between 1987 and 1989, the median percentage change, either positive or negative, was more than 60 percent. Half of the States reported an absolute percentage change in the quantity generated greater than 60 percent, and the other States reported a difference of less than 60 percent.

Another indication of the magnitude of variation is obtained by developing a range for the total quantity generated by taking, in one case, the lower of the two years' quantities for each State, and in the other case, the higher of the two years' quantities. The range was from 125 million tons to 311 million tons. The difference, 186 million tons, was considerably higher than the 41 million ton difference between 1987 and 1989. As with the number of generators, discussed in Section 4.2, the State generation quantity totals were highly variable, with the national total consisting primarily of the quantity generated by a small number of States.

Looking at the sites that accounted for 75 percent of the total RCRA hazardous waste generated in 1987 and 1989, it is clear that there was a large degree of variation at individual sites. As presented in Exhibit 4-9, a total of 17 different sites appear on one or both years' lists. In 1987, 15 of the 17 sites accounted for 75 percent of the total quantity generated. In comparison in 1989, 10 of the 17 sites accounted for 75 percent of the total quantity generated.

Exhibit 4-9. Comparison of Sites Contributing to 75 Percent of National Generation, 1987 and 1989

EPA ID	QUANTITY REPORTED (tons)		ABSOLUTE DIFFERENCE (tons)
	1987	1989	
GAD003282803	36,864,107*	6	36,864,101
GAD003324985	2,818,235*	2,153,083	665,152
KYD006370159	4,822,252*	3,256	4,818,996
LAD008186579	3,139,802*	2,390,769*	749,033
MID000724724	17,817	33,760,292*	33,742,475
NJD002385730	47,283,234*	46,695,042*	588,192
SCD048373468	4,423,416*	212	4,423,204
TND003376928	593,407	32,536,940*	31,943,533
TXD001700806	4,062,335*	2,070,731	1,991,604
TXD007330202	4,731,688*	4,507,313*	224,375
TXD008123317	3,993,687*	3,635,042*	358,645
TXD066349770	3,322,465*	3,584	3,318,881
TXD067285973	17,257,402*	7,840,363*	9,417,039
VAD003121928	10,823,412*	39	10,823,373
VA1210020730	24,782,152*	4,050,016*	20,732,136
WVD004341491	6,691,616*	7,886,806*	1,195,190
WVD005005509	5,582,741*	5,814,145*	231,404
TOTAL	181,209,768	153,347,640	162,087,332

* Quantities included in 75 percent of total generation.

NOTE: Columns may not sum due to rounding.

Although each of the 17 sites was present in both 1987 and 1989, the generation quantities reported in the two years varied considerably. Of the 181 million tons accounted for by the 15 sites in 1987, only 87 million tons, or 48 percent, were accounted for by the same sites in 1989. Conversely, of the 149 million tons (75 percent of 1989 total generation) generated by the 10 largest sites during 1989, the same 10 sites accounted for 114 million tons, or 76 percent in 1987. These quantity differences probably result from changed management practices and inconsistent reporting of RCRA hazardous wastewater.

Exhibit 4-9 also presents the absolute difference between the generation quantity reported in 1987 and 1989, totaling 162 million tons, for the 17 sites. There was considerable variation between individual sites' generation quantity. These are sites contributing to 75 percent of national generation.

More than 90 percent of the hazardous waste that was generated and managed in the United States was wastewater. There has been widespread confusion about the regulatory status of wastewater, thereby contributing to a high measurement of error for wastewater generation quantity. Release of wastewater into surface waters or POTWs is regulated under the National Pollutant Discharge Elimination System (NPDES) or other provisions of the Clean Water Act. Prior to their release, wastewaters may be managed in units subject to RCRA permitting requirements (such as surface impoundments), or in units exempt from RCRA permitting requirements, (such as tank systems). In both 1987 and 1989, wastewater exclusively managed in units exempt from RCRA permitting requirements was to be reported as well as was any wastewater managed in units subject to RCRA permitting requirements.

Both the TSD facilities that generate and manage these often very large quantity of wastewater, and the States that collect the biennial reports, have misunderstood these requirements. In 1987 and 1989, some States appear to have excluded all hazardous wastewater from their biennial reports regardless of the permitting status of the units in which they were managed. Other States may have included RCRA hazardous wastewater managed exclusively in units exempt from RCRA permitting requirements. Since many of these

generation and management quantities were very large, the inclusion or exclusion of one or two sites may produce large shifts in the national quantities.

As shown in Exhibit 4-9, the waste generated by the 54 States for which both 1987 and 1989 data are available, decreased from 238 million tons in 1987 to 197 million tons in 1989. Though this may be the result of inconsistent reporting of wastewater in 1987 and 1989 as discussed above, anecdotal evidence from both the States and from individual sites suggests that sites are shifting the management of wastewater from units subject to RCRA permitting requirements to units exempt from RCRA permitting by managing wastewater in tanks rather than surface impoundments.

4.4 NUMBER OF TREATMENT, STORAGE, AND DISPOSAL (TSD) FACILITIES

Exhibit 4-10 presents, by EPA region, the total number of TSD facilities reporting in 1987 and 1989. The data indicate that the number of TSD facilities decreased from 3,308 in 1987 to 3,062 in 1989, a decline of 7.4 percent. Large changes in regional TSD facility counts were reported in Regions 6 and 9. The Region 6 count of TSD facilities declined by 445, or 50 percent. The Region 9 count increased by 217, up 115 percent. Regions 8 and 10 also showed large percentage increases in TSD facility counts, but these were much smaller than the changes reported in Regions 6 and 9.

Exhibit 4-11 presents the number of TSD facilities in each State in 1987 and 1989. A total of 27 States reported decreases in the number of TSD facilities in 1989, compared to 1987. Twenty-five States reported increases, while 2 States reported no change. The apparent decline in Massachusetts was the result of that State's failure to provide any data on TSD facilities or quantities of RCRA hazardous wastes managed. Three States reported increases of more than 50 TSD facilities between 1987 and 1989. California reported an increase of 224

Exhibit 4-10. Comparison of RCRA Hazardous Waste Treatment, Storage, and Disposal (TSD) Facilities, by EPA Region, 1987 and 1989

REGION	TSD FACILITIES		
	1987 NUMBER	1989 NUMBER	PERCENT CHANGE
1	140	151	7.9
2	215	210	-2.3
3	295	272	-7.8
4	438	361	-17.6
5	836	859	2.8
6	886	441	-50.2
7	182	150	-17.6
8	67	117	74.6
9	188	405	115.4
10	61	96	57.4
TOTAL	3,308	3,062	-7.4

NOTE: CBI data are excluded from this exhibit.

Exhibit 4-11. Comparison of RCRA Hazardous Waste Treatment, Storage and Disposal (TSD) Facilities, by State, 1987 and 1989

STATE	NUMBER OF TSD FACILITIES		
	1987	1989	
	NUMBER OF TSD's	NUMBER OF TSD'S	PERCENT CHANGE
ALABAMA	52	71	36.5
ALASKA	9	20	122.2
ARIZONA	34	17	-50.0
ARKANSAS	39	24	-38.0
CALIFORNIA	130	354	172.0
COLORADO	27	59	118.5
CONNECTICUT	94	131	39.4
DELAWARE	8	7	-12.5
DISTRICT OF COLUMBIA	1	0	-100.0
FLORIDA	51	22	-56.9
GEORGIA	60	57	-5.0
GUAM	2	1	-50.0
HAWAII	15	20	33.3
IDAHO	6	8	33.3
ILLINOIS	226	139	-38.5
INDIANA	103	44	-57.3
IOWA	37	30	-18.9
KANSAS	26	34	30.8
KENTUCKY	64	51	-20.3
LOUISIANA	130	46	-64.6
MAINE	8	4	-50.0
MARYLAND	27	37	37.0
MASSACHUSETTS	21	0	-100.0
MICHIGAN	131	232	77.1
MINNESOTA	46	237	415.2
MISSISSIPPI	29	31	6.9
MISSOURI	111	74	-33.3
MONTANA	5	9	80.0
NEBRASKA	8	12	50.0
NEVADA	7	11	57.1
NEW HAMPSHIRE	4	6	50.0
NEW JERSEY	108	98	-9.3
NEW MEXICO	13	19	46.2
NEW YORK	79	73	-7.6
NORTH CAROLINA	77	28	-63.6
NORTH DAKOTA	7	6	-14.3
OHIO	196	152	-22.4
OKLAHOMA	34	48	41.2
OREGON	8	12	50.0
PENNSYLVANIA	193	157	-18.7
PUERTO RICO	27	38	40.7
RHODE ISLAND	9	4	-55.6
SOUTH CAROLINA	71	34	-52.1
SOUTH DAKOTA	2	2	0.0
TENNESSEE	34	67	97.1
TEXAS	670	304	-54.6
TRUST TERRITORIES	0	2	N/A
UTAH	18	34	88.9
VERMONT	4	6	50.0
VIRGIN ISLANDS	1	1	0.0
VIRGINIA	42	52	23.8
WASHINGTON	38	56	47.4
WEST VIRGINIA	24	19	-20.8
WISCONSIN	134	55	-59.0
WYOMING	8	7	-12.5
TOTAL	3,308	3,062	-7.4

NOTE: CBI data are excluded from this exhibit.

TSD facilities, while Minnesota reported an increase of 191 TSD facilities, and Michigan reported an increase of 101 TSD facilities. Large declines in TSD facility counts were reported by Texas (366), Illinois (87), Louisiana (84), and Wisconsin (79).

4.5 QUANTITY OF RCRA HAZARDOUS WASTE MANAGED

Exhibit 4-12 presents, by EPA region, the total quantity of RCRA hazardous waste that was managed during 1987 and 1989. Since the largest quantities of RCRA hazardous waste consist of hazardous wastewaters managed on site, it is not surprising that these findings closely parallel those presented above for RCRA hazardous waste generation quantity. Three regions accounted for most of the 16 percent decline between 1987 and 1989 in the quantity managed. Region 3's reported quantity managed declined by 27.4 million tons. The declines in Regions 6 and 4 were 24.4 million tons and 17.4 million tons, respectively.

Exhibit 4-13 presents the quantity of hazardous waste managed, by State, during 1987 and 1989. Since storage is never a primary RCRA hazardous waste management method, the quantities reported here exclude storage. As indicated above, Massachusetts did not identify any sites as TSD facilities, nor did it report any quantity of RCRA hazardous waste managed. A total of 33 States reported decreases in the quantity of RCRA hazardous waste managed in 1989, compared to 1987. Only 17 States reported increases. Computations were not possible in 5 States (District of Columbia, New Hampshire, South Dakota, Trust Territories, and Vermont) because they did not provide management quantity data in 1987. Half of the States reported an increase or decrease of more than 43 percent between the two years, suggesting considerable inter-year variation in management quantities across States. The States with the largest quantity increases and decreases are identical to those previously reported in the discussion of hazardous waste generation quantities. These were discussed in Exhibit 4-8.

Exhibit 4-12. Comparison of RCRA Hazardous Waste Quantity Managed, by EPA Region, 1987 and 1989

REGION	HAZARDOUS WASTE QUANTITY[1]		
	1987 TOTAL MANAGED (000 tons)	1989 TOTAL MANAGED (000 tons)	PERCENT CHANGE
1	197	385	95.4
2	48,651	47,601	-2.2
3	48,379	21,014	-56.6
4	56,999	39,593	-30.5
5	9,563	41,533	334.3
6	62,454	38,054	-39.1
7	1,409	2,149	52.5
8	389	368	-5.4
9	5,068	4,876	-3.8
10	368	173	-53.0
TOTAL	233,476	195,746	-16.2

[1] Quantity managed only by storage is excluded.

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Exhibit 4-13. Comparison of RCRA Hazardous Waste Quantity Managed, by State, 1987 and 1989

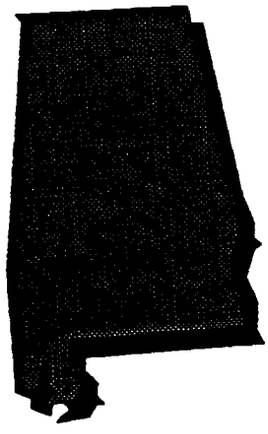
STATE	HAZARDOUS WASTE QUANTITY[1]		
	1987 TOTAL MANAGED (000 tons)	1989 TOTAL MANAGED (000 tons)	PERCENT CHANGE
ALABAMA	2,986	564	-81.1
ALASKA	1	0	-100.0
ARIZONA	452	96	-78.8
ARKANSAS	108	824	663.0
CALIFORNIA	4,603	4,759	3.4
COLORADO	96	81	-15.6
CONNECTICUT	136	366	169.1
DELAWARE	6	3	-50.0
DISTRICT OF COLUMBIA[2]	0	0	<0.05
FLORIDA	476	360	-24.4
GEORGIA	39,751	2,551	-93.6
GUAM[2]	0	0	0.0
HAWAII	1	1	<0.05
IDAHO	41	1	-97.6
ILLINOIS	2,035	1,441	-29.2
INDIANA	2,080	2,021	-2.8
IOWA	47	75	59.6
KANSAS	1,268	1,701	34.1
KENTUCKY	5,775	145	-97.5
LOUISIANA	11,935	9,206	-22.9
MAINE[3]	1	0	-100.0
MARYLAND	27	211	681.5
MASSACHUSETTS[3]	42	0	-100.0
MICHIGAN	2,275	35,067	1,441.4
MINNESOTA	12	349	2,808.3
MISSISSIPPI	1,230	698	-43.3
MISSOURI	82	290	253.7
MONTANA	4	3	-25.0
NEBRASKA	11	84	663.6
NEVADA	12	20	66.7
NEW HAMPSHIRE[2]	0	6	0.0
NEW JERSEY	47,782	46,932	-1.8
NEW MEXICO	7	6	-14.3
NEW YORK	669	420	-37.2
NORTH CAROLINA	901	566	-37.2
NORTH DAKOTA	1	25	2,400.0
OHIO	3,089	2,283	-26.1
OKLAHOMA	1,111	228	-79.5
OREGON	75	1	-98.7
PENNSYLVANIA	350	1,139	225.4
PUERTO RICO	185	243	31.4
RHODE ISLAND	18	13	-27.8
SOUTH CAROLINA	5,237	176	-96.6
SOUTH DAKOTA[2]	0	0	0.0
TENNESSEE	643	34,533	5270.6
TEXAS	49,293	27,789	-43.6
TRUST TERRITORIES[2]	0	0	0.0
UTAH	285	258	-9.5
VERMONT[2]	0	0	0.0
VIRGIN ISLANDS	15	6	-60.0
VIRGINIA	35,654	5,324	-85.1
WASHINGTON	251	171	-31.9
WEST VIRGINIA	12,342	14,335	16.1
WISCONSIN	73	371	408.2
WYOMING	2	0	-100.0
TOTAL	233,476	195,746	-16.2

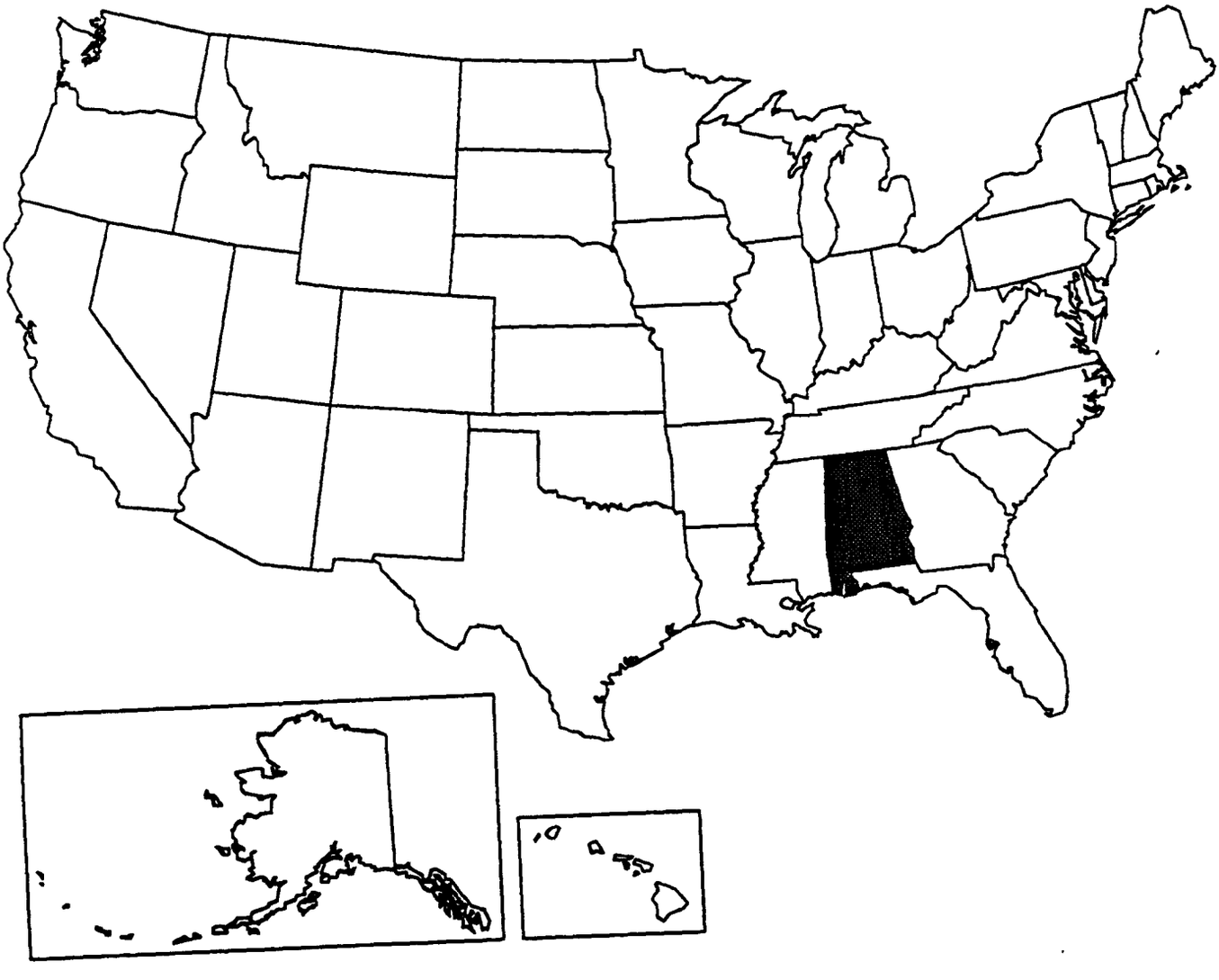
[1] Quantity managed only by storage is excluded.
[2] These States did not provide waste management data for 1987.
[3] Maine and Massachusetts did not provide waste management data for 1989.

NOTES: CBI data are excluded from this exhibit.
Columns may not sum due to rounding.

Alabama

Region IV





ALABAMA

EPA Region Address:	U.S. EPA Region IV Waste Division, Waste Programs Branch State Programs Section 345 Courtland Street Atlanta, GA 30365
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority:	Information Systems Branch Permits and Services Division Department of Environmental Management 1751 Cong. W.L. Dickinson Dr. Montgomery, AL 36130
Contact Name: Phone:	Mr. Michael E. McCary (205) 271-7927

Notes: No special notes for Alabama.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALABAMA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	224
Total Quantity of Regulated Waste Generated:	403,701 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	13
Facilities managing only waste generated off site	9
Facilities managing waste generated both on and off site	5
Total RCRA TSD Facilities (excluding storage-only facilities):	27
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	564,189 tons
Total RCRA TSD Facilities:	71

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	2	0	26,458	26,458	4.7
SOLVENTS RECOVERY	M021-M029	6	168	1	170	.0
OTHER RECOVERY	M031-M039	3	0	6,796	6,796	1.2
INCINERATION	M041-M049	6	3,881	241	4,122	.7
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	0	0	0	.0
FUEL BLENDING	M061	5	43,995	45,066	89,061	15.8
AQUEOUS INORGANIC TREATMENT	M071-M079	5	107	0	107	.0
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	0	0	0	.0
SLUDGE TREATMENT	M101-M109	1	26	0	26	.0
STABILIZATION	M111-M119	1	15,801	26,609	42,409	7.5
OTHER TREATMENT	M121-M129	3	352	580	933	.2
LAND TREATMENT	M131	1	1,548	0	1,548	.3
LANDFILL	M132	5	54,135	299,446	353,580	62.7
SURFACE IMPOUNDMENT	M133	1	1,565	0	1,565	.3
INVALID SYSTEM TYPE		9	0	37,413	37,413	6.6
TOTAL		27	121,578	442,611	564,189	100.0
PERCENTAGE		-	21.5 %	78.5 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALABAMA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AR	17,730
AZ	52
CA	112
CO	328
CT	9,661
DC	4
DE	465
FL	35,831
GA	40,026
IA	3,659
ID	0
IL	9,696
IN	4,792
KS	619
KY	19,145
LA	8,847
MA	2,287
MD	3,835
ME	5
MI	6,830
MN	1,554
MO	489
MS	7,507
MT	5
NC	10,020
ND	13
NE	8
NH	67
NJ	71,824
NM	3,739
NV	0
NY	3,131
OH	12,003
OR	9
PA	13,544
PR	401
RI	110
SC	8,343
SD	7
TN	29,954
TX	1,809
VA	4,247
VT	40
WA	18
WI	662
WV	231
WY	3
TOTAL	333,661

Exports

State	Tons Shipped
AR	777
CT	26
FL	11,776
GA	3,729
IA	16
IL	16,697
IN	609
KS	499
KY	216
LA	10,529
MI	278
MN	983
MS	17
NC	17,878
NE	729
NJ	142
NY	4
OH	465
OK	497
PA	3,520
SC	3,747
TN	4,781
TX	70,365
UT	11
VA	8,568
WI	536
WV	108
TOTAL	157,501

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALABAMA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	M0MX*	85,500	21.2
2	D004	79,549	19.7
3	F0MX*	53,282	13.2
4	F006	52,079	12.9
5	D008	29,737	7.4
6	D0MX*	21,545	5.3
7	D002	18,103	4.5
8	K062	13,028	3.2
9	K061	12,282	3.0
10	D009	11,993	3.0
11	D001	8,178	2.0
12	D006	3,347	.8
13	F003	3,163	.8
14	F019	2,295	.6
15	F002	1,682	.4
16	K071	1,601	.4
17	K048	1,548	.4
18	K001	1,090	.3
19	F001	918	.2
20	D007	791	.2
21	F005	695	.2
22	D003	692	.2
23	K106	332	.1
24	U051	82	.0
25	K035	41	.0
26	P020	40	.0
27	P115	30	.0
28	U0MX*	21	.0
29	F007	20	.0
30	D011	9	.0
31	K052	6	.0
32	U211	6	.0
33	U210	4	.0
34	D005	2	.0
35	U122	1	.0
36	U044	1	.0
37	K045	1	.0
38	U007	1	.0
39	P066	0	.0
40	F008	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALABAMA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D008	26,458
		D002	0
		U151	0
SOLVENTS RECOVERY	M021-M029	F003	123
		F001	45
		D001	1
		F002	1
OTHER RECOVERY	M031-M039	K001	6,562
		U051	233
		D002	0
		U211	0
INCINERATION	M041-M049	F003	2,154
		D001	1,259
		K001	218
		D003	174
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	MOMX*	0
FUEL BLENDING	M061	MOMX*	60,782
		FOMX*	12,573
		D001	9,818
		DOMX*	3,154
AQUEOUS INORGANIC TREATMENT	M071-M079	FOMX*	70
		P115	30
		F006	3
		D002	3
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	U122	0
SLUDGE TREATMENT	M101-M109	F006	26
STABILIZATION	M111-M119	D004	16,085
		F006	14,060
		DOMX*	3,625
		D002	1,845
OTHER TREATMENT	M121-M129	D003	352
		FOMX*	189
		MOMX*	162
		F002	92
LAND TREATMENT	M131	K048	1,548

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALABAMA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989
(continued)

Management Method	Code	Waste Type	Quantity Managed in State (tons)
LANDFILL	M132	DOMX*	81,576
		F006	67,839
		D008	62,334
		FOMX*	34,212
SURFACE IMPOUNDMENT	M133	K071	1,565
INVALID SYSTEM TYPE		MOMX*	13,861
		FOMX*	12,786
		D001	8,007
		F003	1,676
TOTAL			564,189

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

ALABAMA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	ALD000622464	CHEMICAL WASTE MANAGEMENT INC	EMELLE	80,714
02	ALD001221902	CIBA-GEIGY CORPORATION	MCINTOSH	56,750
03	ALD070513767	M&M CHEMICAL & EQUIPMENT COMPANY	ATTALLA	43,534
04	ALD981020894	FISHER INDUSTRIAL SERVICE, INC.	GLENCOE	39,584
05	ALD046481032	SANDERS LEAD COMPANY INC.	TROY	35,021
06	ALD052065117	TELEDYNE CONTINENTAL MOTORS /AP	MOBILE	26,500
07	ALD008188708	OLIN CORPORATION	MCINTOSH	11,771
08	AL1800013863	MARSHALL SPACE FLIGHT CENTER	HUNSTVILLE	10,560
09	ALD000622852	BIRMINGHAM BOLT INC	BIRMINGHAM	8,768
10	ALD004019642	OCCIDENTAL CHEMICAL CORP	SHEFFIELD	8,742
11	ALD004029294	HANNA STEEL CORPORATION	FAIRFIELD	7,980
12	ALD094476793	ALLWORTH INC	BIRMINGHAM	5,977
13	ALD093179315	DU PONT MOBILE PLANT	AXIS	5,416
14	ALD980839310	GERRARD STEEL PICKLING	FLORENCE	5,050
15	ALD102066636	SCHLUMBERGER IND. WATER DIV.	TALLASSEE	3,855
16	ALD008161176	AKZO CHEMICALS INC. LEMOYRE FAC.	AXIS	3,706
17	ALD054571278	NATIONAL-STANDARD COMPANY	COLUMBIANA	3,439
18	ALD067123570	SMI STEEL INC	BIRMINGHAM	3,437
19	ALD006320774	MONSANTO CHEMICAL COMPANY	DECATUR	3,307
20	AL3210020027	ANNISTON ARMY DEPOT	ANNISTON	2,528
21	ALD155638570	MATLACK MOBILE TERMINAL	CREOLA	2,281
22	ALD095687679	REYNOLDS METALS CO.-ALLOYS PLANT	SHEFFIELD	2,066
23	ALD004023164	3M DECATUR	DECATUR	1,831
24	ALD982115180	JVC MAGNETICS AMERICA CO	TUSCALOOSA	1,558
25	ALD004009320	HUNT REFINING COMPANY	TUSCALOOSA	1,554
26	ALD010394021	UNIROYAL CHEMICAL CO. INC.	BAYMINETTE	1,253
27	ALD053360897	WHITAKER CORPORATION	DECATUR	1,170
28	ALD095688875	ICI AMERICAS INC.	BUCKS	1,078
29	ALD000770164	RYDER BULK TRANSPORTATION SERVICES, INC.	MOBILE	983
30	ALD003396983	SQUARE D COMPANY - ANDERSON PLANT	LEEDS	978
31	ALD078960234	SAGINAW DIVISION	ATHENS	778
32	ALD004011342	HANNA CHEMICAL COATINGS CORP	BIRMINGHAM	766
33	ALD078964970	THE DEXTER CORPORATION	BIRMINGHAM	739
34	ALD008163115	MOBILE PAINT MANUFACTURING	THEODORE	730
35	ALD981868466	AMERICAN BRASS, INC.	HEADLAND	725
36	ALD000608224	KAY-FRIES, ALABAMA, INC	THEODORE	682
37	ALD003301884	DIVERSIFIED PRODUCTS	OPELIKA	655
38	ALD008185407	HUXFORD POLE TIMBER INC	HUXFORD	627
39	AL7210020742	U S ARMY MISSILE COMMAND	REDSTONE ARSENAL	623
40	ALD003395043	DIXIE ELECTRICAL MTG CO.	BIRMINGHAM	535

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALABAMA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
1	ALD000622464 CHEMICAL WASTE MANAGEMENT INC, EMELLE					360,463
	LANDFILL	M132	0	299,211	299,211	
	STABILIZATION	M111-M119	15,801	26,609	42,409	
	FUEL BLENDING	M061	461	17,800	18,261	
	OTHER TREATMENT	M121-M129	0	580	580	
	INVALID SYSTEM TYPE		0	0	0	
	INCINERATION	M041-M049	0	0	0	
2	ALD070513767 M&M CHEMICAL & EQUIPMENT COMPANY, ATTALLA					80,903
	FUEL BLENDING	M061	43,534	0	43,534	
	INVALID SYSTEM TYPE		0	37,369	37,369	
3	ALD001221902 CIBA-GEIGY CORPORATION, MCINTOSH					56,750
	LANDFILL	M132	54,011	0	54,011	
	INCINERATION	M041-M049	2,739	0	2,739	
4	ALD981019045 SYSTECH ENVIRONMENTAL /LAFARGE, DEMOPOLIS					26,919
	FUEL BLENDING	M061	0	26,919	26,919	
5	ALD046481032 SANDERS LEAD COMPANY INC.,TROY					26,458
	METALS RECOVERY (FOR REUSE)	M011-M019	0	26,458	26,458	
6	ALD031499833 ALLIED - SIGNAL INC., FAIRFIELD					7,325
	OTHER RECOVERY	M031-M039	0	6,796	6,796	
	INCINERATION	M041-M049	124	241	365	
	LANDFILL	M132	124	0	124	
	INVALID SYSTEM TYPE		0	41	41	
7	ALD008161176 AKZO CHEMICALS INC. LEMOYRE FAC., AXIS					1,565
	SURFACE IMPOUNDMENT	M133	1,565	0	1,565	
8	ALD004009320 HUNT REFINING COMPANY, TUSCALOOSA					1,548
	LAND TREATMENT	M131	1,548	0	1,548	
9	ALD093179315 DU PONT MOBILE PLANT, AXIS					872
	INCINERATION	M041-M049	872	0	872	
10	ALD981020894 FISHER INDUSTRIAL SERVICE, INC., GLENCOE					382
	FUEL BLENDING	M061	0	335	335	
	LANDFILL	M132	0	46	46	
	INVALID SYSTEM TYPE		0	1	1	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	0	0	
11	AL7210020742 U S ARMY MISSILE COMMAND, REDSTONE ARSENAL					352
	OTHER TREATMENT	M121-M129	352	0	352	
12	ALD049699366 OPELIKA FOUNDRY COMPANY, OPELIKA					188
	LANDFILL	M132	0	188	188	
13	AL3210020027 ANNISTON ARMY DEPOT, ANNISTON					146
	INCINERATION	M041-M049	146	0	146	
	INVALID SYSTEM TYPE		0	0	0	
14	ALD004010120 INDURALL COATINGS INC., BIRMINGHAM					121
	SOLVENTS RECOVERY	M021-M029	121	0	121	
15	ALD067111450 UNITED PLATING INC., HUNTSVILLE					70
	AQUEOUS INORGANIC TREATMENT	M071-M079	70	0	70	

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xcluding quantity managed by storage only.

ALABAMA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City	Management Method		On Site	Off Site	Method Total	Tot Manag
16	ALD044075919 EATON CORPORATION, ATHENS						
		AQUEOUS INORGANIC TREATMENT	M071-M079	30	0	30	
		SLUDGE TREATMENT	M101-M109	26	0	26	
17	ALD079127635 COOPER INDUSTRIES, CULLMAN						
		SOLVENTS RECOVERY	M021-M029	44	0	44	
18	ALD980559850 FUELS & CHEMICALS INC., COALING						
		FUEL BLENDING	M061	0	12	12	
19	ALD004002333 PARKER HANNIFIN ICD, HUNTSVILLE						
		AQUEOUS INORGANIC TREATMENT	M071-M079	4	0	4	
20	ALD004001145 ALD004001145, TRUSSVILLE						
		AQUEOUS INORGANIC TREATMENT	M071-M079	3	0	3	
21	ALD000826958 AUBURN UNIVERSITY, AUBURN						
		SOLVENTS RECOVERY	M021-M029	2	0	2	
		OTHER RECOVERY	M031-M039	0	0	0	
22	ALD079474037 UNIVERSITY OF SOUTH CAMPUS, MOBILE						
		SOLVENTS RECOVERY	M021-M029	0	1	1	
		AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	0	0	
		AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
		INCINERATION	M041-M049	0	0	0	
		OTHER TREATMENT	M121-M129	0	0	0	
		OTHER RECOVERY	M031-M039	0	0	0	
		INVALID SYSTEM TYPE		0	0	0	
		METALS RECOVERY (FOR REUSE)	M011-M019	0	0	0	
23	ALD983166265 BARBERS PURE MILK COMPANY, MOBILE						
		INVALID SYSTEM TYPE		0	1	1	
24	ALD982095648 LIBERTY TRUCK SALES INC., BIRMINGHAM						
		SOLVENTS RECOVERY	M021-M029	0	1	1	
25	ALD058218967 TRAIL PONTIAC - GMC TRUCK INC., MOBILE						
		SOLVENTS RECOVERY	M021-M029	1	0	1	
26	ALD094476793 ALLWORTH INC., BIRMINGHAM						
		INVALID SYSTEM TYPE		0	1	1	
27	ALD077640001 SAFETY - KLEEN, DOLOMITE						
		INVALID SYSTEM TYPE		0	0	0	

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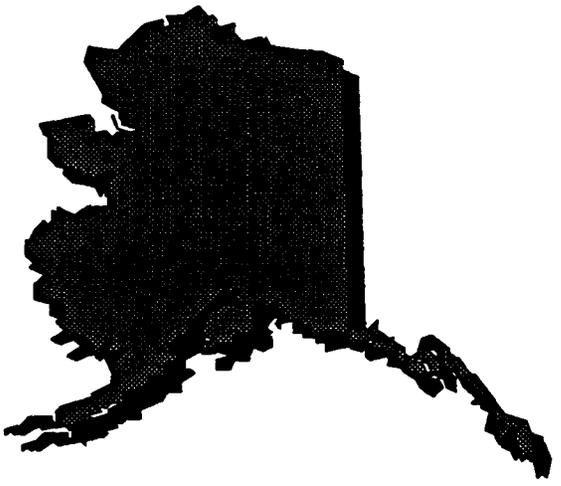
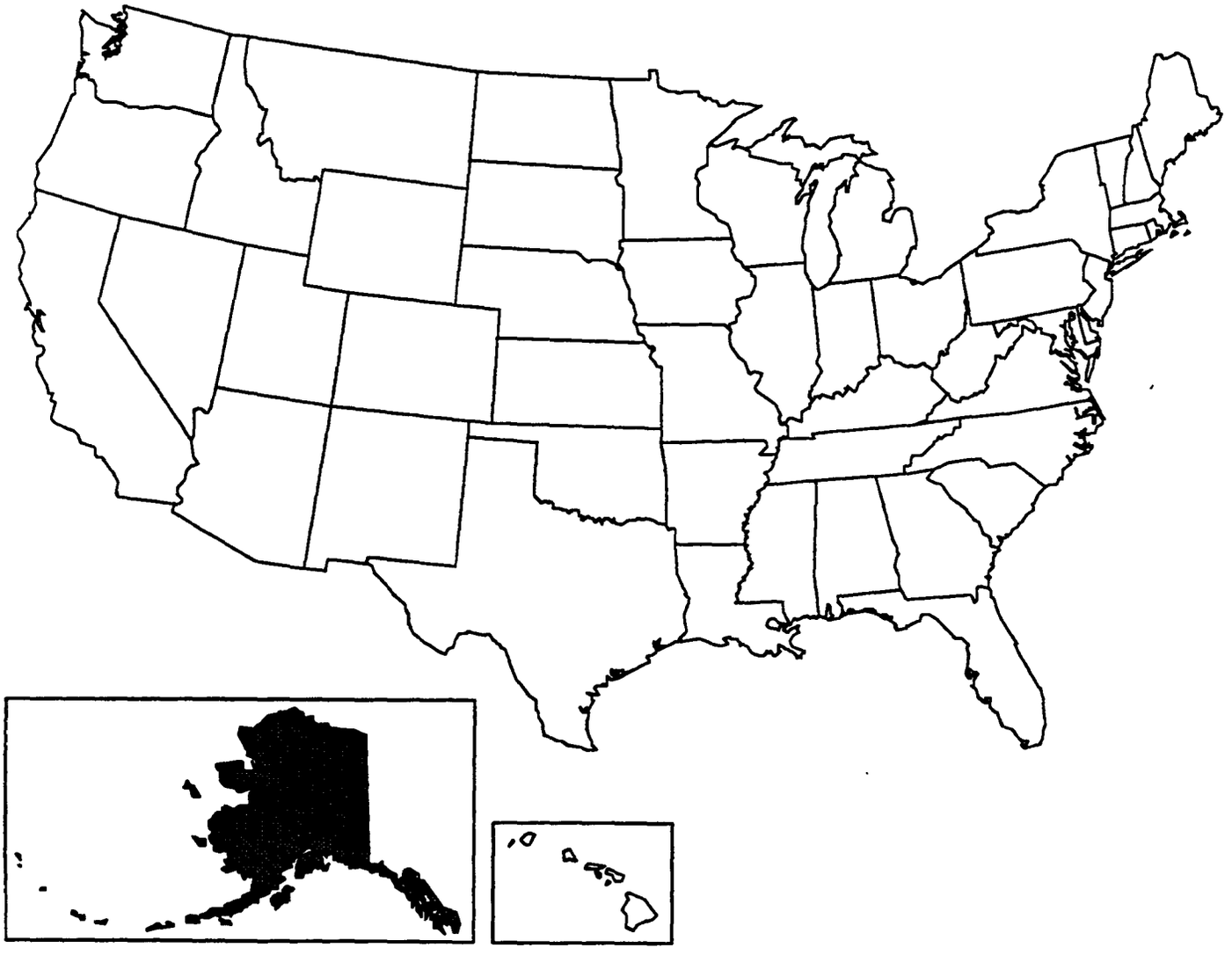
1 Excluding quantity managed by storage only.

Alaska

Region X





ALASKA

EPA Region Address:	U.S. EPA Region X Waste Management Branch Mail Stop HW-112 1200 6th Avenue Seattle, WA 98101
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Program Solid and Hazardous Waste Section Alaska Department of Environmental Conservation 410 Willoughby Avenue Juneau, AK 99801-1795
Contact Name:	Mr. Jeffrey B. Hurst BRS/Biennial Reports Coordinator
Phone:	(907) 465-5164

Notes: No special notes for Alaska.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALASKA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	43
Total Quantity of Regulated Waste Generated:	3,664 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	7
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	7
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	29 tons
Total RCRA TSD Facilities:	20

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	3	5	0	5	18.6
OTHER RECOVERY	M031-M039	1	1	0	1	2.9
AQUEOUS INORGANIC TREATMENT	M071-M079	1	15	0	15	50.9
OTHER TREATMENT	M121-M129	3	8	0	8	27.7
TOTAL		7	29	0	29	100.0
PERCENTAGE		-	100.0 %	.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALASKA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
TOTAL	0

Exports

State	Tons Shipped
CA	0
ID	49
NY	3
OR	195
PA	1
UT	2,460
WA	762
TOTAL	3,470

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALASKA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D008	2,654	72.4
2	DOMX*	330	9.0
3	MOMX*	280	7.7
4	D001	247	6.7
5	D003	43	1.2
6	D002	41	1.1
7	FOMX*	23	.6
8	D011	15	.4
9	F002	7	.2
10	D004	5	.1
11	D009	4	.1
12	U122	4	.1
13	D007	3	.1
14	U359	3	.1
15	KOMX*	2	.0
16	F001	2	.0
17	F005	1	.0
18	P039	0	.0
19	U239	0	.0
20	D010	0	.0
21	F003	0	.0
22	U061	0	.0
23	U228	0	.0
24	U072	0	.0
25	P015	0	.0
26	P042	0	.0
27	U160	0	.0
28	P022	0	.0
29	U159	0	.0
30	U114	0	.0
31	P047	0	.0
31	U226	0	.0

* These waste type represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALASKA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	D001	3
		D0MX*	2
		F001	1
OTHER RECOVERY	M031-M039	D001	1
AQUEOUS INORGANIC TREATMENT	M071-M079	D011	15
OTHER TREATMENT	M121-M129	D001	8
		D003	0
TOTAL			29

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALASKA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	AKD004904215	US ENVIRONMENTAL PROTECTION AGENCY ALASK	FAIRBANKS	2,433
02	AK1570028646	EIELSON AFB	FAIRBANKS	227
03	AKD009252230	KETCHIKAN PULP COMPANY	KETCHIKAN	175
04	AK8690360492	US COAST GUARD GROUP	KETCHIKAN	113
05	AK9570028655	USAF, 5072 CSS/DE	GALENA AIRPORT	97
06	AKD000643239	BP EXPLORATION (ALASKA) INC.	PRUDHOE BAY	72
07	AK8570028649	USAF ELMENDORF AFB	ELEMDORFAFB	72
08	AK4170024323	NAVAL AIR STATION ADAK	ADAK ISLANDS	60
09	AK5210090002	DFSP WHITTIER	WHITTIER	54
10	AK1210022157	U.S. ARMY, 6TH INFANTRY DIVISION (LIGHT)	FORT RICHARD1ON	40
11	AKD048679682	KENAI REFINERY TESORO ALASKA PETROLEUM	KENAI	38
12	AKD980834675	BP EXPLORATION (ALASKA) INC.	PRUDHOE BAY	36
13	AKD982657991	EXXON COMPANY, U.S.A.	VALDEZ	36
14	AKD048679567	UNIVERSITY OF ALASKA FAIRBANKS	FAIRBANKS	30
15	AKD983066366	STATE OF ALASKA DEPARTMENT OF TRANSPORTA	JUNEAU	24
16	AKD052581758	TAPS-VALDEZ MARINE TERMINAL	VALDEZ	23
17	AK9690330742	U.S. COAST GUARD SUPPORT CENTER	KODIAK	22
18	AKD991281221	ARCO PRUDHOE BAY OILFIELD EASTERN OPERAT	DEADHORSE	16
19	AK9572728633	CAPE ROMANZOF LONG RANGE RADAR SITE	HOOPER BAY	12
20	AK5570028709	SPARREVOHN LONG RANGE RADAR SITE	ANCHORAGE	11
21	AK0690390042	USCGC SWEETBRIER WLB-405	CORDOVA	10
22	AK0570028662	INDIAN MOUNTAIN LONG RANGE RADAR SITE	GALENA	9
23	AKD092876390	UNOCAL CHEMICALS, KENAI PLANT	KENAI	7
24	AKD982655847	UNOCAL GRAYLING PLATFORM	KENAI	7
25	AKD982655789	UNOCAL CORPORATION MONOPOD PLATFORM	KENAI	5
26	AK9570028705	USAF SHEMYA AFB	SHEMYA AFB	5
27	AKD983067364	EXXON COMPANY, U.S.A.	SEWARD	4
28	AK1572728631	CAPE LISBURNE LONG RANGE RADAR SITE	KOTZEBUE	4
29	AKD980329585	TAPS-PUMP STATION 6	ANCHORAGE	3
30	AKD980329858	CHUGACH ELECTRIC ASSOC., INC.	ANCHORAGE	3
31	AKD981769821	KETCHIKAN SHIPYARD, INC.	KETCHIKAN	3
32	AK8570090110	USAF BETHEL AFS	BETHEL	3
33	AKD983068222	EXXON COMPANY, U.S.A.	ANCHORAGE	3
34	AK3572728654	FORT YUKON LONG RANGE RADAR SITE	FORT YUKON	3
35	AKD982655953	UNOCAL B.P. #0736	SITKA	2
36	AKD115168999	ARCTIC CENTER	ANCHORAGE	2
37	AKD097251169	UNIVERSITY OF ALASKA FAIRBANKS AGRICULTU	PALMER	1
38	AK7570028632	CAPE NEWENHAM LONG RANGE RADAR SITE	DILLINGHAM	1
39	AKD980329536	TAPS - PUMP STATION 2	DEADHORSE	1
40	AKD983068172	EXXON COMPANY, U.S.A. - CHEM WASTE	ANCHORAGE	1

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ALASKA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID	Site Name, City	Management Method		On Site	Off Site	Method Total	Tot Manag
1	AKD991281221	ARCO PRUDHOE BAY OILFIELD EASTERN OPERAT, DEADHORSE						
			AQUEOUS INORGANIC TREATMENT	M071-M079	15	0	15	
2	AKD041921503	ANCHORAGE DAILY NEWS, ANCHORAGE						
			OTHER TREATMENT	M121-M129	8	0	8	
			SOLVENTS RECOVERY	M021-M029	3	0	3	
3	AKD981769854	MUNICIPALITY OF ANCHORAGE, ANCHORAGE						
			SOLVENTS RECOVERY	M021-M029	2	0	2	
4	AKD092876390	UNOCAL CHEMICALS, KENAI PLANT, KENAI						
			SOLVENTS RECOVERY	M021-M029	1	0	1	
5	AKD981767668	NOME JOINT UTILITY SYSTEM, NOME						
			OTHER RECOVERY	M031-M039	1	0	1	
6	AK1570028646	EIELSON AFB, FAIRBANKS						
			OTHER TREATMENT	M121-M129	0	0	0	
7	AK4170024323	NAVAL AIR STATION ADAK, ADAK ISLANDS						
			OTHER TREATMENT	M121-M129	0	0	0	

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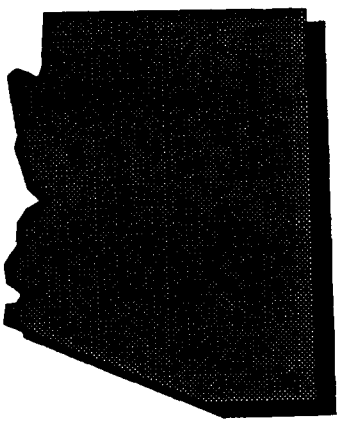
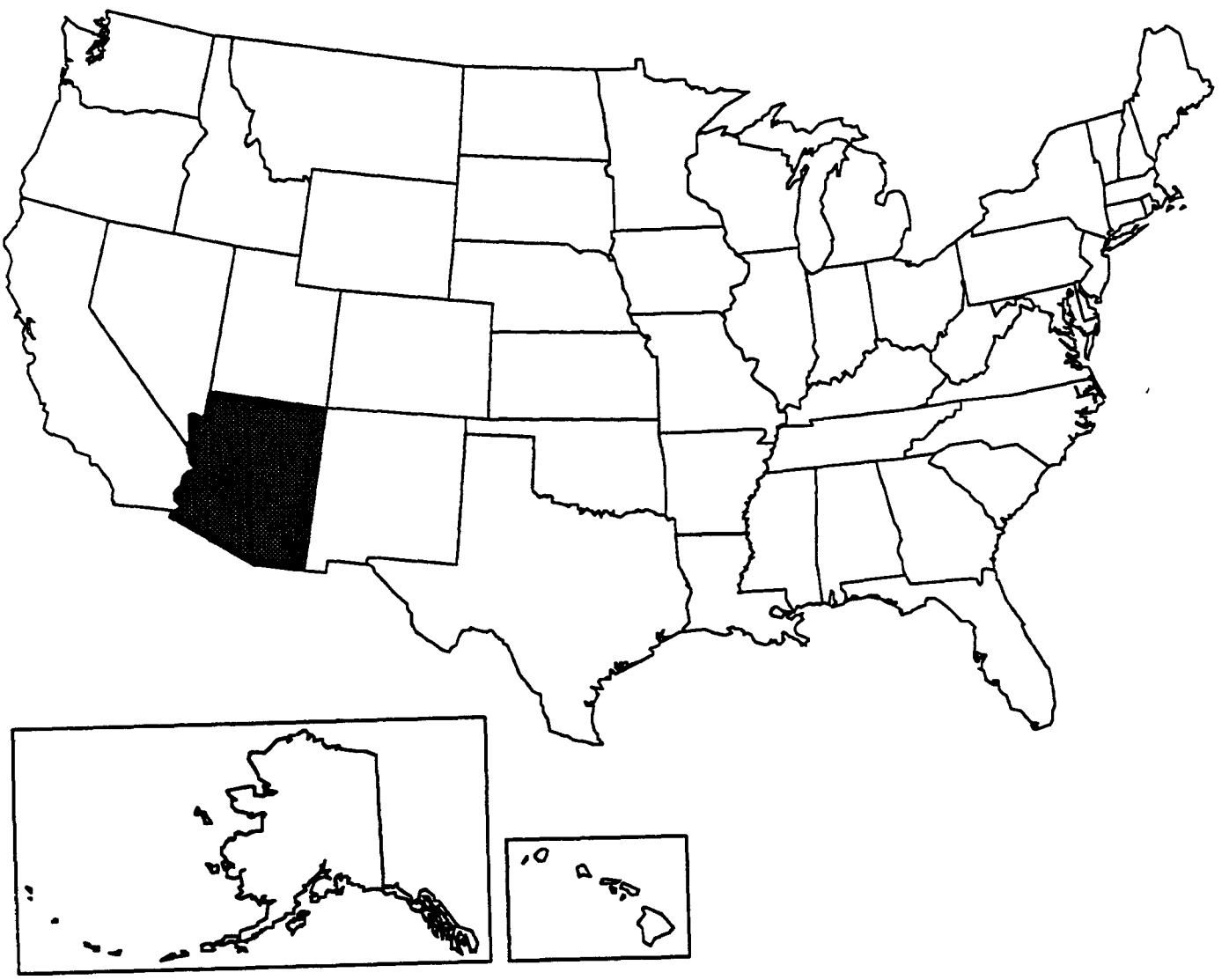
1 Excluding quantity managed by storage only.

Arizona

Region IX





ARIZONA

EPA Region Address:	U.S. EPA Region IX RCRA Branch Mail Stop H-31 1235 Mission Street San Francisco, CA 94103
Biennial Report Data Collection Instrument:	State-specific annual report
Address of Participating State Environmental Authority	Waste Assessment Section Department of Environmental Quality 2005 North Central Avenue, Room 403C Phoenix, AZ 85004
Contact Name:	Dr. Andy Soesilo Acting Manager
Phone:	(602) 257-6995

Notes: No special notes for Arizona.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARIZONA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	175
Total Quantity of Regulated Waste Generated:	124,595 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	5
Facilities managing only waste generated off site	2
Facilities managing waste generated both on and off site	5
Total RCRA TSD Facilities (excluding storage-only facilities):	12
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	95,737 tons
Total RCRA TSD Facilities:	17

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	1	0	73	73	.1
OTHER RECOVERY	M031-M039	5	151	56	206	.2
INCINERATION	M041-M049	5	31	235	266	.3
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	3	795	798	.8
AQUEOUS INORGANIC TREATMENT	M071-M079	2	13,672	6	13,677	14.3
OTHER TREATMENT	M121-M129	5	80,286	168	80,453	84.0
LANDFILL	M132	1	2	260	262	.3
INVALID SYSTEM TYPE		1	0	0	0	.0
TOTAL		12	94,144	1,593	95,737	100.0
PERCENTAGE		-	98.3 %	1.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARIZONA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AS	1
CA	692
CO	0
MO	15
NM	20
NV	13
OH	35
OR	1
UT	0
WA	0
TOTAL	778

Exports

State	Tons Shipped
AL	344
AR	32
CA	7,943
CO	23
FC	1,143
FL	17
GA	4
ID	69
IL	153
KS	155
LA	665
MI	0
MO	312
NE	49
NJ	1,119
NM	6,855
NV	1,531
NY	1
OH	7
OK	1,176
PA	3
TN	103
TX	977
UT	733
TOTAL	23,415

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARIZONA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MOMX*	84,840	68.1
2	DOMX*	14,189	11.4
3	F006	11,491	9.2
4	D002	3,438	2.8
5	D001	3,027	2.4
6	F002	2,356	1.9
7	F001	1,632	1.3
8	FOMX*	1,448	1.2
9	F003	832	.7
10	D007	460	.4
11	D003	247	.2
12	D008	234	.2
13	F005	74	.1
14	P105	61	.0
15	UOMX*	53	.0
16	D006	39	.0
17	D004	26	.0
18	F007	20	.0
19	F019	20	.0
20	P003	18	.0
21	F009	14	.0
22	P071	13	.0
23	P044	12	.0
24	F008	10	.0
25	P089	9	.0
26	D011	6	.0
27	P085	4	.0
28	D010	3	.0
29	D009	3	.0
30	P029	2	.0
31	U220	2	.0
32	U223	2	.0
33	F027	1	.0
34	U226	1	.0
35	U122	1	.0
36	U154	1	.0
37	U080	1	.0
38	P030	0	.0
39	U151	0	.0
40	U002	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARIZONA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	D001	39
		D002	14
		F006	10
		MOMX*	8
OTHER RECOVERY	M031-M039	MOMX*	62
		F001	43
		FOMX*	27
		D001	27
INCINERATION	M041-M049	D003	158
		D001	77
		MOMX*	8
		F006	5
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	D001	343
		MOMX*	258
		F003	63
		D002	47
AQUEOUS INORGANIC TREATMENT	M071-M079	DOMX*	11,536
		MOMX*	2,136
		F001	4
		D001	1
OTHER TREATMENT	M121-M129	MOMX*	80,262
		F001	75
		D001	33
		F002	29
LANDFILL	M132	D002	128
		D003	49
		DOMX*	32
		D001	13
INVALID SYSTEM TYPE		D002	0
		F001	0
TOTAL			95,737

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARIZONA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989*

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	AZD009005422	HUGHES AIRCRAFT CO., U.S. AIR FORCE PLAN	TUCSON	94,801**
02	AZD980735500	WORLD RESOURCES COMPANY	PHOENIX	7,998
03	AZ9573124055	ARIZONA AIR NATIONAL GUARD	TUCSON	1,460
04	AZD089308803	SAFETY-KLEEN CORP.	PHOENIX	1,353
05	AZD009000050	ALLIED SIGNAL AEROSPACE CO. GARRETT ENGI	PHOENIX	1,309
06	AZD009004961	HONEYWELL, INC.	PHOENIX	1,125
07	AZD049318009	BUD'S OIL SERVICE, INC.	PHOENIX	1,077
08	AZD980818330	TELCO TECHNOLOGY, INC.	TEMPE	1,012
09	AZT000611426	CAPITOL COATINGS	CHANDLER	993
10	AZD980896310	CONTINENTAL CIRCUITS CORP.	PHOENIX	964
11	AZD000625715	GOULD INC.	CHANDLER	834
12	AZD063274609	CONTINENTAL CIRCUITS CORP.	PHOENIX	788
13	AZD009004177	MOTOROLA, INC.	PHOENIX	707
14	AZD043848050	MOTOROLA, INC.	MESA	458
15	AZT000623702	INTERNATIONAL BUSINESS MACHINES CORP.	TUCSON	449
16	AZD085453603	CAPITOL CASTINGS, INC.	TEMPE	428
17	AZ8170024493	MARINE CORPS AIR STATION, YUMA	YUMA	424
18	AZD981371628	CUSTOM CIRCUITS INC.	PHOENIX	418
19	AZD980892897	SAFETY-KLEEN CORP	TUCSON	391
20	AZD982041907	HEXCEL ADVANCED PRODUCTS DIVISION	CHANDLER	349
21	AZD981579634	QUALITY PRINTED CIRCUITS CORP.	PHOENIX	289
22	AZD042018689	ROGERS CORPORATION	CHANDLER	285
23	AZD104150024	PEABODY COAL CO. BLACK MESA & KAYENTA SU	BLACK MESA	230
24	AZT000624445	BULL HN INFORMATION SYSTEMS INC.	CHANDLER	219
25	AZT000623819	DIGITAL EQUIPMENT CORP.	TEMPE	215
26	AZD980881015	ADV. PRINTED CIRCUIT TECHNOLOGY II	TEMPE	206
27	AZ0570024133	LUKE AIR FORCE BASE	GLENDALE	193
28	AZD094527587	SFPP, L.P. (PHOENIX TERMINAL)	PHOENIX	191
29	AZT050010636	GILBERT ENGINEERING CO., INC.	GLENDALE	171
30	AZD058788845	SO.WEST.ALLOYS,INC./NAT'L AIRCRAFT, INC.	TUCSON	165
31	AZD008399636	MOTOROLA INC., GEG	SCOTTSDALE	163
32	AZT000624429	PALO VERDE NUCLEAR GENERATING STATION	WINTERSBURG	155
33	AZD008398505	CHEM RESEARCH CO.	PHOENIX	150
34	AZD074440470	QUALITY PRINTED CIRCUITS CORP.	PHOENIX	130
35	AZD018517698	ALLIED-SIGNAL AEROSPACE CO.	TEMPE	122
36	AZD980881163	MCDONNELL DOUGLAS HELICOPTER CO.	MESA	115
37	AZD003987997	HEXCEL CORPORATION	CASA GRANDE	114
38	AZD980818165	EVERGREEN AIR CENTER, INC.	MARANA	100
39	AZD982471062	TRW SAFETY SYSTEMS/MESA	MESA	96
40	AZD008394454	BURR-BROWN CORPORATION	TUSCON	92

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* This list does not include significant tonnage generated by Arizona Portland Cement (AZD008394397) and Miller Delinting (AZD981582273) because these two companies generated RCRA hazardous wastes that were managed in units exempt from RCRA permitting requirements.

** Of the total, 80,000 tons represents waste brines from IWTP and concentrated acid waste water.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARIZONA

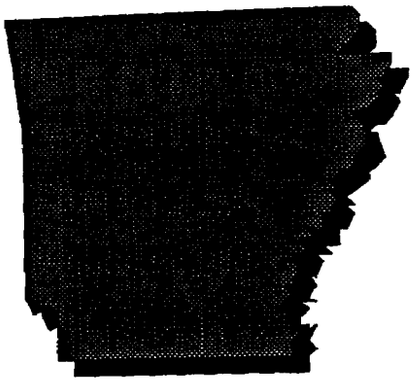
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

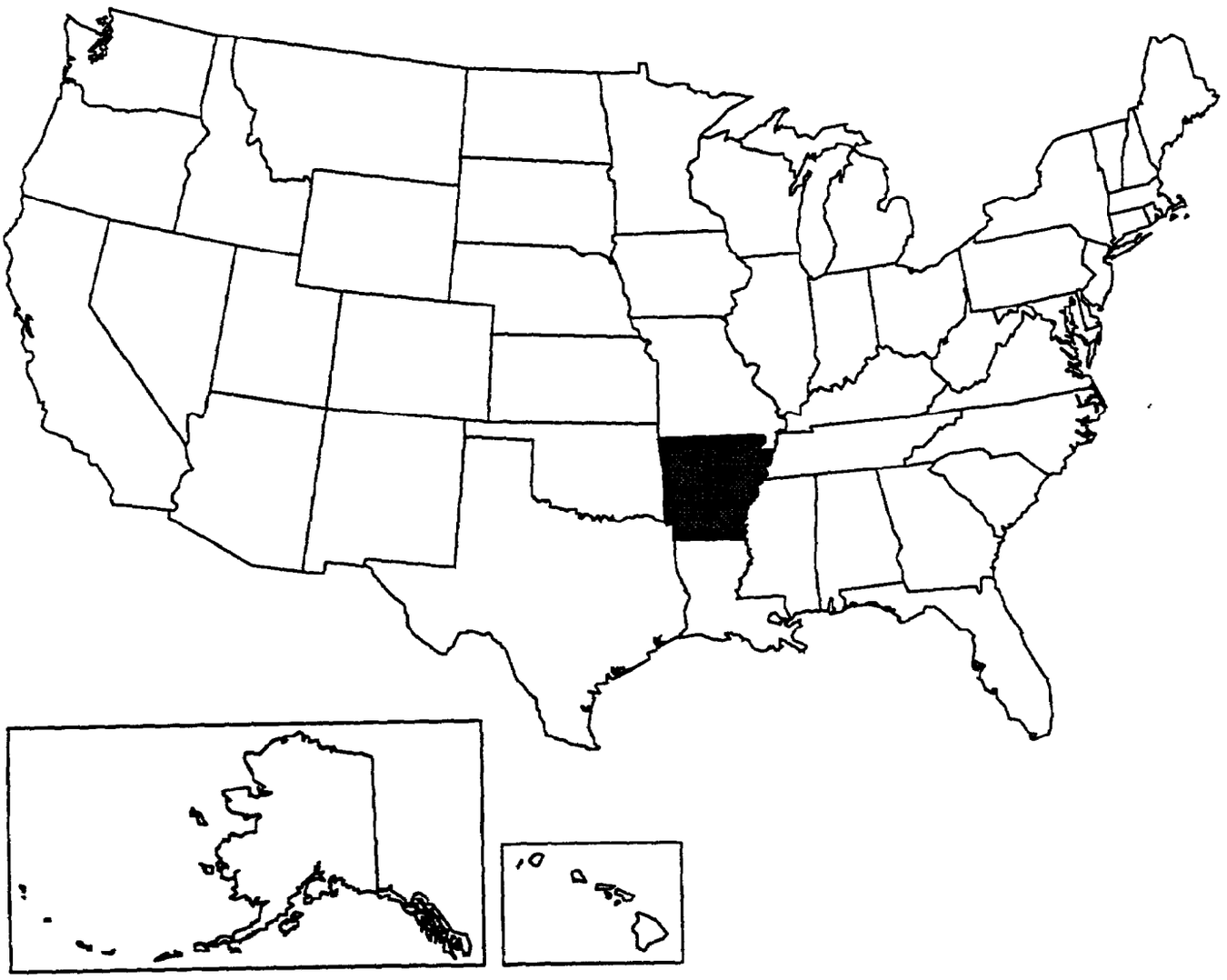
Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	AZD009005422 HUGHES AIRCRAFT CO., U.S. AIR FORCE PLAN, TUCSON					93
	OTHER TREATMENT	M121-M129	80,251	0	80,251	
	AQUEOUS INORGANIC TREATMENT	M071-M079	13,672	0	13,672	
2	AZD980892731 THE RINCHEM COMPANY, INC., PHOENIX					1
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3	795	798	
	LANDFILL	M132	2	260	262	
	OTHER TREATMENT	M121-M129	0	168	168	
	INCINERATION	M041-M049	2	107	110	
	SOLVENTS RECOVERY	M021-M029	0	73	73	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	6	6	
	INVALID SYSTEM TYPE		0	0	0	
3	AZD020132502 TALLEY DEFENSE SYSTEMS, INC.-BURN GROUND, MESA					
	INCINERATION	M041-M049	0	119	119	
4	AZD049318009 BUD'S OIL SERVICE, INC., PHOENIX					
	OTHER RECOVERY	M031-M039	82	0	82	
5	AZT000623702 INTERNATIONAL BUSINESS MACHINES CORP., TUCSON					
	OTHER RECOVERY	M031-M039	51	6	56	
6	AZD000819565 BEAN & COMPANY, PALO VERDE					
	OTHER TREATMENT	M121-M129	22	0	22	
	OTHER RECOVERY	M031-M039	17	0	17	
7	AZT050010685 ALLIED PRECIOUS METALS RECYCLING CO, INC., TUCSON					
	OTHER RECOVERY	M031-M039	1	35	37	
8	AZ4570024139 GILA BEND AFAF/LUKE AFB RANGE, LUKE AFB					
	INCINERATION	M041-M049	23	9	32	
9	AZ4572190029 DRMO LUKE AFB ANNEX, GLENDALE					
	OTHER RECOVERY	M031-M039	0	15	15	
10	AZ4570024055 DAVIS-MONTHAN AIR FORCE BASE, DAVIS-MONTHAN AFB					
	OTHER TREATMENT	M121-M129	12	0	12	
	INCINERATION	M041-M049	0	0	1	
11	AZD980814479 UNIVERSAL PROPULSION CO.,INC., PHOENIX					
	INCINERATION	M041-M049	5	0	5	
12	AZD000819615 UNIVERSITY OF ARIZONA, TUCSON					
	OTHER TREATMENT	M121-M129	1	0	1	

1 Excluding quantity managed by storage only.

Arkansas

Region VI





ARKANSAS

EPA Region Address:	U.S. EPA Region VI RCRA Programs Branch Mail Stop 6H-H 1445 Ross Avenue Dallas, TX 75202
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Department of Pollution Control and Ecology 8001 National Drive Post Office Box 9583 Little Rock, AR 72219-8913
Contact Name:	Ms. Vicky Prewett Program Coordinator
Phone:	(501) 570-2867

Notes: No special notes for Arkansas.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARKANSAS

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	51
Total Quantity of Regulated Waste Generated:	805,150 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	10
Facilities managing only waste generated off site	5
Facilities managing waste generated both on and off site	3
Total RCRA TSD Facilities (excluding storage-only facilities):	18
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	824,156 tons
Total RCRA TSD Facilities:	24

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	1	0	615	615	.1
OTHER RECOVERY	M031-M039	1	42	0	42	.0
INCINERATION	M041-M049	8	7,893	27,685	35,578	4.3
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2	4,311	55,428	59,739	7.2
FUEL BLENDING	M061	1	0	45,351	45,351	5.5
AQUEOUS INORGANIC TREATMENT	M071-M079	1	4	0	4	.0
OTHER TREATMENT	M121-M129	5	403	0	403	.0
LANDFILL	M132	1	188	0	188	.0
SURFACE IMPOUNDMENT	M133	1	675	0	675	.1
UNDERGROUND INJECTION	M134	2	681,490	0	681,490	82.7
OTHER DISPOSAL	M137	1	0	45	45	.0
INVALID SYSTEM TYPE		2	0	27	27	.0
TOTAL		18	695,005	129,151	824,156	100.0
PERCENTAGE		-	84.3 %	15.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARKANSAS

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	933
AZ	220
CA	3,526
CO	562
CT	936
DC	46
DE	139
FL	867
GA	1,528
IA	44
ID	25
IL	1,012
IN	4,548
KS	295
KY	1,148
LA	44,785
MA	1,651
MD	588
MI	22,480
MN	1,263
MO	2,145
MS	203
MT	34
NC	1,318
ND	8
NE	7
NH	8
NJ	615
NM	67
NV	7
NY	2,640
OH	3,039
OK	554
OR	67
PA	1,406
PR	38
RI	193
SC	549
SD	7
TN	2,329
TX	10,961
UT	514
VA	362
VT	25
WA	765
WI	400
WV	488
WY	7
TOTAL	115,352

Exports

State	Tons Shipped
AL	20,148
FC	1,136
FL	16
GA	12
IL	5,828
IN	710
KS	2,434
KY	388
LA	32,684
MI	1
MO	1,983
MS	171
NE	674
NJ	3,223
OK	16,068
PA	2
TN	1,288
TX	12,124
WI	53
WV	68
TOTAL	99,014

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARKANSAS

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	K118	647,793	80.5
2	DOMX*	46,452	5.8
3	D002	39,984	5.0
4	K061	19,763	2.5
5	MOMX*	18,892	2.3
6	D001	13,705	1.7
7	FOMX*	10,867	1.3
8	KOMX*	1,128	.1
9	F006	1,048	.1
10	D007	892	.1
11	K062	710	.1
12	D015	687	.1
13	P071	683	.1
14	D003	524	.1
15	F005	488	.1
16	K001	416	.1
17	F003	323	.0
18	U113	270	.0
19	D008	210	.0
20	F002	123	.0
21	F001	76	.0
22	U162	61	.0
23	K046	27	.0
24	UOMX*	11	.0
25	U244	6	.0
26	U190	5	.0
27	F007	2	.0
28	U220	2	.0
29	U067	1	.0
30	U147	0	.0
31	D009	0	.0
32	K044	0	.0
33	U103	0	.0
34	U188	0	.0
35	U037	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARKANSAS

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F002	341
		F001	123
		MOMX*	91
		FOMX*	54
OTHER RECOVERY	M031-M039	D001	42
INCINERATION	M041-M049	FOMX*	11,143
		D001	5,986
		MOMX*	5,751
		F002	2,072
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	MOMX*	46,691
		FOMX*	12,008
		F003	453
		D001	345
FUEL BLENDING	M061	MOMX*	36,275
		D001	3,208
		FOMX*	2,228
		DOMX*	1,270
AQUEOUS INORGANIC TREATMENT	M071-M079	D003	4
OTHER TREATMENT	M121-M129	DOMX*	205
		D003	178
		MOMX*	10
		D002	8
LANDFILL	M132	D002	182
		DOMX*	5
SURFACE IMPOUNDMENT	M133	DOMX*	675
UNDERGROUND INJECTION	M134	K118	645,935
		D002	35,555
OTHER DISPOSAL	M137	D003	45
		D001	0
INVALID SYSTEM TYPE		D001	14
		FOMX*	6
		DOMX*	5
		D006	2
TOTAL			824,156

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARKANSAS

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	ARD043195429	GREAT LAKES CHEMICAL CORPORATION	EL DORADO	653,539
02	ARD069748192	ENSCO INC	EL DORADO	41,600
03	ARD052528809	ETHYL CORPORATION	MAGNOLIA	35,999
04	ARD981057870	RINECO CHEMICAL INDUSTRIES	BENTON	15,163
05	ARD981908890	NUCOR YAMATO STEEL COMPANY	BARFIELD	13,125
06	ARD089234884	ARKANSAS EASTMAN COMPANY	BATESVILLE	11,159
07	ARD990660649	CEDAR CHEMICAL CORPORATION	WEST HELENA	9,285
08	ARD053730701	QUANEX CORPORATION MACSTEEL DIV	FT SMITH	5,692
09	AR0213820707	PINE BLUFF ARSENAL	PINE BLUFF	4,956
10	ARD089232508	TERRA INTERNATIONAL INC	PINE BLUFF	2,859
11	ARD000021998	LION OIL COMPANY	EL DORADO	1,148
12	ARD091691261	ARKANSAS STEEL ASSOCIATES	NEWPORT	954
13	ARD071253819	AEROQUIP CORPORATION AIR COND & REF DIV	HEBER SPRINGS	813
14	ARD093404143	CENTURY TUBE CORPORATION	PINE BLUFF	751
15	ARD030414494	HELENA CHEMICAL COMPANY	WEST HELENA	689
16	ARP060023944	FARMERS SUPPLY ASSN	HARRISBURG	687
17	ARD000604959	LTV AEROSPACE AND DEFENSE GROUP	E CAMDEN	631
18	ARD091691311	ARISTECH CHEMICAL CORPORATION	JACKSONVILLE	603
19	ARD067671313	WEYERHAEUSER COMPANY	DEQUEEN	419
20	ARD042755389	WHIRLPOOL CORPORATION	FT SMITH	378
21	ARD035500818	SOUTHERN STEEL AND WIRE COMPANY	FT SMITH	378
22	ARD139607048	CYRO INDUSTRIES	OSCEOLA	336
23	ARD982558561	ETHYL CORPORATION	MAGNOLIA	305
24	ARD007240716	AMERON ENMAR FINISHES DIVISION	LITTLE ROCK	303
25	ARP060024919	RISON DERAILMENT	RISON	270
26	ARD075673079	BEKAERT CORPORATION	VAN BUREN	268
27	ARD982558595	ARKANSAS GALVANIZING INC	PRAIRIE GROVE	259
28	ARD005935986	BAXTER HEALTHCARE CORPORATION	MOUNTAIN HOME	258
29	ARD981055494	GRIFFING RAILWAY REPAIR COMPANY	EL DORADO	246
30	ARD091688283	ATLANTIC RESEARCH CORPORATION	E CAMDEN	241
31	ARD006344972	HEEKIN CAN INC	SPRINGDALE	240
32	ARD047335922	REMINGTON ARMS CO INC	LONOKE	229
33	ARD008049298	AMERICAN FUEL CELL AND COATED FABRIC	MAGNOLIA	199
34	ARD058698937	RINGIER AMERICA INC	JONESBORO	197
35	ARD059637710	VIRCO MANUFACTURING CORPORATION	CONWAY	196
36	ARD082577602	GRACE MANUFACTURING INC	RUSSELLVILLE	186
37	ARD982549479	ROHR INDUSTRIES INC	HEBER SPRINGS	158
38	ARD000022186	GREAT LAKES CHEMICAL CORP SOUTH PLANT	EL DORADO	156
39	ARD000388983	STERLING FAUCET COMPANY	SHERIDAN	145
40	ARD006341119	AT&T LITTLE ROCK WORKS	LITTLE ROCK	64

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ARKANSAS

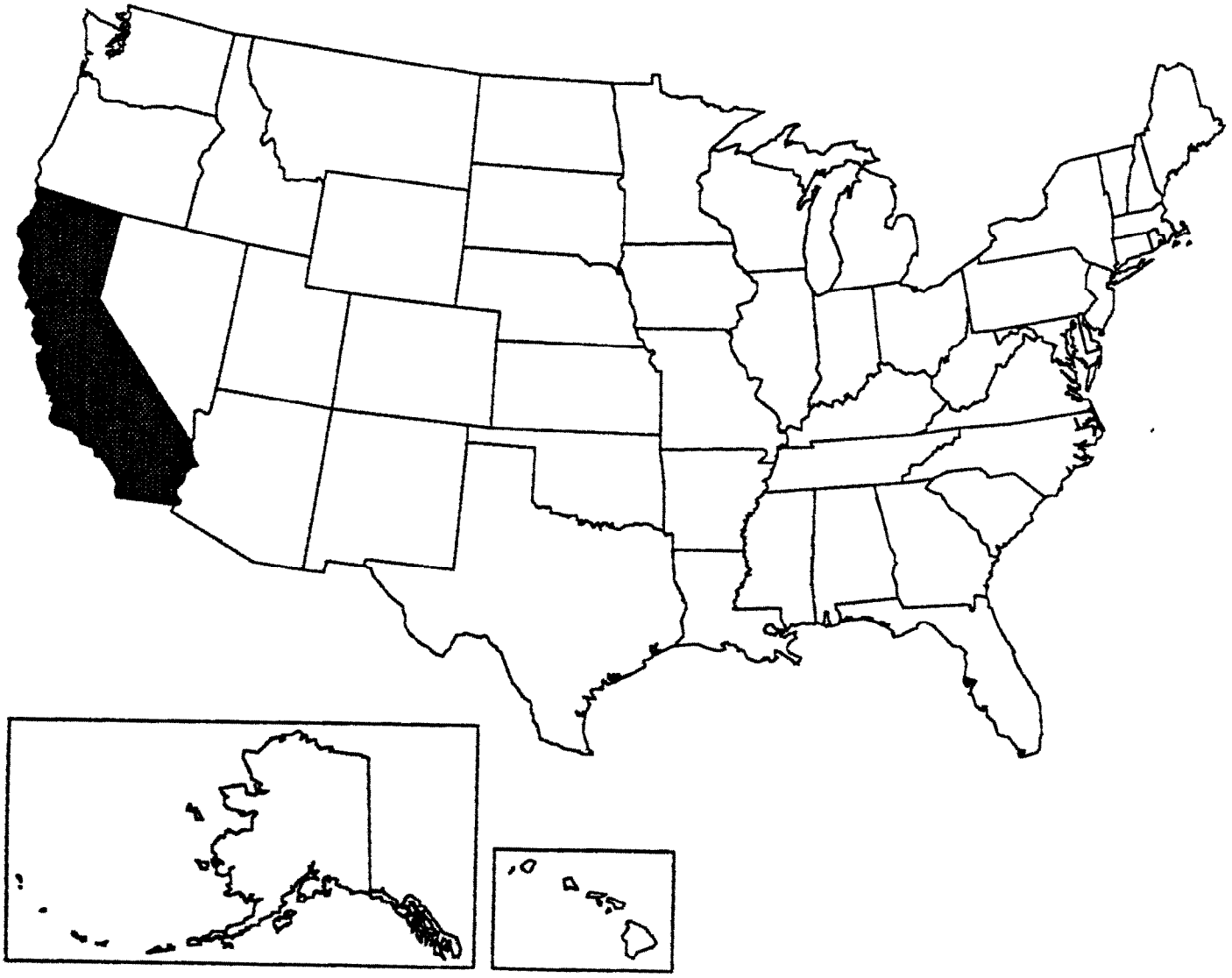
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	To Manag
1	ARD043195429 GREAT LAKES CHEMICAL CORPORATION, EL DORADO					651
	UNDERGROUND INJECTION	M134	651,360	0	651,360	
2	ARD981512270 ASH GROVE CEMENT COMPANY, FOREMAN					55
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	55,217	55,218	
3	ARD981057870 RINECO CHEMICAL INDUSTRIES, BENTON					45
	FUEL BLENDING	M061	0	45,351	45,351	
	SOLVENTS RECOVERY	M021-M029	0	615	615	
	INVALID SYSTEM TYPE		0	24	24	
4	ARD052528809 ETHYL CORPORATION, MAGNOLIA					30
	UNDERGROUND INJECTION	M134	30,130	0	30,130	
5	ARD069748192 ENSCO INC., EL DORADO					27
	INCINERATION	M041-M049	0	27,676	27,676	
6	ARD089234884 ARKANSAS EASTMAN COMPANY, BATESVILLE					11
	INCINERATION	M041-M049	6,685	0	6,685	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	4,311	210	4,521	
7	AR0213820707 PINE BLUFF ARSENAL, PINE BLUFF					1
	SURFACE IMPOUNDMENT	M133	675	0	675	
	OTHER TREATMENT	M121-M129	376	0	376	
	INCINERATION	M041-M049	359	0	359	
	LANDFILL	M132	188	0	188	
	OTHER RECOVERY	M031-M039	42	0	42	
	AQUEOUS INORGANIC TREATMENT	M071-M079	4	0	4	
8	ARD091691311 ARISTECH CHEMICAL CORPORATION, JACKSONVILLE					
	INCINERATION	M041-M049	597	0	597	
9	ARD091688283 ATLANTIC RESEARCH CORPORATION, E CAMDEN					
	INCINERATION	M041-M049	235	0	235	
10	ARD980621155 LTV AEROSPACE & DEFENSE MISSILES, EAST CAMDEN					
	OTHER DISPOSAL	M137	0	45	45	
11	ARD000022186 GREAT LAKES CHEMICAL CORP SOUTH PLANT, EL DORADO					
	OTHER TREATMENT	M121-M129	20	0	20	
12	ARD047335922 REMINGTON ARMS CO INC., LONOKE					
	INCINERATION	M041-M049	13	0	13	
13	ARD980867873 TRACOR AEROSPACE, EAST CAMDEN					
	INCINERATION	M041-M049	0	8	8	
14	AR6140090006 US EPA INCINERATION RESEARCH FACILITY, JEFFERSON					
	INCINERATION	M041-M049	4	2	6	
15	ARD093417525 AUSTIN POWDER COMPANY, E CAMDEN					
	OTHER TREATMENT	M121-M129	6	0	6	
16	ARD054575238 SAFETY KLEEN CORP 608601, LITTLE ROCK					
	INVALID SYSTEM TYPE		0	2	2	
17	AR9210020187 USAG FORT CHAFFEE, FT SMITH					
	OTHER TREATMENT	M121-M129	1	0	1	
18	AR8571924473 EAKER AIR FORCE BASE, BLYTHEVILLE					
	OTHER TREATMENT	M121-M129	0	0	0	

1 Excluding quantity managed by storage only.

California

Region IX



CALIFORNIA

EPA Region Address:	U.S. EPA Region IX RCRA Branch Mail Stop H-31 1235 Mission Street San Francisco, CA 94103
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Department of Health Services Toxic Substances Control Program 400 P Street Post Office Box 806 Sacramento, CA 95812-0806
Contact Name:	Mr. Tim Beckwith Chief, Manifest Unit
Phone:	(916) 323-6558

Notes: CBI data have been included in Tables 1, 2, and 3; CBI data are not included in Table 4; CBI data are excluded from Tables 5 and 6 to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

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Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	2,387
Total Quantity of Regulated Waste Generated:	4,670,579 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	69
Facilities managing only waste generated off site	24
Facilities managing waste generated both on and off site	13
Total RCRA TSD Facilities (excluding storage-only facilities):	106
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	4,978,478 tons
Total RCRA TSD Facilities:	357

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	15	2,691	154,225	156,916	3.2
SOLVENTS RECOVERY	M021-M029	18	17,808	28,999	46,807	.9
OTHER RECOVERY	M031-M039	8	17,676	72,218	89,894	1.8
INCINERATION	M041-M049	15	54,833	2,813	57,646	1.2
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	4	1,253	30,082	31,335	.6
FUEL BLENDING	M061	3	1,962	31,997	33,959	.7
AQUEOUS INORGANIC TREATMENT	M071-M079	46	2,006,767	35,946	2,042,713	41.0
AQUEOUS ORGANIC TREATMENT	M081-M089	2	39,511	0	39,511	.8
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	5	8,876	10,677	19,553	.4
SLUDGE TREATMENT	M101-M109	10	43,878	0	43,878	.9
STABILIZATION	M111-M119	4	0	14,363	14,363	.3
OTHER TREATMENT	M121-M129	25	1,696,164	555,730	2,251,894	45.2
LANDFILL	M132	5	10	149,101	149,111	3.0
SURFACE IMPOUNDMENT	M133	1	0	0	0	.0
UNDERGROUND INJECTION	M134	1	0	70	70	.0
OTHER DISPOSAL	M137	6	819	8	826	.0
INVALID SYSTEM TYPE		1	0	0	0	.0
TOTAL		106	3,892,249	1,086,229	4,978,478	100.0
PERCENTAGE		-	78.2 %	21.8 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
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TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AR	465
AZ	11,528
CO	554
FC	475
GA	5
GU	3
HI	351
IA	34
ID	661
IL	190
LA	10
MA	3
MI	8
MN	241
MO	0
MT	30
NJ	47
NM	968
NV	2,889
NY	0
OH	9
OR	2,357
PA	1
RI	2
TX	140
UT	1,722
VA	561
WA	5,134
WI	167
TOTAL	28,556

Exports

State	Tons Shipped
AK	0
AL	233
AR	3,691
AZ	16,685
CO	60
CT	69,040
FC	627
FL	6,951
GA	35
ID	9,523
IL	1,576
IN	469
KS	15,369
KY	86
LA	3,806
MI	27
MN	232
MO	310
MS	14
MT	0
NC	211
NE	264
NJ	1,659
NV	9,154
NY	15
OH	278
OK	653
OR	269
PA	143
RI	43
SC	6
TN	649
TX	28,089
UT	31,274
VT	4
WA	3,442
WI	5
WY	6
TOTAL	204,896

National Biennial RCRA Hazardous Waste Report
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CALIFORNIA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D002	2,536,639	54.3
2	F006	641,239	13.7
3	D001	473,154	10.1
4	DOMX*	307,025	6.6
5	MOMX*	130,809	2.8
6	D008	71,655	1.5
7	D004	64,650	1.4
8	F002	56,794	1.2
9	D007	53,676	1.1
10	FOMX*	50,244	1.1
11	UOMX*	42,418	0.9
12	K051	40,617	0.9
13	K062	40,126	0.9
14	F007	34,904	0.7
15	F003	23,496	0.5
16	F009	22,203	0.5
17	K048	20,498	0.4
18	D011	16,232	0.3
19	D003	13,135	0.3
20	F001	11,449	0.2
21	K049	6,542	0.1
22	KOMX*	4,207	<0.05
23	F005	1,819	<0.05
24	F019	1,075	<0.05
25	U223	852	<0.05
26	D006	821	<0.05
27	D005	794	<0.05
28	K050	467	<0.05
29	D010	435	<0.05
30	D009	430	<0.05
31	POMX*	383	<0.05
32	U122	179	<0.05
33	U051	162	<0.05
34	K001	149	<0.05
35	P048	143	<0.05
36	U188	138	<0.05
37	P030	135	<0.05
38	P044	132	<0.05
39	U151	70	<0.05
40	F024	68	<0.05

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CALIFORNIA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D0MX*	146,554
		D008	7,325
		M0MX*	2,055
		D007	521
SOLVENTS RECOVERY	M021-M029	D001	13,595
		F003	5,000
		M0MX*	4,425
		F0MX*	580
OTHER RECOVERY	M031-M039	D001	68,939
		K048	8,147
		K062	7,072
		K051	1,950
INCINERATION	M041-M049	F002	37,159
		M0MX*	8,681
		D0MX*	3,531
		D001	2,716
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	M0MX*	19,156
		D001	3,514
		F0MX*	3,127
		F002	2,620
FUEL BLENDING	M061	M0MX*	1,972
		D001	15
		F003	10
		F001	9
AQUEOUS INORGANIC TREATMENT	M071-M079	D002	835,729
		F006	484,273
		D001	385,044
		D0MX*	155,396
AQUEOUS ORGANIC TREATMENT	M081-M089	U0MX*	39,501
		K047	10
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	F0MX*	5,910
		D001	4,985
		D002	4,279
		F002	3,191
SLUDGE TREATMENT	M101-M109	K051	25,382
		K048	10,590
		M0MX*	5,604
		D007	1,825
STABILIZATION	M111-M119	D007	790
		D001	312
		D008	59
		D002	38

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

Note: CBI data are not included in this table.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CALIFORNIA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989
(continued)

Management Method	Code	Waste Type	Quantity Managed in State (tons)
OTHER TREATMENT	M121-M129	D002	2,101,283
		D004	126,004
		K051	12,000
		K049	6,000
LANDFILL	M132	D008	1,256
		D001	865
		D002	34
		F019	10
OTHER DISPOSAL	M137	D001	813
		D002	11
		DOMX*	2
		D003	0
INVALID SYSTEM TYPE		MOMX*	0
TOTAL			4,759,090

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

Note: CBI data are not included in this table.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CALIFORNIA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	CAD041472986	NATIONAL SEMICONDUCTOR CORP	SANTA CLARA	1,510,095
02	CAD097030993	NORRIS INDUSTRIES INC	VERNON	695,656
03	CA7210020759	RIVERBANK ARMY AMMUNITION PLANT	RIVERBANK	385,307
04	CAD097578082	MASCO CORP	HUNTINGTON BEACH	262,982
05	CAD009686874	WESLOCK CO.	LOS ANGELES	126,796
06	CAD053049490	RHONE-POULENC BASIC CHEMICALS CO	MARTINEZ	126,551
07	CAD009438300	VARIAN ASSN/EIMAC DIV SAN CARLOS	SAN CARLOS	109,409
08	CAD009630708	DEUTSCH ENGINEERED CONNECTING DEVICES	OCEANSIDE	107,491
09	CAD008357295	HIXSON METAL FINISHING INC	NEWPORT BEACH	70,400
10	CAD073604340	BLACK OXIDE INDUSTRIES INC	ANAHEIM	69,000
11	CAD008271090	PALACE PLATING	LOS ANGELES	65,064
12	CAD095984167	QUALITY TECHNOLOGIES	PALO ALTO	63,020
13	CAD009120817	VARIAN ASSOCIATES INC	PALO ALTO	50,884
14	CAD043237486	CHEVRON CHEMICAL CO	RICHMOND	49,324
15	CAD001705235	CHEMICAL SYSTEMS DIVISION	SAN JOSE	39,839
16	CAD980887517	NASHUA COMPUTER PRODUCTS CORP.	SANTA CLARA	39,817
17	CAD008488025	SOUTHERN CALIFORNIA CHEM/DIV OF C	SANTA FE SPRINGS	38,471
18	CAD009150194	USS-POSCO INDUSTRIES	PITTSBURG	36,709
19	CAT080011695	PG&E PITTSBURG POWER PLANT	PITTSBURG	35,979
20	CAD009212929	STOCKTON PLATING INC.	STOCKTON	35,480
21	CAT080014103	VALLEY-TODECO CO	SYLMAR	33,789
22	CAD071557029	GRASS VALLEY GROUP INC, THE	GRASS VALLEY	31,495
23	CAD050125053	CALIFORNIA ELECTROPLATING	LOS ANGELES	31,042
24	CAD009114919	CHEVRON USA INC-RICHMOND REFINERY	RICHMOND	28,403
25	CAD981391055	SOLDER STATION ONE	SANTA ANA	27,558
26	CAD981412604	AVALON GLASS & MIRROR	CARSON	23,429
27	CAD076306836	GTE GOVT SYSTEMS CORP/ELECT. DEF. SYSTEM	MOUNTAIN VIEW	22,623
28	CAD066676123	SHELL OIL CO/WILMINGTON MFG COMPLEX	CARSON	20,904
29	CAD008517005	AL'S PLATING CO. INC.	LOS ANGELES,	20,386
30	CAD008336901	CHEVRON USA INC-EL SEGUNDO REFINERY	EL SEGUNDO	19,103
31	CAD008354052	MOBIL OIL CORPORATION	TORRANCE	17,849
32	CAD042245001	OMEGA RECOVERY SERVICE	WHITTIER	16,989
33	CAD097854541	GNB INCORPORATED/GOULD INC. METALS	LOS ANGELES	16,559
34	CAD980896369	GLOBAL PLATING INC	FREMONT	15,671
35	CAD008382475	TELEDYNE RYAN AERONAUTICALCO	SAN DIEGO	15,164
36	CAD982468282	MEKTEC CORPORATION INC	MILPITAS	14,548
37	CAD009164021	SHELL OIL CO/MARTINEZ MFG COMPLEX	MARTINEZ	13,749
38	CAD000030494	US AEROJET RCRA FACILITY	RANCHO CORDOVA	12,730
39	CAD059494310	SOLVENT SERVICE INC	SAN JOSE	11,502
40	CAD063564132	SCOTTS VALLEY CIRCUITS	SCOTTS VALLEY	10,732

Note: CBI data are not included in this table to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CALIFORNIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

ank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
1	CAD041472986 NATIONAL SEMICONDUCTOR CORP., SANTA CLARA					1,509,271
	OTHER TREATMENT	M121-M129	1,483,686	0	1,483,686	
	AQUEOUS INORGANIC TREATMENT	M071-M079	25,586	0	25,586	
2	CAD097030993 NORRIS INDUSTRIES INC., VERNON					693,661
	AQUEOUS INORGANIC TREATMENT	M071-M079	693,661	0	693,661	
3	CAD008274938 KAISER STEEL RESOURCES INC., FONTANA					546,289
	OTHER TREATMENT	M121-M129	0	546,289	546,289	
4	CA7210020759 RIVERBANK ARMY AMMUNITION PLANT, RIVERBANK					385,260
	AQUEOUS INORGANIC TREATMENT	M071-M079	385,260	0	385,260	
5	CAD097578082 MASCO CORP., HUNTINGTON BEACH					262,719
	AQUEOUS INORGANIC TREATMENT	M071-M079	262,719	0	262,719	
6	CAD097854541 GNB INCORPORATED/GOULD INC. METALS, LOS ANGELES					153,642
	METALS RECOVERY (FOR REUSE)	M011-M019	0	153,642	153,642	
7	CAD009686874 WESLOCK CO., LOS ANGELES					126,551
	AQUEOUS INORGANIC TREATMENT	M071-M079	126,551	0	126,551	
8	CAD095984167 QUALITY TECHNOLOGIES, PALO ALTO					126,004
	OTHER TREATMENT	M121-M129	126,004	0	126,004	
9	CAD009438300 VARIAN ASSN/EIMAC DIV SAN CARLOS, SAN CARLOS					109,317
	AQUEOUS INORGANIC TREATMENT	M071-M079	109,317	0	109,317	
10	CAD009630708 DEUTSCH ENGINEERED CONNECTING DEVICES, OCEANSIDE					107,311
	AQUEOUS INORGANIC TREATMENT	M071-M079	106,158	0	106,158	
	OTHER TREATMENT	M121-M129	1,145	0	1,145	
	SOLVENTS RECOVERY	M021-M029	7	0	7	
11	CAD008488025 SOUTHERN CALIFORNIA CHEM/DIV OF C, SANTA FE SPRINGS					63,235
	AQUEOUS INORGANIC TREATMENT	M071-M079	38,449	23,525	61,974	
	OTHER TREATMENT	M121-M129	0	1,262	1,262	
12	CAT080011059 PETROLEUM RECYCLING CORPORATION, SIGNAL HILL					61,365
	OTHER RECOVERY	M031-M039	0	61,365	61,365	
13	CAD009120817 VARIAN ASSOCIATES INC., PALO ALTO					50,714
	AQUEOUS INORGANIC TREATMENT	M071-M079	37,475	0	37,475	
	OTHER TREATMENT	M121-M129	13,239	0	13,239	
14	CAD043237486 CHEVRON CHEMICAL CO., RICHMOND					47,684
	INCINERATION	M041-M049	47,684	0	47,684	
15	CAD980887517 NASHUA COMPUTER PRODUCTS CORP., SANTA CLARA					39,700
	AQUEOUS INORGANIC TREATMENT	M071-M079	39,700	0	39,700	
16	CAD001705235 CHEMICAL SYSTEMS DIVISION, SAN JOSE					39,501
	AQUEOUS ORGANIC TREATMENT	M081-M089	39,501	0	39,501	
17	CAT080011695 PG&E PITTSBURG POWER PLANT, PITTSBURG					35,934
	OTHER TREATMENT	M121-M129	35,934	0	35,934	
18	CAD009212929 STOCKTON PLATING INC., STOCKTON					35,437
	AQUEOUS INORGANIC TREATMENT	M071-M079	35,437	0	35,437	
19	CAD071557029 GRASS VALLEY GROUP INC, THE, GRASS VALLEY					31,461
	AQUEOUS INORGANIC TREATMENT	M071-M079	31,377	0	31,377	
	SLUDGE TREATMENT	M101-M109	77	0	77	
	SOLVENTS RECOVERY	M021-M029	0	5	5	
	INCINERATION	M041-M049	0	1	1	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	0	0	
20	CAD050125053 CALIFORNIA ELECTROPLATING, LOS ANGELES					30,517
	AQUEOUS INORGANIC TREATMENT	M071-M079	30,517	0	30,517	
21	CAT080031628 NATL CEMENT CO OF CA/SYSTECH ENV, LEBEC					29,985
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	29,985	29,985	

xcluding quantity managed by storage only.

ote: CBI data are not included in this table to preserve confidentiality.

CALIFORNIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

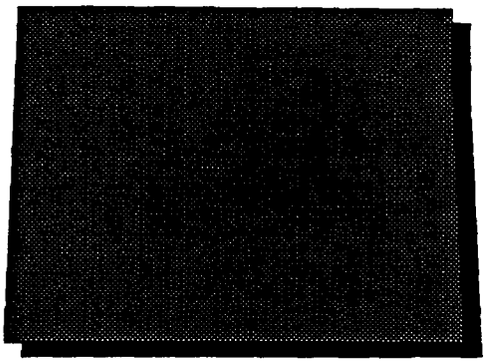
Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Manage
21	CAT080031628 NATL CEMENT CO OF CA/SYSTECH ENV, LEBEC					29,9
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	29,985	29,985	
22	CAD009114919 CHEVRON USA INC-RICHMOND REFINERY, RICHMOND					25,1
	SLUDGE TREATMENT	M101-M109	25,130	0	25,130	
23	CAD076306836 GTE GOVT SYSTEMS CORP/ELECT. DEF. SYSTEM, MOUNTAIN VIEW					22,6
	OTHER TREATMENT	M121-M129	11,907	0	11,907	
	AQUEOUS INORGANIC TREATMENT	M071-M079	10,701	0	10,701	
	SLUDGE TREATMENT	M101-M109	2	0	2	
24	CAD008517005 AL'S PLATING CO. INC. LOS ANGELES,					20,35
	AQUEOUS INORGANIC TREATMENT	M071-M079	20,350	0	20,350	
25	CAD008336901 CHEVRON USA INC-EL SEGUNDO REFINERY EL SEGUNDO					18,01
	OTHER TREATMENT	M121-M129	18,015	0	18,015	
26	CAD066676123 SHELL OIL CO/WILMINGTON MFG COMPLEX CARSON					17,64
	OTHER RECOVERY	M031-M039	17,647	0	17,647	
27	CAD042245001 OMEGA RECOVERY SERVICE WHITTIER					16,98
	SOLVENTS RECOVERY	M021-M029	16,989	0	16,989	
28	CAD982468282 MEKTEC CORPORATION INC MILPITAS					14,50
	AQUEOUS INORGANIC TREATMENT	M071-M079	14,504	0	14,504	
29	CAD009164021 SHELL OIL CO/MARTINEZ MFG COMPLEX MARTINEZ					13,0
	SLUDGE TREATMENT	M101-M109	12,667	0	12,667	
	INCINERATION	M041-M049	406	0	406	
30	CAD000030494 US AEROJET RCRA FACILITY RANCHO CORDOVA					11,5
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	8,873	0	8,873	
	OTHER TREATMENT	M121-M129	2,645	0	2,645	
	OTHER DISPOSAL	M137	2	0	2	
31	CAT080010101 APPROPRIATE TECHNOLOGIES II CHULA VISTA					11,1
	OTHER TREATMENT	M121-M129	0	6,092	6,092	
	AQUEOUS INORGANIC TREATMENT	M071-M079	2,632	2,449	5,081	
32	CAD063564132 SCOTTS VALLEY CIRCUITS, SCOTTS VALLEY					10,
	AQUEOUS INORGANIC TREATMENT	M071-M079	10,650	0	10,650	
33	CAD009645268 ANCO METAL IMPROVEMENT CO. INC., GARDENA					8,
	AQUEOUS INORGANIC TREATMENT	M071-M079	8,437	0	8,437	
34	CAD048645444 BECKMAN INSTRUMENTS INC., PORTERVILLE					8,
	AQUEOUS INORGANIC TREATMENT	M071-M079	8,267	0	8,267	
35	CAT080033681 CHEM-TECH SYSTEMS INC., VERNON					7,
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	6,436	6,436	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	1,499	1,499	
	STABILIZATION	M111-M119	0	11	11	
36	CAD040520975 CHEMWEST INDUSTRIES INC., FONTANA					7,
	OTHER RECOVERY	M031-M039	0	7,072	7,072	
37	CAD981160948 CP INORGANICS INC., UNION CITY					5,
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	5,898	5,898	
38	CAD980880959 NORTHROP CORP (AIRCRAFT DIV), HAWTHORNE					5,
	OTHER TREATMENT	M121-M129	0	1,722	1,722	
	LANDFILL	M132	0	899	899	
	STABILIZATION	M111-M119	0	814	814	
	SOLVENTS RECOVERY	M021-M029	0	755	755	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	675	675	
	INCINERATION	M041-M049	0	545	545	
	OTHER RECOVERY	M031-M039	0	32	32	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	10	10	
39	CA3170024381 NAVAL AIR STATION LEMORE CA, LEMOORE					5
	SLUDGE TREATMENT	M101-M109	5,412	0	5,412	
40	CAD070215355 DAVIS CHEMICAL CO., LOS ANGELES					5
	SOLVENTS RECOVERY	M021-M029	0	5,000	5,000	

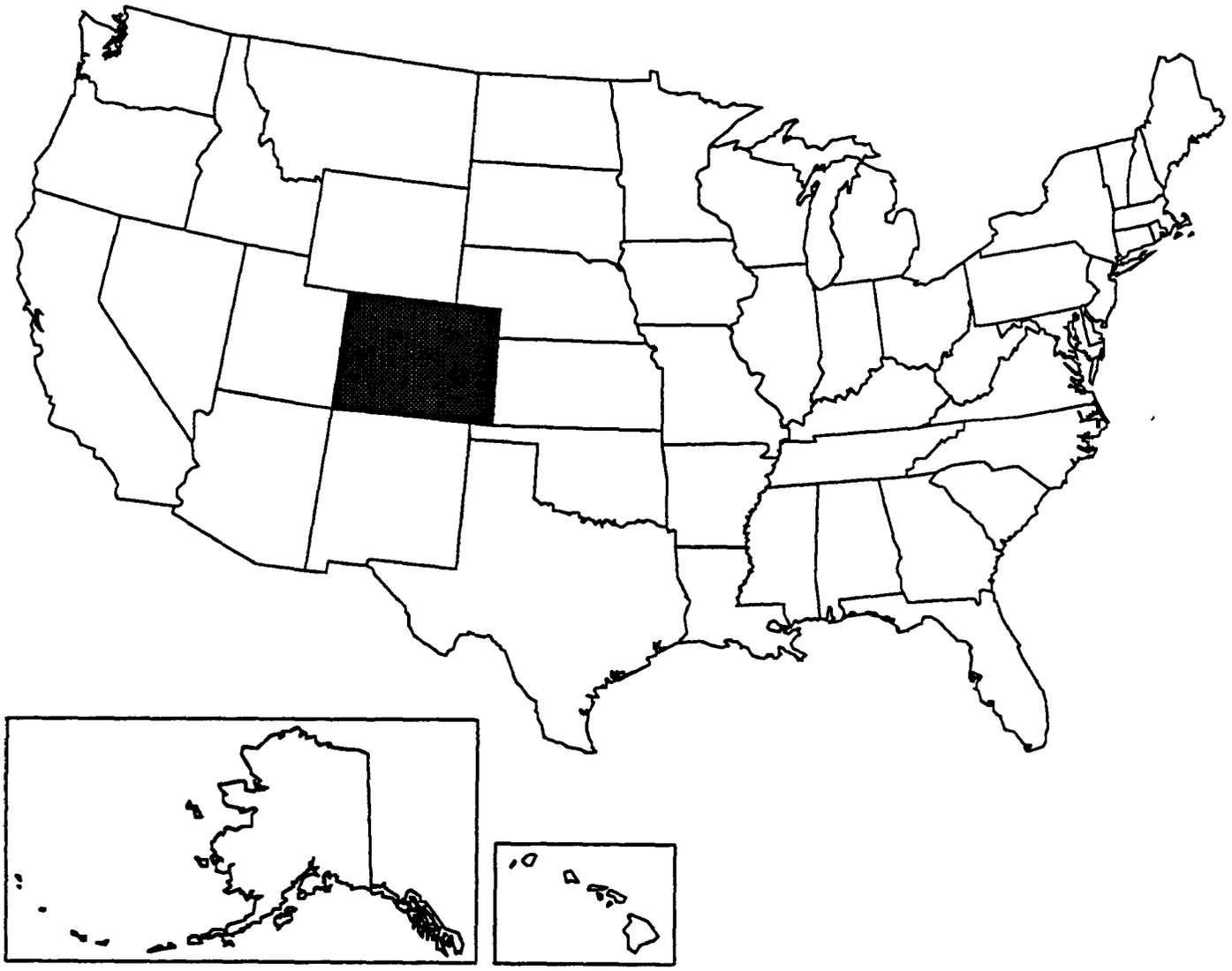
1 Quantity managed by storage only is not included.

Note: CBI data are not included in this table to preserve confidentiality.

Colorado

Region VIII





COLORADO

EPA Region Address:	U.S. EPA Region VIII Hazardous Waste Management Division Mail Stop HWM-RI 999 18th Street, Suite 500 Denver, CO 80202
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Materials and Waste Management Colorado Department of Health 4210 East 11th Avenue, Room 351 Denver, CO 80220
Contact Name:	Ms. Mira Neumiller Information Specialist
Phone:	(303) 331-4805

Notes: No special notes for Colorado.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

COLORADO

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	131
Total Quantity of Regulated Waste Generated:	117,347 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	6
Facilities managing only waste generated off site	3
Facilities managing waste generated both on and off site	1
Total RCRA TSD Facilities (excluding storage-only facilities):	10
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	81,292 tons
Total RCRA TSD Facilities:	59

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
OTHER RECOVERY	M031-M039	1	1,649	0	1,649	2.0
INCINERATION	M041-M049	1	111	0	111	.1
FUEL BLENDING	M061	2	0	2,810	2,810	3.5
AQUEOUS INORGANIC TREATMENT	M071-M079	2	13,227	0	13,227	16.3
STABILIZATION	M111-M119	1	36	0	36	.0
OTHER TREATMENT	M121-M129	3	63,201	9	63,210	77.8
LANDFILL	M132	1	213	0	213	.3
OTHER DISPOSAL	M137	1	36	0	36	.0
TOTAL		10	78,473	2,818	81,292	100.0
PERCENTAGE		-	96.5 %	3.5 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

COLORADO

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AZ	14
CA	18
DC	4
ID	442
IL	0
MD	23
MT	44
NE	65
NM	404
NV	1
OK	3
OR	25
PA	3
SD	1
TX	1
UT	911
VA	1
WA	6
WY	18
TOTAL	1,984

Exports

State	Tons Shipped
AL	164
AR	1,099
AZ	403
CA	738
FL	2
IA	0
ID	1,445
IL	6,887
IN	3
KS	1,385
KY	4
LA	513
MN	20
MO	108
NC	33
NE	13
NV	2,698
NY	476
OH	242
OK	1,311
OR	43
PA	7,330
SC	76
TN	55
TX	5,082
UT	2,909
WA	3
TOTAL	33,044

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

COLORADO

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MOMX*	73,829	62.9
2	K061	13,664	11.6
3	FOMX*	11,726	10.0
4	D003	5,394	4.6
5	D002	2,562	2.2
6	DOMX*	1,651	1.4
7	K062	1,649	1.4
8	F002	1,343	1.1
9	D001	1,048	.9
10	F003	593	.5
11	D007	583	.5
12	F006	529	.5
13	F019	522	.4
14	K051	493	.4
15	D004	421	.4
16	F001	364	.3
17	U051	325	.3
18	F005	166	.1
19	D011	123	.1
20	K049	119	.1
21	D008	103	.1
22	UOMX*	32	.0
23	K050	32	.0
24	D009	20	.0
25	K052	16	.0
26	K044	15	.0
27	D006	6	.0
28	POMX*	5	.0
29	U103	5	.0
30	F007	2	.0
31	P001	1	.0
32	F008	1	.0
33	U223	1	.0
34	P105	1	.0
35	P015	1	.0
36	U133	0	.0
37	U240	0	.0
38	U122	0	.0
39	P030	0	.0
40	D014	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

COLORADO

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
OTHER RECOVERY	M031-M039	K062	1,649
INCINERATION	M041-M049	D003	111
FUEL BLENDING	M061	FOMX*	1,873
		D001	328
		F003	233
		F002	171
AQUEOUS INORGANIC TREATMENT	M071-M079	MOMX*	7,882
		D003	5,254
		DOMX*	89
		D002	2
STABILIZATION	M111-M119	MOMX*	34
		F001	2
OTHER TREATMENT	M121-M129	MOMX*	62,945
		DOMX*	218
		FOMX*	37
		D003	10
LANDFILL	M132	DOMX*	213
OTHER DISPOSAL	M137	K044	23
		D003	13
TOTAL			81,292

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

COLORADO

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	CO7890010526	U.S. DEPARTMENT OF ENERGY-ROCKY FLATS OF	GOLDEN	73,504
02	COD007057961	CF&I STEEL CORPORATION PUEBLO PLANT	PUEBLO	15,458
03	COD054929989	ADOLPH COORS COMPANY	GOLDEN	7,699
04	COD007069974	WESTERN TANNING INC	DELTA	5,254
05	COD980718902	UNOCAL PARACHUTE CREEK SHALE OIL PROJECT	PARACHUTE	1,716
06	COD980591184	OIL & SOLVENT PROCESS COMPANY	HENDERSON	1,559
07	COD001704790	MARTIN MARIETTA ASTRONAUTICS GROUP WATER	LITTLETON	1,481
08	COD056562085	HEWLETT-PACKARD COMPANY	LOVELAND	1,217
09	COD007057995	SUNDSTRAND AVIATION THOMAS L MISIAK PM	DENVER	608
10	COD078341658	KODAK COLORADO DIVISION	WINDSOR	597
11	COD007060577	GREAT WESTERN INORGANICS	GOLDEN	595
12	COD097665558	NCR CORPORATION	FORT COLLINS	545
13	COD001883164	INTERNATIONAL BUSINESS MACHINES CORP	BOULDER	454
14	COD060627189	CONOCO INC	COMMERCE CITY	447
15	COD040716458	ADOLPH COORS COMPANY GLASS DIVISION	WHEAT RIDGE	441
16	CO2210020150	HQ FORT CARSON & HQ 4TH INF. DIV (MECH)	FORT CARSON	337
17	COD007077175	KOPPERS INDUSTRIES INC (AKA BEAZERS)	DENVER	328
18	COD076470525	SYNTEX CHEMICALS INC	BOULDER	307
19	COD981552466	METAL CONTAINER CORPORATION	WINDSOR	279
20	COD081474710	ATMEL CORPORATION	COLORADO SPRINGS	270
21	COD082657420	SCHLAGE LOCK COMPANY	SECURITY	257
22	COD078362837	CHEMICAL & METAL INDUSTRIES#	DENVER	217
23	COD007091879	CENTER LINE CIRCUITS INC	LONGMONT	197
24	COD007092513	WESTERN FORGE CORPORATION	COLORADO SPRINGS	173
25	COD097147987	NTI - DOUBLE SIDED DIVISION	COLORADO SPRINGS	167
26	CO8213820725	PUEBLO DEPOT ACTIVITY (US ARMY)	PUEBLO	155
27	COD076445303	GRAPHIC PACKAGING CORPORATION	BOULDER	141
28	COD980953723	LOWRY GROUND WATER TREATMENT FACILITY	AURORA	128
29	COT090010331	COORS BREWING COMPANY - END MANUFACTURIN	GOLDEN	124
30	COD058158775	STANFORD APPLIED ENGINEERING#	BOULDER	113
31	COD051222065	STORAGE TECHNOLOGY CORPORATION	LOUISVILLE	110
32	COD000694869	BOULDER SCIENTIFIC COMPANY	MEAD	108
33	COD080395007	HEWLETT-PACKARD DESKTOP COMPUTER DIV	FORT COLLINS	105
34	COD000109975	COLORADO REFINING CO. (FORMERLY ASAMERA)	COMMERCE CITY	102
35	COD006915466	CONTINENTAL AIRLINES (FORMERLY FRONTIER)	DENVER	98
36	COD177307311	VELIE CIRCUITS OF COLORADO INC	BROOMFIELD	97
37	COD081469801	HANSON CONTAINER	GRAND JUNCTION	81
38	COP982587594	CONTRACT APPLICATIONS INC.	ENGLEWOOD	76
39	COD007068646	BEECH AIRCRAFT CORPORATION	BOULDER	59
40	COD007061294	WILKERSON CORPORATION	ENGLEWOOD	54

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

COLORADO

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed
1	CO7890010526 U.S. DEPARTMENT OF ENERGY-ROCKY FLATS OF, GOLDEN					71,2
	OTHER TREATMENT	M121-M129	63,191	0	63,191	
	AQUEOUS INORGANIC TREATMENT	M071-M079	7,973	0	7,973	
	STABILIZATION	M111-M119	36	0	36	
2	COD007069974 WESTERN TANNING INC., DELTA					5,2
	AQUEOUS INORGANIC TREATMENT	M071-M079	5,254	0	5,254	
3	COD980591184 OIL & SOLVENT PROCESS COMPANY, HENDERSON					2,7
	FUEL BLENDING	M061	0	2,771	2,771	
4	COD007057961 CF&I STEEL CORPORATION PUEBLO PLANT, PUEBLO					1,6
	OTHER RECOVERY	M031-M039	1,649	0	1,649	
5	COD082657420 SCHLAGE LOCK COMPANY, SECURITY					2
	LANDFILL	M132	213	0	213	
6	CO8213820725 PUEBLO DEPOT ACTIVITY (US ARMY), PUEBLO					1
	INCINERATION	M041-M049	111	0	111	
7	COD980718985 RAMP INDUSTRIES INCORPORATED, DENVER					
	FUEL BLENDING	M061	0	39	39	
8	COD007060981 ETI. DUPONT DE NEMOURS & CO., INC., LOUVIERS					
	OTHER DISPOSAL	M137	36	0	36	
9	CO2210020150 HQ FORT CARSON & HQ 4TH INF. DIV (MECH), FORT CARSON					
	OTHER TREATMENT	M121-M129	10	0	10	
10	COD048742175 HAZEN RESEARCH INC., GOLDEN					
	OTHER TREATMENT	M121-M129	0	9	9	

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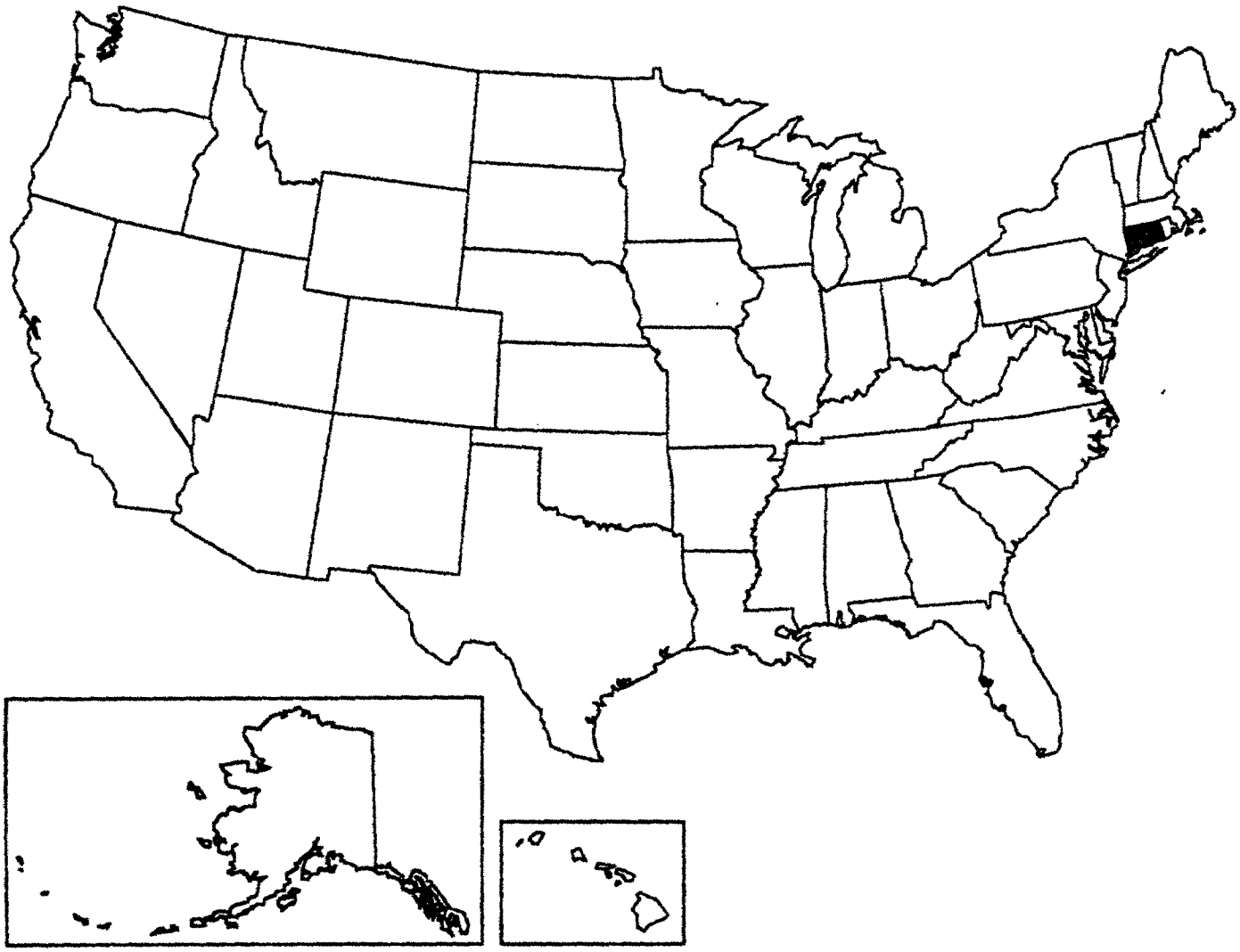
1 Excluding quantity managed by storage only.

Connecticut

Region I



CONNECTICUT

EPA Region Address:	U.S. EPA Region I RCRA Support Section Mail Stop HRW-CAN-3 JFK Federal Building Boston, MA 02203
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Waste Planning and Standards Division Department of Environmental Protection 1st Floor, Room T-1F Hartford, CT 06106
Contact Name:	Ms. Anne Gobin Principal Environmental Analyst
Phone:	(203) 566-5217

Notes: In the State of Connecticut, Generation + Imports exceed Management + Exports by 936,851 tons. This discrepancy was found to result from one site that pipes a large volume of wastewater off site for management in units exempt from RCRA permitting requirements. Since all shipments off site were included in the quantity generated, the results is that the large volume of waste is included in the generation tally, but excluded from the management quantity due to the exempt management method.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CONNECTICUT

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	506
Total Quantity of Regulated Waste Generated:	1,390,314 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	28
Facilities managing only waste generated off site	7
Facilities managing waste generated both on and off site	3
Total RCRA TSD Facilities (excluding storage-only facilities):	38
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	366,215 tons
Total RCRA TSD Facilities:	131

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	2	0	377	377	.1
SOLVENTS RECOVERY	M021-M029	10	3,356	100	3,455	.9
OTHER RECOVERY	M031-M039	5	2,491	802	3,293	.9
INCINERATION	M041-M049	6	5,206	47	5,254	1.4
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2	4,185	0	4,185	1.1
FUEL BLENDING	M061	4	14,793	20,628	35,421	9.7
AQUEOUS INORGANIC TREATMENT	M071-M079	11	40,543	11,964	52,507	14.3
SLUDGE TREATMENT	M101-M109	3	245	0	245	.1
STABILIZATION	M111-M119	2	123	6,152	6,276	1.7
OTHER TREATMENT	M121-M129	10	244,397	9,880	254,276	69.4
LANDFILL	M132	2	1	260	261	.1
SURFACE IMPOUNDMENT	M133	1	553	0	553	.2
INVALID SYSTEM TYPE		2	0	113	113	.0
TOTAL		38	315,893	50,322	366,215	100.0
PERCENTAGE		-	86.3 %	13.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CONNECTICUT

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
CA	4
FC	1
FL	12
IL	68
IN	69
MA	13,869
MD	42
ME	513
MI	3
MN	2
NC	36
NH	670
NJ	1,633
NY	1,504
OH	13
OK	7
PA	506
RI	1,416
TN	14
VA	436
VT	433
TOTAL	21,253

Exports

State	Tons Shipped
AL	10,575
AR	603
DE	1
FC	4,092
FL	4
GA	6
IL	2,714
IN	9,078
KY	140
LA	1,691
MA	5,473
MD	199
MI	2,864
NC	2,047
NJ	13,206
NV	1
NY	20,521
OH	3,299
PA	17,137
RI	1,901
SC	1,191
TN	2
TX	33
VA	11,716
WV	7
WY	0
TOTAL	108,501

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CONNECTICUT

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MOMX*	925,274	66.6
2	D002	271,954	19.6
3	FOMX*	47,629	3.4
4	F006	35,616	2.6
5	D007	35,471	2.6
6	DOMX*	15,909	1.1
7	D003	14,404	1.0
8	D001	13,478	1.0
9	D006	9,303	.7
10	D008	4,357	.3
11	F002	3,780	.3
12	F001	3,627	.3
13	F003	3,508	.3
14	F005	2,356	.2
15	F009	821	.1
16	F008	616	<0.05
17	UOMX*	438	<0.05
18	D005	365	<0.05
19	D011	321	<0.05
20	F007	298	<0.05
21	K046	177	<0.05
22	F019	142	<0.05
23	U051	90	<0.05
24	U220	74	<0.05
25	U028	65	<0.05
26	D009	54	<0.05
27	U122	49	<0.05
28	U239	20	<0.05
29	U010	13	<0.05
30	U121	12	<0.05
31	F011	11	<0.05
32	U012	11	<0.05
33	P068	10	<0.05
34	U188	9	<0.05
35	P063	8	<0.05
36	U044	6	<0.05
37	D004	5	<0.05
38	F004	4	<0.05
39	U154	3	<0.05
40	D010	2	<0.05

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CONNECTICUT

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	F009	204
		F007	77
		D002	55
		DOMX*	18
SOLVENTS RECOVERY	M021-M029	MOMX*	2,385
		F001	556
		FOMX*	391
		D001	69
OTHER RECOVERY	M031-M039	D002	2,490
		D008	801
		DOMX*	1
		D006	0
INCINERATION	M041-M049	D001	2,830
		F003	1,862
		MOMX*	463
		D002	64
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	D001	3,592
		F005	593
FUEL BLENDING	M061	FOMX*	15,663
		D001	7,988
		F003	3,286
		F005	2,423
AQUEOUS INORGANIC TREATMENT	M071-M079	D007	25,092
		D003	14,720
		F006	6,002
		DOMX*	2,767
SLUDGE TREATMENT	M101-M109	F006*	243
		D002	1
		D007	0
STABILIZATION	M111-M119	D006	1,796
		D008	951
		D001	901
		F006	769
OTHER TREATMENT	M121-M129	D002	248,351
		DOMX*	2,245
		MOMX*	1,451
		D007	1,163
LANDFILL	M132	D008	57
		DOMX*	51
		D004	44
		F006	38
SURFACE IMPOUNDMENT	M133	F006	553
INVALID SYSTEM TYPE		F009	108
		D001	5
TOTAL			366,215

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CONNECTICUT

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	CTD990672081	PRATT & WHITNEY, EAST HARTFORD	EAST HARTFORD	920,149
02	CTD010170363	THE STANLEY WORKS, INC.	NEW BRITAIN	240,079
03	CTD052541695	CORBIN & RUSSWIN ARCHITECTURAL HARDWARE	BERLIN	37,606
04	CTD072138969	ENVIRONMENTAL WASTE RESOURCES INC	WATERBURY	23,455
05	CTD009717604	SOLVENTS RECOVERY SERVICE OF NEW	SOUTHINGTON	15,998
06	CTD001168558	RISDON CORP	DANBURY	15,184
07	CTD001144237	STANADYNE AUTOMOTIVE CORP	WINDSOR	10,164
08	CTD001147495	PFIZER INC GROTON PLANT	GROTON	9,294
09	CTD058507740	CHANDLER EVANS DIV. OF COLTEC INDUSTRIES	WEST HARTFORD	6,637
10	CTD093616613	ENVIRITE CORP	THOMASTON	6,170
11	CTD001168533	UPJOHN CO THE FINE CHEMICALS DIV	NORTH HAVEN	6,163
12	CTD001184894	AMERICAN CHEMICAL & REFINING CO	WATERBURY	4,830
13	CTD001173467	AMERICAN CYANAMID CO	WALLINGFORD	4,803
14	CTD001449511	PRATT & WHITNEY AIRCRAFT DIV U T C	NORTH HAVEN	4,066
15	CTD001450154	WHYCO CHROMIUM CO INC	THOMASTON	3,295
16	CTD018631952	STANLEY BOSTITCH	CLINTON	3,290
17	CTD065529158	KAMAN AEROSPACE CORPORATION	MOOSUP	2,900
18	CTD000844332	PRATT & WHITNEY	SOUTHINGTON	2,788
19	CTD980669352	SIKORSKY AIRCRAFT DIV OF U T C	SHELTON	2,760
20	CTD001449784	SIKORSKY AIRCRAFT DIV OF U T C	STRATFORD	2,182
21	CTD001864024	AMERICAN CYANAMID	STAMFORD	2,129
22	CTD001147875	U N C NAVAL PRODUCTS	UNCASVILLE	2,121
23	CTD001449826	UNIROYAL CHEMICAL CO INC	NAUGATUCK	1,848
24	CTD047551593	BRUNING A M	GUILFORD	1,572
25	CTD001162775	GILBERT & BENNETT MFG. CO.	GEORGETOWN	1,486
26	CTD000604488	CECOS TREATMENT CORP	BRISTOL	1,403
27	CTD018625632	G M C DELCO MORAINE NDH	BRISTOL	1,329
28	CTD089631956	EAST COAST ENVIRONMENTAL SERVICES	NEW HAVEN	1,325
29	CTD001183763	CIRCUIT WISE INC	NORTH HAVEN	1,265
30	CTD001166453	BUELL INDUSTRIES, INC.	WATERBURY	1,134
31	CTD001154558	METAL FINISHING TECHNOLOGIES, INC.	FORESTVILLE	1,083
32	CTD001145341	HAMILTON STANDARD DIV OF UTC	WINDSOR LOCKS	1,024
33	CTD000844399	PRATT & WHITNEY EAST HARTFORD, COLT STRE	EAST HARTFORD	1,008
34	CTD001181148	EXIDE GROUP INC	FAIRFIELD	970
35	CTD001140862	SPIROL INTERNATIONAL CORP.	DANIELSON	969
36	CTD001159730	DOW CHEMICAL CO ALLYNS POINT PLANT	GALES FERRY	900
37	CTD046233003	CT GALVANIZING CORP	GLASTONBURY	846
38	CTD042279513	KING INDUSTRIES INC	NORWALK	831
39	CTD004533063	KESSLER INSTALLATION CORP	HARTFORD	737
40	CTD059831479	HOWMET CORPORATION NEW ENGLAND AIRCRAFT	FARMINGTON	727

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CONNECTICUT

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	CTD010170363 THE STANLEY WORKS, INC., NEW BRITAIN					239,
	OTHER TREATMENT	M121-M129	239,300	0	239,300	
2	CTD052541695 CORBIN & RUSSWIN ARCHITECTURAL HARDWARE, BERLIN					37,
	AQUEOUS INORGANIC TREATMENT	M071-M079	37,386	0	37,386	
3	CTD009717604 SOLVENTS RECOVERY SERVICE OF NEW, SOUTHINGTON					30,
	FUEL BLENDING	M061	13,610	14,658	28,268	
	OTHER TREATMENT	M121-M129	1,439	0	1,439	
	SOLVENTS RECOVERY	M021-M029	327	0	327	
4	CTD093616613 ENVIRITE CORP., THOMASTON					18,
	OTHER TREATMENT	M121-M129	0	9,880	9,880	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	8,594	8,594	
	OTHER RECOVERY	M031-M039	0	0	0	
5	CTD072138969 ENVIRONMENTAL WASTE RESOURCES INC., WATERBURY					6,
	STABILIZATION	M111-M119	0	6,152	6,152	
	INVALID SYSTEM TYPE		0	5	5	
6	CTD021816889 UNITED OIL RECOVERY INC., MERIDEN					5,
	FUEL BLENDING	M061	0	5,956	5,956	
7	CTD001147495 PFIZER INC GROTON PLANT, GROTON					5,
	INCINERATION	M041-M049	5,193	0	5,193	
8	CTD001168533 UPJOHN CO THE FINE CHEMICALS DIV., NORTH HAVEN					4,
	OTHER RECOVERY	M031-M039	2,490	0	2,490	
	SOLVENTS RECOVERY	M021-M029	2,385	0	2,385	
9	CTD000604488 CECOS TREATMENT CORP., BRISTOL					3,
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	3,249	3,249	
	LANDFILL	M132	0	260	260	
	INVALID SYSTEM TYPE		0	108	108	
	INCINERATION	M041-M049	0	47	47	
	FUEL BLENDING	M061	0	14	14	
	SOLVENTS RECOVERY	M021-M029	0	2	2	
	OTHER RECOVERY	M031-M039	0	1	1	
10	CTD001173467 AMERICAN CYANAMID CO., WALLINGFORD					3
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3,477	0	3,477	
11	CTD001184894 AMERICAN CHEMICAL & REFINING CO., WATERBURY					3
	AQUEOUS INORGANIC TREATMENT	M071-M079	2,790	0	2,790	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	368	368	
	INCINERATION	M041-M049	0	0	0	
12	CTD065529158 KAMAN AEROSPACE CORPORATION., MOOSUP					2
	OTHER TREATMENT	M121-M129	2,539	0	2,539	
13	CTD089631956 EAST COAST ENVIRONMENTAL SERVICES, NEW HAVEN					1
	FUEL BLENDING	M061	1,183	0	1,183	
	STABILIZATION	M111-M119	123	0	123	
14	CTD001169010 ENTHONE INC., WEST HAVEN					
	OTHER RECOVERY	M031-M039	0	801	801	
15	CTD001449826 UNIROYAL CHEMICAL CO INC., NAUGATUCK					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	708	0	708	
16	CTD000845248 CT LIGHT & POWER DEVON ST., MILFORD					
	OTHER TREATMENT	M121-M129	697	0	697	

1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

CONNECTICUT

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
17	CTD990672081 PRATT & WHITNEY, EAST HARTFORD, EAST HARTFORD					625
	SOLVENTS RECOVERY	M021-M029	519	98	617	
	OTHER TREATMENT	M121-M129	7	0	7	
	SLUDGE TREATMENT	M101-M109	1	0	1	
18	CTD001140920 WILLIAM PRYM, INC., DAYVILLE					595
	SURFACE IMPOUNDMENT	M133	553	0	553	
	SLUDGE TREATMENT	M101-M109	31	0	31	
	SOLVENTS RECOVERY	M021-M029	11	0	11	
19	CTD058509712 THE ENSIGN BICKFORD CO., SIMSBURY					229
	OTHER TREATMENT	M121-M129	229	0	229	
20	CTD001701168 ACME RIVET & MACHINE CORP., BRISTOL					212
	SLUDGE TREATMENT	M101-M109	212	0	212	
21	CTD060024247 MITCHELL BRADFORD CHEMICAL, MILFORD					175
	AQUEOUS INORGANIC TREATMENT	M071-M079	175	0	175	
22	CTD000790972 DEKNATEL DIV PFIZER H.P.G., COVENTRY					143
	AQUEOUS INORGANIC TREATMENT	M071-M079	143	0	143	
23	CTD001145341 HAMILTON STANDARD DIV OF UTC, WINDSOR LOCKS					121
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	121	121	
24	CTD001163237 TURBO PRODUCTS INTL INC., IVORYTON					107
	OTHER TREATMENT	M121-M129	105	0	105	
	INCINERATION	M041-M049	1	0	1	
25	CTD001181205 VANDERBILT CHEMICAL CORP., BETHEL					78
	OTHER TREATMENT	M121-M129	78	0	78	
26	CTD001864024 AMERICAN CYANAMID, STAMFORD					57
	SOLVENTS RECOVERY	M021-M029	57	0	57	
27	CTD003935905 PRATT & WHITNEY, MIDDLETOWN					36
	SOLVENTS RECOVERY	M021-M029	36	0	36	
28	CTD051320372 NORTH & JUDD INC., MIDDLETOWN					26
	AQUEOUS INORGANIC TREATMENT	M071-M079	26	0	26	
29	CTD064834914 G A R ELECTROFORMING DIV ELECTRO, DANBURY					20
	AQUEOUS INORGANIC TREATMENT	M071-M079	20	0	20	
30	CTD047711346 STANCHEM INC., EAST BERLIN					13
	SOLVENTS RECOVERY	M021-M029	13	0	13	
31	CTD043211101 HIGHLINE PRODUCTS CORP., OLD SAYBROOK					9
	SOLVENTS RECOVERY	M021-M029	6	0	6	
	INCINERATION	M041-M049	3	0	3	
32	CTD018695999 AEROSPACE METALS INC., HARTFORD					9
	METALS RECOVERY (FOR REUSE)	M011-M019	0	9	9	
33	CTD005931456 CONSERTHERM SYSTEMS, INC., SOUTH WINDSOR					8
	INCINERATION	M041-M049	8	0	8	
34	CTD001179316 BOVANO INDUSTRIES INC., CHESHIRE					4
	AQUEOUS INORGANIC TREATMENT	M071-M079	4	0	4	
35	CTD001453216 REMINGTON ARMS CO INC., BRIDGEPORT					3
	OTHER TREATMENT	M121-M129	3	0	3	
36	CTD001164599 MACDERMID INC., WATERBURY					3
	OTHER RECOVERY	M031-M039	1	0	1	
	SOLVENTS RECOVERY	M021-M029	1	0	1	
37	CTD001145317 ACCURATE FORGING CORP., BRISTOL					1
	LANDFILL	M132	1	0	1	
38	CTD042306720 CT YANKEE HADDAM NECK PLANT, HADDAM NECK					0
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	

Excluding quantity managed by storage only.

Delaware

Region III

DELAWARE

EPA Region Address:	U.S. EPA Region III Waste Management Branch Mail Stop 3HW53 841 Chestnut Street Philadelphia, PA 19107
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Hazardous Waste Management Branch Air and Waste Management Division Department of Natural Resources and Environmental Control 89 Kings Highway Post Office Box 1401 Dover, DE 19903
Contact Name:	Ms. Karen J'Anthony Environmental Scientist III
Phone:	(302) 739-3689

Notes: No special notes for Delaware.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DELAWARE

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	59
Total Quantity of Regulated Waste Generated:	19,766 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	1
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	1
Total RCRA TSD Facilities (excluding storage-only facilities):	2
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	3,472 tons
Total RCRA TSD Facilities:	7

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
INCINERATION	M041-M049	1	887	0	888	25.6
LAND TREATMENT	M131	1	2,583	0	2,583	74.4
INVALID SYSTEM TYPE		1	0	1	1	.0
TOTAL		2	3,470	1	3,472	100.0
PERCENTAGE		-	100.0 %	.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DELAWARE

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
CT	1
TOTAL	1

Exports

State	Tons Shipped
AL	471
AR	138
FL	19
GA	14
IL	412
IN	40
KY	17
LA	2,774
MD	102
MI	1,295
NC	66
NJ	4,048
NY	844
OH	415
PA	3,007
SC	313
TN	0
TX	1
WV	107
TOTAL	14,084

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DELAWARE

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D001	3,169	16.0
2	F003	2,989	15.1
3	K0MX*	2,955	14.9
4	K085	2,194	11.1
5	K061	1,826	9.2
6	D007	930	4.7
7	M0MX*	865	4.4
8	F0MX*	827	4.2
9	D008	711	3.6
10	D002	621	3.1
11	K062	580	2.9
12	D0MX*	415	2.1
13	D003	334	1.7
14	U0MX*	279	1.4
15	D009	251	1.3
16	K106	212	1.1
17	F002	178	.9
18	F009	92	.5
19	F007	78	.4
20	D005	72	.4
21	F005	51	.3
22	K071	45	.2
23	F001	40	.2
24	U220	17	.1
25	P007	11	.1
26	U012	3	.0
27	U226	3	.0
28	U044	2	.0
29	U162	2	.0
30	U211	1	.0
31	U122	1	.0
32	K126	1	.0
33	P024	1	.0
34	D015	1	.0
35	U213	1	.0
36	U114	1	.0
37	P028	1	.0
38	U239	1	.0
39	U151	1	.0
40	D011	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DELAWARE

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
INCINERATION	M041-M049	MOMX*	380
		F003	318
		FOMX*	76
		D001	58
LAND TREATMENT	M131	KOMX*	2,583
INVALID SYSTEM TYPE		D008	1
		F002	0
TOTAL			3,472

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DELAWARE

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	DED002329738	STAR ENTERPRISE DELAWARE CITY REFINERY	DELAWARE CITY	3,533
02	DED003930807	DUPONT EXPERIMENTAL STATION	WILMINGTON	2,514
03	DED041212473	STANDARD CHLORINE OF DELAWARE INC	DELAWARE CITY	2,474
04	DED980830400	CIBA-GEIGY CORP	NEWPORT	2,072
05	DED002276764	CITISTEEL USA INC	CLAYMONT	1,876
06	DED002369205	GM BOC WILMINGTON PLANT	WILMINGTON	1,667
07	DED980555122	DUPONT HOLLY RUN SITE	NEWPORT	850
08	DED002357408	CHRYSLER CORP	NEWARK	695
09	DED004321212	FORBES STEEL & WIRE CORP	WILMINGTON	583
10	DED042263764	E.I.DUPONT DE NEMOURS & CO INC	GLASGOW	435
11	DED003913266	OCCIDENTAL CHEMICAL CORPORATION	DELAWARE CITY	402
12	DED060058062	WILMINGTON MAINTENANCE FACILITY	WILMINGTON	356
13	DED131873853	TRIPLE C RAILCAR SVC INC	EDGEMOOR YARD	273
14	DED002342020	ICI AMERICAS INC ALLAS POINT SITE	NEW CASTLE	199
15	DED982574576	ICI MOLDED CIRCUIT BOARD PLANT	NEWARK	181
16	DED002341287	WILMINGTON CHEMICAL CORP	NEW CASTLE	172
17	DED001315647	HERCULES RESEARCH CENTER	WILMINGTON	159
18	DED002353092	JOHNSON-CONTROLS INC	MIDDLETOWN	152
19	DED060074291	PPG INDUSTRIES	CHESWOLD	121
20	DED003930799	E.I.DUPONT DE NEMOURS & CO INC	WILMINGTON	92
21	DED980827919	ALLOY SURFACED COMAPNY INC	WILMINGTON	84
22	DED064370992	DUPONT STINE-HASKELL RESEARCH CTR	NEWARK	84
23	DED980551667	AKZO CHEMICALS INC	DELAWARE CITY	74
24	DED069877611	LANXIDE CORP.	NEWARK	70
25	DED981113681	E.I.DUPONT DE NEMOURS WILLOW BANK PLANT	NEW PORT	69
26	DED980829808	E.I.DUPONT CO-WILMINGTON SHOPS	WILMINGTON	49
27	DED021957444	MFG JUSTIN TANKS, INC	GEORGETOWN	46
28	DED981743065	L.D.CAULK DIVISION OF DENTSPLY INT'L	MILFORD	39
29	DED000820399	ICI AMERICAS INC	WILMINGTON	36
30	DED069876795	JAMES RIVER CORP	NEW CASTLE	35
31	DED073750796	DELAWARE TERMINAL COMPANY	WILMINGTON	30
32	DE8570024010	DOVER AIR FORCE BASE	DOVER	23
33	DED033665621	ILC DOVER INC	FREDERICA	23
34	DED002348845	E.I.DUPONT DE NEMOURS & CO INC	SEAFORD	23
35	DED069032613	DELAWARE STORAGE & PIPELINE CO	LITTLE CREEK	23
36	DED981944861	CHRISTINA LABORATORY	WILMINGTON	21
37	DED980537781	CAMDEL METALS CORP	CAMDEN	20
38	DED048044820	KAUMAGRAPH CORP.	WILMINGTON	20
39	DED000820704	UNIVERSITY OF DELAWARE	NEWARK	20
40	DED054719851	NANTICOKE HOMES INC	GREENWOOD	19

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DELAWARE

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID	Site Name, City					Tota Manage
	Management Method			On Site	Off Site	Method Total	
1	DED002329738	STAR ENTERPRISE DELAWARE CITY REFINERY, DELAWARE CITY					2,5
	LAND TREATMENT		M131	2,583	0	2,583	
2	DED003930807	DUPONT EXPERIMENTAL STATION, WILMINGTON					88
	INCINERATION		M041-M049	887	0	888	
	INVALID SYSTEM TYPE			0	1	1	

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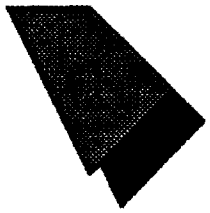
1 Excluding quantity managed by storage only.

District of Columbia

Region III



DISTRICT OF COLUMBIA

EPA Region Address:	U.S. EPA Region III Waste Management Branch Mail Stop 3HW53 841 Chestnut Street Philadelphia, PA 19107
Biennial Report Data Collection Instrument:	Customized EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Section Environmental Control Division Housing and Environmental Regulation Department of Consumer and Regulatory Affairs 2100 Martin Luther King Jr. Avenue, S.E. Suite 203 Washington, D.C. 20020
Contact Name:	Mr. Mark Hughes Environmental Chemist
Phone:	(202) 404-1167

Notes: The District of Columbia does not have any TSD facilities, therefore waste management data were not calculated.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DISTRICT OF COLUMBIA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	11
Total Quantity of Regulated Waste Generated:	2,357 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	0
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	0 tons
Total RCRA TSD Facilities:	0

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DISTRICT OF COLUMBIA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
TOTAL	0

Exports

State	Tons Shipped
AR	24
FL	4
GA	5
IL	3
MA	0
MD	1,732
MI	7
NC	0
NJ	20
NY	5
OH	57
PA	14
SC	460
TN	2
VA	76
TOTAL	2,409

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DISTRICT OF COLUMBIA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F001	1,534	65.1
2	D008	397	16.8
3	D001	246	10.5
4	MOMX*	61	2.6
5	DOMX*	59	2.5
6	FOMX*	18	.8
7	F002	16	.7
8	D002	15	.6
9	F003	3	.1
10	D007	2	.1
11	F005	2	.1
12	U121	1	.1
13	D011	1	.0
14	D009	0	.0
15	D003	0	.0
16	D005	0	.0
17	U211	0	.0
18	U044	0	.0
19	P106	0	.0
20	U220	0	.0
21	U122	0	.0
22	D004	0	.0
23	U061	0	.0
24	U188	0	.0
25	U154	0	.0
26	UOMX*	0	.0
27	U108	0	.0
28	U219	0	.0
29	U246	0	.0
30	U190	0	.0
31	U223	0	.0
32	U012	0	.0
33	P098	0	.0
34	U003	0	.0
34	U133	0	.0
35	P042	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DISTRICT OF COLUMBIA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

This table is not applicable because the State did not manage any hazardous waste during 1989.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

DISTRICT OF COLUMBIA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	DCD000819516	PEPCO -BENNING GENERATING STATION	WASHINGTON	1,535
02	DC2200907812	U.S. DEPARTMENT OF TREASURY	WASHINGTON	493
03	DCD981737422	WASHINGTON METRO. AREA TRANSIT AUTHORITY	WASHINGTON	91
04	DCD003245768	WASHINGTON POST - NORTHWEST PLANT	WASHINGTON	72
05	DCD980555643	WASHINGTON METRO. AREA TRANSIT AUTHORITY	WASHINGTON	55
06	DCD003238193	WASHINGTON POST - SOUTHEAST PLANT	WASHINGTON	23
07	DC8170024311	NAVAL RESEARCH LABORATORY	WASHINGTION	21
08	DC8470000086	FOOD AND DRUG ADMINISTRATION	WASHINGTION	21
09	DC4040005031	U. S. GOVERNMENT PRINTING OFFICE	WASHINGTON	17
10	DCD024231896	DISTRICT FUR CLEANING CO	WASHINGTON	15
11	DC4210021156	WALTER REED ARMY MEDICAL CENTER	WASHINGTON	13

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

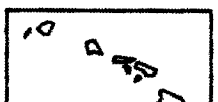
DISTRICT OF COLUMBIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

This table is not applicable because the State did not manage any hazardous wast during 1989.

Florida

Region IV



FLORIDA

EPA Region Address:	U.S. EPA Region IV Waste Division, Waste Programs Branch State Programs Section 345 Courtland Street Atlanta, GA 30365
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Compliance and Enforcement Section Hazardous Waste Regulation Department of Environmental Regulation 2600 Blairstone Road, Suite 438-D Tallahassee, FL 32399-2400
Contact Name:	Mr. Mike Redig Environmental Manager
Phone:	(904) 488-0300

Notes: No special notes for Florida.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

FLORIDA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	368
Total Quantity of Regulated Waste Generated:	411,832 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	10
Facilities managing only waste generated off site	5
Facilities managing waste generated both on and off site	1
Total RCRA TSD Facilities (excluding storage-only facilities):	16
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	359,733 tons
Total RCRA TSD Facilities:	22

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
OTHER TREATMENT	M121-M129	10	18,130	0	18,130	5.0
UNDERGROUND INJECTION	M134	1	320,134	0	320,134	89.0
INVALID SYSTEM TYPE		6	0	21,468	21,468	6.0
TOTAL		16	338,264	21,468	359,733	100.0
PERCENTAGE		-	94.0 %	6.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

FLORIDA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
AL	11,408
GA	4,776
LA	45
SC	388
TOTAL	16,617

Exports

State	Tons Shipped
AL	19,474
AR	500
CT	21
GA	2,198
IL	609
IN	206
KY	101
LA	7,220
MA	0
MD	0
MI	973
MO	2
NC	337
NJ	449
NY	238
OH	796
OR	7
PA	9,432
RI	7
SC	16,151
TN	1,815
TX	359
UT	18
TOTAL	60,915

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

FLORIDA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D002	341,109	82.8
2	LABP	22,383	5.4
3	D001	12,805	3.1
4	K061	11,133	2.7
5	D006	8,268	2.0
6	F006	3,050	0.7
7	D008	2,468	0.6
8	F003	2,417	0.6
9	F002	2,316	0.6
10	F001	1,811	0.4
11	D007	1,381	0.3
12	F019	1,019	0.2
13	F005	702	0.2
14	P078	243	0.1
15	D009	112	<0.05
16	D003	99	<0.05
17	U239	82	<0.05
18	F007	73	<0.05
19	U147	68	<0.05
20	D011	46	<0.05
21	U210	26	<0.05
22	D005	24	<0.05
23	D004	23	<0.05
24	D016	18	<0.05
25	U036	18	<0.05
26	U080	17	<0.05
27	D010	9	<0.05
28	U122	8	<0.05
29	D013	7	<0.05
30	F008	6	<0.05
31	U016	6	<0.05
32	U154	5	<0.05
33	U226	5	<0.05
34	F009	4	<0.05
35	U134	4	<0.05
36	U019	4	<0.05
37	U121	4	<0.05
38	P050	4	<0.05
39	U133	3	<0.05
40	U044	3	<0.05

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

FLORIDA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
OTHER TREATMENT	M121-M129	D002	17,460
		LABP	327
		D007	309
		D001	30
UNDERGROUND INJECTION	M134	D002	320,134
INVALID SYSTEM TYPE		LABP	19,920
		F003	734
		D001	528
		D006	189
TOTAL			359,733

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

FLORIDA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	FLD004106811	KAISER ALUMINUM & CHEMICAL CORP	MULBERRY	320,134
02	FLD057231821	AMERICAN CYANAMID CO INC	MILTON	17,427
03	FLD083812537	FLORIDA STEEL CORP	BALDWIN	8,312
04	FLD980729610	TRICIL RECOVERY SERVICE	BARTOW	7,462
05	FLD043860451	GATES ENERGY PRODUCTS INC	HAGUE	6,597
06	FLD980842207	FLORIDA DER WASTE CLEANUP	TALLAHASSEE	4,077
07	FLD095565206	REICHOLD CHEMICALS INC	PENSACOLA	3,207
08	FLD000814434	FLORIDA STEEL CORP	TAMPA	2,938
09	FLD980847271	SAFETY KLEEN CORP 3-163-01	TAMPA	2,283
10	FLD980847214	SAFETY KLEEN CORP 3-079-01	ORANGE PARK	1,884
11	FL6170024412	USNAS JACKSONVILLE	JACKSONVILLE	1,648
12	FLD000776708	CHEMICAL WASTE MGT POMPANO	POMPANO BEACH	1,646
13	FLD984166942	UNC RECLAMATION INC	MULBERRY	1,476
14	FLD004092839	GULF COAST RECYCLING INC	TAMPA	1,387
15	FLD000602334	HARRIS SEMICONDUCTOR DIV	PALM BAY	1,309
16	FLD097837983	SAFETY KLEEN CORP 3-130-01	ALTAMONTE SPRINGS	1,241
17	FLD981474802	GSX SERVICES	PINELLAS PARK	965
18	FLD982106775	FAME PLASTICS INC	DAYTONA BEACH	961
19	FLD065912966	ADVANCED QUICK CIRCUITS	MELBOURNE	951
20	FLD980840086	SAFETY KLEEN CORP 3-097-02	MIAMI	864
21	FLD095558466	PEC VIKTRON	ORLANDO	790
22	FLD069145019	NORTHERN TELECOM ELECTRONICS INC	WEST PALM BEACH	788
23	FLD004073177	AERO CORP	LAKE CITY	772
24	FLD065885931	METAL CONTAINER CORP	JACKSONVILLE	696
25	FL6800014585	USNASA KENNEDY SPACE CENTER	KENNEDY SPACE CENTER	672
26	FLD061993606	MARTIN MARIETTA AEROSPACE	OCALA	643
27	FLD000776716	SAFETY KLEEN CORP 3-163-02	PORT CHARLOTTE	610
28	FLD000776773	SAFETY KLEEN CORP 3-079-02	TALLAHASSEE	600
29	FLD980602734	RESOURCE RECOVERY OF AMERICA INC	MULBERRY	567
30	FLD001447952	UNITED TECHNOLOGIES	JUPITER	510
31	FLD161150446	METALPLATE GALVANIZING INC	JACKSONVILLE	504
32	FL9170024567	USN NAVY PUBLIC WORKS CENTER	PENSACOLA	471
33	FLD981469612	FLORIDA DER AMNESTY DAYS	TALLAHASSEE	442
34	FLD004065470	WALT DISNEY WORLD CO	BAY LAKE	421
35	FL2800016121	USAF CAPE CANAVERAL	CAPE CANAVERAL	408
36	FLD981475049	CONNECTRONICS INC	FORT LAUDERDALE	400
37	FLD047966593	MARTIN ELECTRONICS INC	PERRY	398
38	FLD059859587	VISION EASE	FORT LAUDERDALE	337
39	FLD047096524	OLIN CORP	ST MARKS	326
40	FLD004117677	PERKO INC	MIAMI	287

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

FLORIDA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID	Site Name, City	Management Method	On Site	Off Site	Method Total	T Man
1	FLD004106811	KAISER ALUMINUM & CHEMICAL CORP., MULBERRY					320
		OTHER TREATMENT	M121-M129	320,134	0	320,134	
2	FLD000737312	OLDOVER CORP., GREEN COVE SPRINGS					20
		INVALID SYSTEM TYPE		0	20,562	20,562	
3	FLD057231821	AMERICAN CYANAMID CO INC., MILTON					17
		OTHER TREATMENT	M121-M129	17,427	0	17,427	
4	FLD981750706	MATRIX RECOVERY SYSTEMS INC., WILLISTON					
		INVALID SYSTEM TYPE		0	655	655	
5	FLD047096524	OLIN CORP., ST MARKS					
		OTHER TREATMENT	M121-M129	315	0	315	
6	FLD047966593	MARTIN ELECTRONICS INC., PERRY					
		OTHER TREATMENT	M121-M129	309	0	309	
7	FLD984166942	UNC RECLAMATION INC., MULBERRY					
		INVALID SYSTEM TYPE		0	189	189	
8	FLD004092839	GULF COAST RECYCLING INC., TAMPA					
		INVALID SYSTEM TYPE		0	62	62	
9	FLD099694572	ABB POWER DISTRIBUTION INC., SANFORD					
		OTHER TREATMENT	M121-M129	49	0	49	
10	FLD001447952	UNITED TECHNOLOGIES, JUPITER					
		OTHER TREATMENT	M121-M129	16	0	16	
11	FLD004104105	HONEYWELL INC., CLEARWATER					
		OTHER TREATMENT	M121-M129	10	0	10	
12	FL6170022952	USN BOCA CHICA, KEY WEST					
		OTHER TREATMENT	M121-M129	5	0	5	
13	FL8572128587	USAF AVON PARK, AVON PARK					
		INVALID SYSTEM TYPE		0	1	1	
14	FL2800016121	USAF CAPE CANAVERAL, CAPE CANAVERAL					
		OTHER TREATMENT	M121-M129	0	0	0	
		INVALID SYSTEM TYPE		0	0	0	
15	FL6890090008	USDOE PINELLAS PLANT, LARGO					
		OTHER TREATMENT	M121-M129	0	0	0	
16	FLD064824030	MCDONNELL DOUGLAS MISSILE SYSTEMS, TITUSVILLE					
		OTHER TREATMENT	M121-M129	0	0	0	

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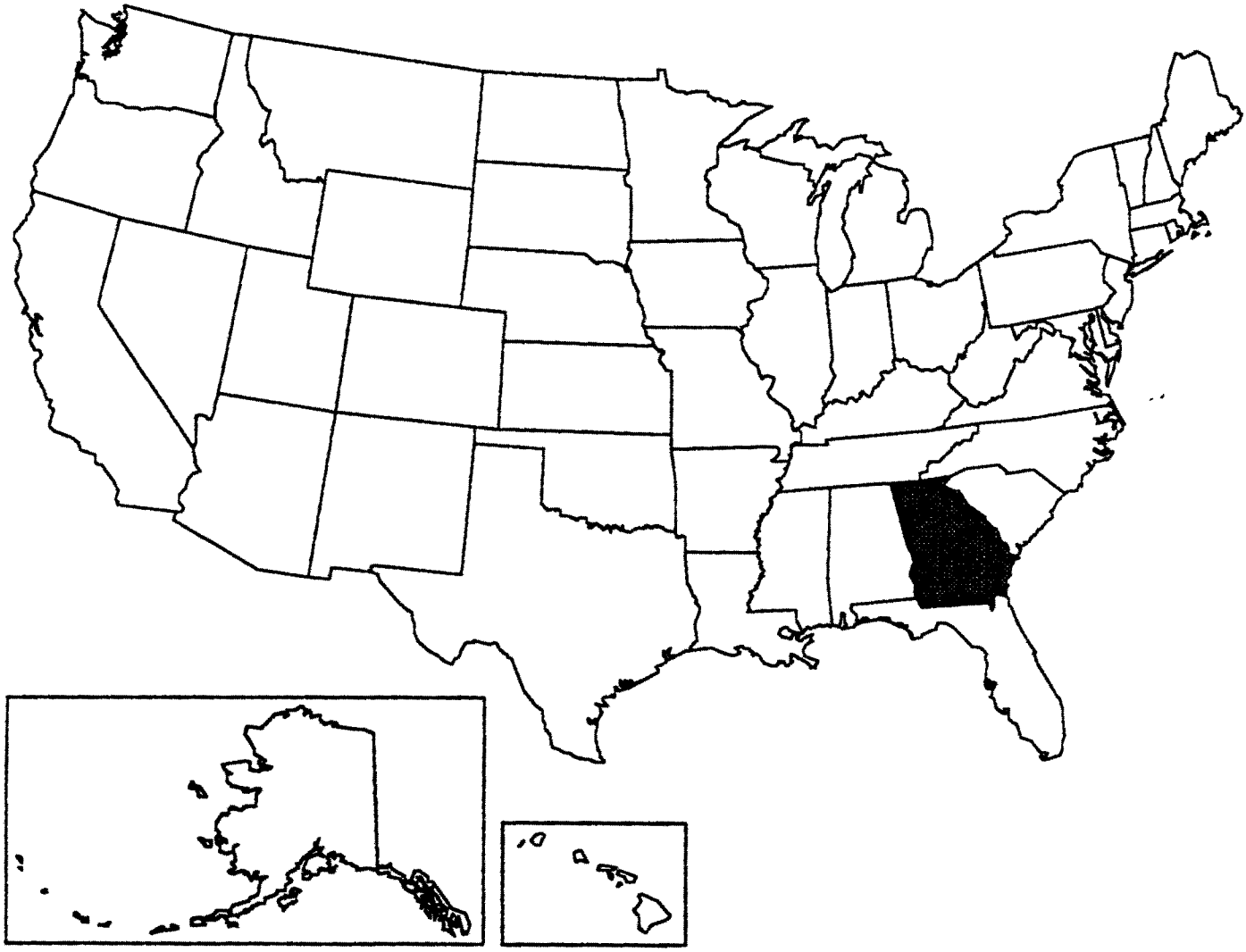
1 Excluding quantity managed by storage only.

Georgia

Region IV



GEORGIA

EPA Region Address:	U.S. EPA Region IV Waste Division, Waste Programs Branch State Programs Section 345 Courtland Street Atlanta, GA 30365
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Georgia Department of Natural Resources Land Protection Branch 205 Butler Street, S.E. East Tower, Room 1154 Atlanta, GA 30334
Contact Name: Phone:	Mr. Jack C. Booker, Jr. (404) 656-2833

Notes: No special notes for Georgia.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GEORGIA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	378
Total Quantity of Regulated Waste Generated:	2,615,210 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	17
Facilities managing only waste generated off site	3
Facilities managing waste generated both on and off site	4
Total RCRA TSD Facilities (excluding storage-only facilities):	24
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	2,551,209 tons
Total RCRA TSD Facilities:	57

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	2	0	6,862	6,862	.3
INCINERATION	M041-M049	3	11,779	0	11,779	.5
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3	2,044	0	2,044	.1
FUEL BLENDING	M061	4	114	11,397	11,511	.5
AQUEOUS INORGANIC TREATMENT	M071-M079	5	234,190	0	234,190	9.2
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	109,759	0	109,759	4.3
SLUDGE TREATMENT	M101-M109	3	6,666	0	6,666	.3
STABILIZATION	M111-M119	3	14,032	905	14,936	.6
OTHER TREATMENT	M121-M129	7	2,150,765	1,835	2,152,599	84.4
SURFACE IMPOUNDMENT	M133	1	861	0	861	.0
INVALID SYSTEM TYPE		2	0	1	1	.0
TOTAL		24	2,530,209	20,999	2,551,209	100.0
PERCENTAGE		-	99.2 %	.8 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GEORGIA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	1,993
AR	712
AZ	8
CA	80
CT	5
DC	9
DE	51
FL	3,645
IA	24
IL	34
IN	890
KS	314
KY	161
LA	37
MA	96
MD	1,275
ME	5
MI	632
MN	2
MO	66
MS	119
NC	1,601
NE	7
NJ	446
NM	8
NV	3
NY	167
OH	1,109
OK	8
OR	2
PA	620
PR	20
RI	0
SC	2,182
TN	1,220
TX	116
UT	3
VA	388
WI	0
WV	131
TOTAL	18,188

Exports

State	Tons Shipped
AL	40,290
AR	1,477
FL	6,170
IL	464
IN	101
KS	1,050
KY	492
LA	3,517
MD	3
MI	1,436
MO	233
NC	3,217
NE	447
NJ	991
NY	5
OH	1,199
OK	86
OR	95
PA	8,821
RI	18
SC	14,361
TN	3,155
TX	1,816
UT	15
TOTAL	89,459

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GEORGIA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F0MX*	2,161,521	82.7
2	D006	235,681	9.0
3	M0MX*	145,401	5.6
4	F006	16,733	.6
5	D005	12,877	.5
6	K061	12,378	.5
7	D0MX*	9,878	.4
8	D001	5,062	.2
9	D002	3,397	.1
10	K001	3,041	.1
11	F003	2,084	.1
12	D008	1,568	.1
13	D007	1,220	.0
14	D009	916	.0
15	F005	747	.0
16	F001	671	.0
17	F002	553	.0
18	U154	312	.0
19	P070	297	.0
20	F019	164	.0
21	K071	161	.0
22	K106	101	.0
23	U151	76	.0
24	U0MX*	60	.0
25	U080	52	.0
26	F009	42	.0
27	F008	38	.0
28	U051	32	.0
29	U220	30	.0
30	U188	19	.0
31	D003	17	.0
32	U147	16	.0
33	P066	16	.0
34	K086	10	.0
35	K036	6	.0
36	F011	5	.0
37	U159	4	.0
38	U165	4	.0
39	U162	3	.0
40	U210	2	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GEORGIA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	MOMX*	4,747
		F002	992
		F001	461
		D001	431
INCINERATION	M041-M049	MOMX*	10,363
		DOMX*	1,416
		D003	1
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	MOMX*	1,800
		D001	204
		DOMX*	40
FUEL BLENDING	M061	MOMX*	3,970
		D001	2,779
		F003	2,424
		FOMX*	1,328
AQUEOUS INORGANIC TREATMENT	M071-M079	D006	233,815
		D007	297
		D009	77
		DOMX*	0
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	MOMX*	109,759
SLUDGE TREATMENT	M101-M109	F006	6,187
		DOMX*	438
		D007	41
STABILIZATION	M111-M119	D005	12,854
		K001	1,212
		DOMX*	242
		D001	240
OTHER TREATMENT	M121-M129	FOMX*	2,150,764
		K061	1,731
		F002	74
		D002	11
SURFACE IMPOUNDMENT	M133	K001	861
INVALID SYSTEM TYPE		DOMX*	1
		F003	0
		F002	0
		D002	0
TOTAL			2,551,209

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GEORGIA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	GAD003324985	MERCK & CO INC	ALBANY	2,153,083
02	GAD063152573	SAFT AMERICAN INC	VALDOSTA	234,425
03	GAD006924872	DELTA AIR LINES INC	ATLANTA	111,897
04	GA8570024606	LOCKEED-GEORGIA CO USAF PLT #6	MARIETTA	15,279
05	GAD003275468	CHEMICAL PRODUCTS CORP	CARTERSVILLE	12,820
06	GAD039046800	SEARLE G D & CO	AUGUSTA	10,455
07	GAD003326477	ATLANTIC STEEL CO	ATLANTA	6,802
08	GAD030059182	ATLANTIC STEEL CO-CARTERSVILLE	CARTERSVILLE	5,608
09	GAD096629282	OHM RESOURCE RECOVERY CORP	MORROW	5,472
10	GAD093380814	CHEMICAL CONSERVATION OF GEORGIA, INC.	VALDOSTA	5,321
11	GAD033582461	ALTERNATE ENERGY RESOURCES, INC.	AUGUSTA	3,806
12	GAD075876623	PPG INDUSTRIES INC - EAST POINT	EAST POINT	3,260
13	GAD990740714	ARIVEC CHEMICALS INC	DOUGLASVILLE	3,194
14	GAD084823301	CARGILL INC/CHEM PROD DIV	FOREST PARK	2,534
15	GAD003323805	MEREDITH WILLIAM C CO INC	EAST POINT	2,140
16	GAD051011609	DSM CHEMICALS NORTH AMERICA, INC.	AUGUSTA	1,820
17	GAD003310810	GENERAL MOTORS ASMBLY DIV DORAVILLE PT	DORAVILLE	1,795
18	GAD095811162	PHOTOCIRCUITS-ATLANTA INC	PEACHTREE CITY	1,648
19	GAD033842543	TRI-STATE STEEL DRUM CO INC	GRAYSVILLE	1,626
20	GAD042869057	SHERWIN WILLIAMS CO - MORROW	MORROW	1,205
21	GAD099303182	LCP CHEMICALS - GEORGIA INC	BRUNSWICK	937
22	GAD109263467	EMPAK INC	FITZGERALD	851
23	GA1570024330	USAF ROBINS AIR FORCE BASE	WARNER ROBINS	810
24	GAD003305307	FORD MOTOR CO/ATLANTA ASSEMBLY PLT	HAPEVILLE	670
25	GAD030035356	RHONE-POULENC AG CO	WOODBINE	670
26	GAD080107873	DAVIDSON EXTERIOR TRIM TEXTRON	AMERICUS	614
27	GAD084914787	ATLANTIC WOOD INDUSTRIES INC - PT WENT	PORT WENTWORTH	609
28	GAD980726491	NORAMCO INC	ATHENS	597
29	GAD003299526	UNION CAMP CORP - VALDOSTA	VALDOSTA	588
30	GAD980729974	BLUE BIRD BODY COMPANY	FORT VALLEY	554
31	GAD045929643	DOW CHEMICAL CO	DALTON	551
32	GAD980711816	PRATT & WHITNEY AIRCRAFT MFG DIV	COLUMBUS	500
33	GAD003274545	PRINTPACK INC - ATLANTA	ATLANTA	491
34	GAD990741092	HENKEL CORP	CEDARTOWN	463
35	GAD008966400	AMERCORD INC	LUMBER CITY	453
36	GAD981024458	GEORGIA GALVANIZING	CLAXTON	438
37	GAD048708044	BOYLE-MIDWAY INC	ATLANTA	424
38	GAD003302064	E-Z GO DIVISION TEXTRON INC	AUGUSTA	414
39	GAD000814541	SOUTHWIRE CO COPPER DIV	CARROLLTON	402
40	GAD046901427	THE GLIDDEN COMPANY - ATLANTA	ATLANTA	396

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GEORGIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	GAD003324985 MERCK & CO INC., ALBANY					2,150,
	OTHER TREATMENT	M121-M129	2,150,760	0	2,150,760	
2	GAD063152573 SAFT AMERICAN INC., VALDOSTA					234,
	AQUEOUS INORGANIC TREATMENT	M071-M079	233,815	0	233,815	
	SLUDGE TREATMENT	M101-M109	438	0	438	
3	GAD006924872 DELTA AIR LINES INC., ATLANTA					109,
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	109,759	0	109,759	
4	GAD003275468 CHEMICAL PRODUCTS CORP., CARTERSVILLE					12,
	STABILIZATION	M111-M119	12,819	0	12,819	
5	GAD039046800 SEARLE G D & CO., AUGUSTA					10,
	INCINERATION	M041-M049	10,363	0	10,363	
6	GA8570024606 LOCKEED-GEORGIA CO USAF PLT #6, MARIETTA					6,
	SLUDGE TREATMENT	M101-M109	6,187	0	6,187	
7	GAD990740714 ARIVEC CHEMICALS INC., DOUGLASVILLE					5,
	SOLVENTS RECOVERY	M021-M029	0	5,654	5,654	
8	GAD093380814 CHEMICAL CONSERVATION OF GEORGIA, INC., VALDOSTA					5,
	FUEL BLENDING	M061	0	4,228	4,228	
	SOLVENTS RECOVERY	M021-M029	0	1,208	1,208	
9	GAD096629282 OHM RESOURCE RECOVERY CORP., MORROW					4
	FUEL BLENDING	M061	0	3,283	3,283	
	STABILIZATION	M111-M119	0	905	905	
	OTHER TREATMENT	M121-M129	0	23	23	
10	GAD033582461 ALTERNATE ENERGY RESOURCES, INC., AUGUSTA					3
	FUEL BLENDING	M061	103	3,298	3,401	
	OTHER TREATMENT	M121-M129	0	81	81	
11	GAD003323805 MEREDITH WILLIAM C CO INC., EAST POINT					2
	STABILIZATION	M111-M119	1,212	0	1,212	
	SURFACE IMPOUNDMENT	M133	861	0	861	
12	GAD051011609 DSM CHEMICALS NORTH AMERICA, INC., AUGUSTA					1
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1,800	0	1,800	
13	GAD082830803 TRI CHEM CORPORATION, ATLANTA					1
	OTHER TREATMENT	M121-M129	0	1,731	1,731	
14	GAD084823301 CARGILL INC/CHEM PROD DIV., FOREST PARK					1
	INCINERATION	M041-M049	1,416	0	1,416	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	40	0	40	
15	GAD033842543 TRI-STATE STEEL DRUM CO INC., GRAYSVILLE					
	FUEL BLENDING	M061	11	588	599	
	INVALID SYSTEM TYPE		0	1	1	
16	GAD003302064 E-Z GO DIVISION TEXTRON INC., AUGUSTA					
	AQUEOUS INORGANIC TREATMENT	M071-M079	297	0	297	
	SLUDGE TREATMENT	M101-M109	41	0	41	
17	GAD003275252 UNION CAMP CORP - SAVANNAH, SAVANNAH					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	204	0	204	
18	GAD099303182 LCP CHEMICALS - GEORGIA INC., BRUNSWICK					
	AQUEOUS INORGANIC TREATMENT	M071-M079	77	0	77	
19	GA9210020872 USA FORT STEWART-HQ 24TH INF. DIV (M), FORT STEWART					
	OTHER TREATMENT	M121-M129	3	0	3	
	INVALID SYSTEM TYPE		0	0	0	

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1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GEORGIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City	Management Method	On Site	Off Site	Method Total	Total Managed 1
20	GAD073460941 UNIVERSITY OF GEORGIA, ATHENS					2
	OTHER TREATMENT	M121-M129	2	0	2	
21	GA0570024109 USAF MOODY AIR FORCE BASE/GA TAC, VALDOSTA					1
	INCINERATION	M041-M049	1	0	1	
22	GAD075942706 GENERAL MOTORS DELCO REMY DIV., FITZGERALD					0
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
23	GA4170090001 USN NAVAL SUBMARINE SUPPORT BASE, KINGS BAY					0
	OTHER TREATMENT	M121-M129	0	0	0	
24	GAD097392971 NORTHWEST AIRLINES, ATLANTA					0
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	

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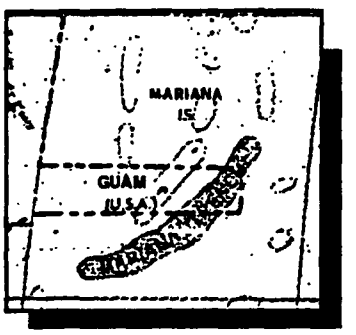
xcluding quantity managed by storage only.

Guam

Region IX



National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GUAM

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	10
Total Quantity of Regulated Waste Generated:	573 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	0
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	0 tons
Total RCRA TSD Facilities:	1

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Perce

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GUAM

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
TOTAL	0

Exports

State	Tons Shipped
CA	18
HI	185
TOTAL	203

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GUAM

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D001	331	57.8
2	D002	49	8.5
3	U036	47	8.2
4	F002	40	7.0
5	D008	31	5.4
6	DOMX*	23	4.0
7	FOMX*	9	1.6
8	MOMX*	9	1.5
9	F007	8	1.3
10	D006	7	1.2
11	D007	6	1.0
12	D003	3	.5
13	P030	3	.5
14	UOMX*	3	.4
15	U154	2	.3
16	D009	1	.2
17	F006	1	.2
18	D004	1	.1
19	D016	0	.1
20	U159	0	.0
21	F001	0	.0
22	U248	0	.0
23	F005	0	.0
24	P106	0	.0
25	F003	0	.0
26	U220	0	.0
27	P001	0	.0
28	U122	0	.0
29	P098	0	.0
30	U151	0	.0
31	U112	0	.0
31	U226	0	.0
32	U359	0	.0
33	U044	0	.0
34	U032	0	.0
35	U188	0	.0
36	D011	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GUAM

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

This table is not applicable because the State did not manage any hazardous waste during 1989.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

GUAM

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	GU6170027316	DRMO GUAM	NAVAL STATION	203
02	GU0170027320	U.S. NAVAL AIR STATION	AGANA, GUAM	152
03	GU5170022680	US NAVY PUBLIC WORKS CENTER-GUAM	SUMAY	94
04	GU4170027334	US NAVAL SHIP REPAIR FACILITY	AGANA	40
05	GU7170027323	US NAVAL STATION GUAM	APRA HARBOR	33
06	GU4170090027	US NAVAL SUPPLY DEPOT	NAVAL STATION	32
07	GU6571999519	ANDERSEN AFB	YIGO	19
08	GU0170090013	USN MAGAZINE GUAM	SANTA RITA	1
09	GUD982469462	GUAM MEM. HOSP. AUTHORITY	TAMUNING	0
10	GU0170090021	USN COMMUNICATIONS AREA MASTER STA. WEST	FINEGAYAN	0

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

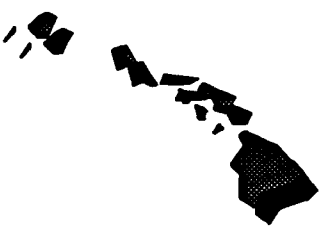
GUAM

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

This table is not applicable because the State did not manage any hazardous waste during 1989.

Hawaii

Region IX



HAWAII

EPA Region Address:	U.S. EPA Region IX RCRA Branch Mail Stop H-31 1235 Mission Street San Francisco, CA 94103
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Solid and Hazardous Waste Department of Health Division 5 Waterfront Plaza, Suite 250 500 Ala Moana Boulevard Honolulu, HI 96813
Contact Name: Phone:	Mr. Greg McCartney (808) 586-4374

Notes: CBI data have been included in Tables 1, 2, and 3; CBI data are not included in Table 4; CBI data are excluded from Tables 5 and 6 to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

HAWAII

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	28
Total Quantity of Regulated Waste Generated:	2,149 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	2
Facilities managing only waste generated off site	1
Facilities managing waste generated both on and off site	1
Total RCRA TSD Facilities (excluding storage-only facilities):	4
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	803 tons
Total RCRA TSD Facilities:	22

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
INCINERATION	M041-M049	1	0	1	1	.2
AQUEOUS INORGANIC TREATMENT	M071-M079	2	32	313	344	42.9
OTHER TREATMENT	M121-M129	1	2	35	37	4.6
LAND TREATMENT	M131	1	420	0	420	52.3
TOTAL		4	454	349	803	100.0
PERCENTAGE		-	56.6 %	43.4 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

HAWAII

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
GU	149
TOTAL	149

Exports

State	Tons Shipped
CA	329
FC	554
FL	3
KS	132
ID	206
NV	2
OR	7
TX	163
WA	53
TOTAL	1,449

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

HAWAII

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D0MX*	1,057	49.2
2	M0MX*	519	24.2
3	D001	159	7.4
4	D003	85	4.0
5	F006	83	3.9
6	D002	74	3.4
7	F002	56	2.6
8	F0MX*	45	2.1
9	D008	31	1.4
10	F005	13	0.6
11	K052	11	0.5
12	D007	10	0.5
13	F001	3	0.1
14	U0MX*	2	0.1
15	K050	1	<0.05
15	U226	1	<0.05
17	D006	0	0.0
17	D009	0	0.0
17	K051	0	0.0
17	F004	0	0.0
17	U220	0	0.0
17	F003	0	0.0
17	P042	0	0.0
17	D013	0	0.0
17	U227	0	0.0
17	U122	0	0.0
17	P104	0	0.0
17	U058	0	0.0
17	U201	0	0.0
17	D005	0	0.0
17	P073	0	0.0
17	D004	0	0.0
17	P057	0	0.0
17	U036	0	0.0
17	U075	0	0.0
17	U129	0	0.0
17	U151	0	0.0
17	U188	0	0.0
17	U223	0	0.0
17	U228	0	0.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

HAWAII

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
INCINERATION	M041-M049	D001	1
AQUEOUS INORGANIC TREATMENT	M071-M079	F006	108
		D002	104
		D007	97
		DOMX*	30
OTHER TREATMENT	M121-M129	D008	24
		D002	13
LAND TREATMENT	M131	MOMX*	420
		K051	0
TOTAL			803

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

Note: CBI data are not included in this table.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

HAWAII

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	HI6170024339	PEARL HARBOR NAVAL SHIPYARD	PEARL HARBOR	609
02	HID981581788	HAWAIIAN WESTERN STEEL LIMITED	EWA	554
03	HIT160010005	CHEVRON U.S.A. INC.	EWA BEACH	427
04	HI1170024334	NAVY PUBLIC WORKS CENTER	PEARL HARBOR	100
05	HI9170090006	NAVAL MAGAZINE LUALUALEI	LUALUALEI	86
06	HI6170022762	MARINE CORPS AIR STATION	KANEOHE BAY	55
07	HI1170024326	NAVAL AIR STATION BARBERS POINT, HI 9686	BARBERS POINT	53
08	HID981990104	MTL, INC. - CLYDE CALHOUN, SUPT.	AIEA	46
09	HI3210022239	SCHOFIELD BARRACKS	WAHIAWA	37
10	HI6170024719	PACIFIC MISSILE RANGE FACILITY HAWAIIAN	KEKAHA	34
11	HI1170024342	NAVAL SUPPLY CENTER	PEARL HARBOR	23
12	HID981990047	MTL, INC. - JAMES MUNEOKA, SUPT.	HONOLULU	22
13	HI8570028722	USAF HDQTRS. 15TH AIR BASE WING	HICKAM AFB	13
14	HI8170090007	SHORE INTERMEDIATE MAINTENANCE	PEARL HARBOR	12
15	HID056786395	HAWAIIAN INDEPENDENT REFINERY, INC.	EWA BEACH	10
16	HID981651698	PACIFIC MACHINERY	WAIPAHU	9
17	HID087190542	UNIVERSITY OF HAWAII-MANOA CAMPUS	HONOLULU	8
18	HI0570090027	UNITED STATES AIR FORCE HDQTRS 15TH AIR	WHEELER AIR FORCE BASE	8
19	HID009198797	HONOLULU WOOD TREATING CO., LTD.	EWA BEACH	7
20	HIT160010047	WESTINGHOUSE ELECTRIC CORPORATION	HONOLULU	7
21	HI2170090052	CAMP H M SMITH	CAMP SMITH	4
22	HID981424385	DOLE PACKAGED FOODS COMPANY DOLE IWILEI	HONOLULU	4
23	HI9210022241	TRIPLER ARMY MEDICAL CENTER TRIPLER AMC	HONOLULU	2
24	HI6214522207	FORT SHAFTER	HONOLULU	1
25	HID980735443	PACIFIC RESOURCES TERMINALS, INC.	HONOLULU	1
26	HI3170090002	DRMO HAWAII	PEARL CITY	0

Note: CBI data are not included in this table to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

HAWAII

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

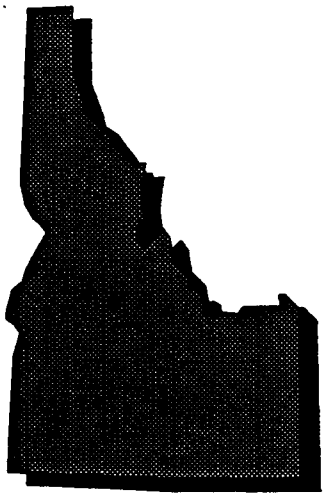
Rank	EPA ID / Site Name, City	Management Method		On Site	Off Site	Method Total	Tot. Manag
1	HIT160010005 CHEVRON U.S.A. INC., EWA BEACH						
		LAND TREATMENT	M131	420	0	420	
2	HI1170024334 NAVY PUBLIC WORKS CENTER, PEARL HARBOR						
		AQUEOUS INORGANIC TREATMENT	M071-M079	2	313	314	
		OTHER TREATMENT	M121-M129	2	35	37	
3	HI6170024719 PACIFIC MISSILE RANGE FACILITY HAWAIIAN, KEKAHA						
		AQUEOUS INORGANIC TREATMENT	M071-M079	30	0	30	
4	HI7210022227 ORDINANCE DISPOSAL AREA MAKUA MILITARY R, WAIANAE						
		INCINERATION	M041-M049	0	1	1	

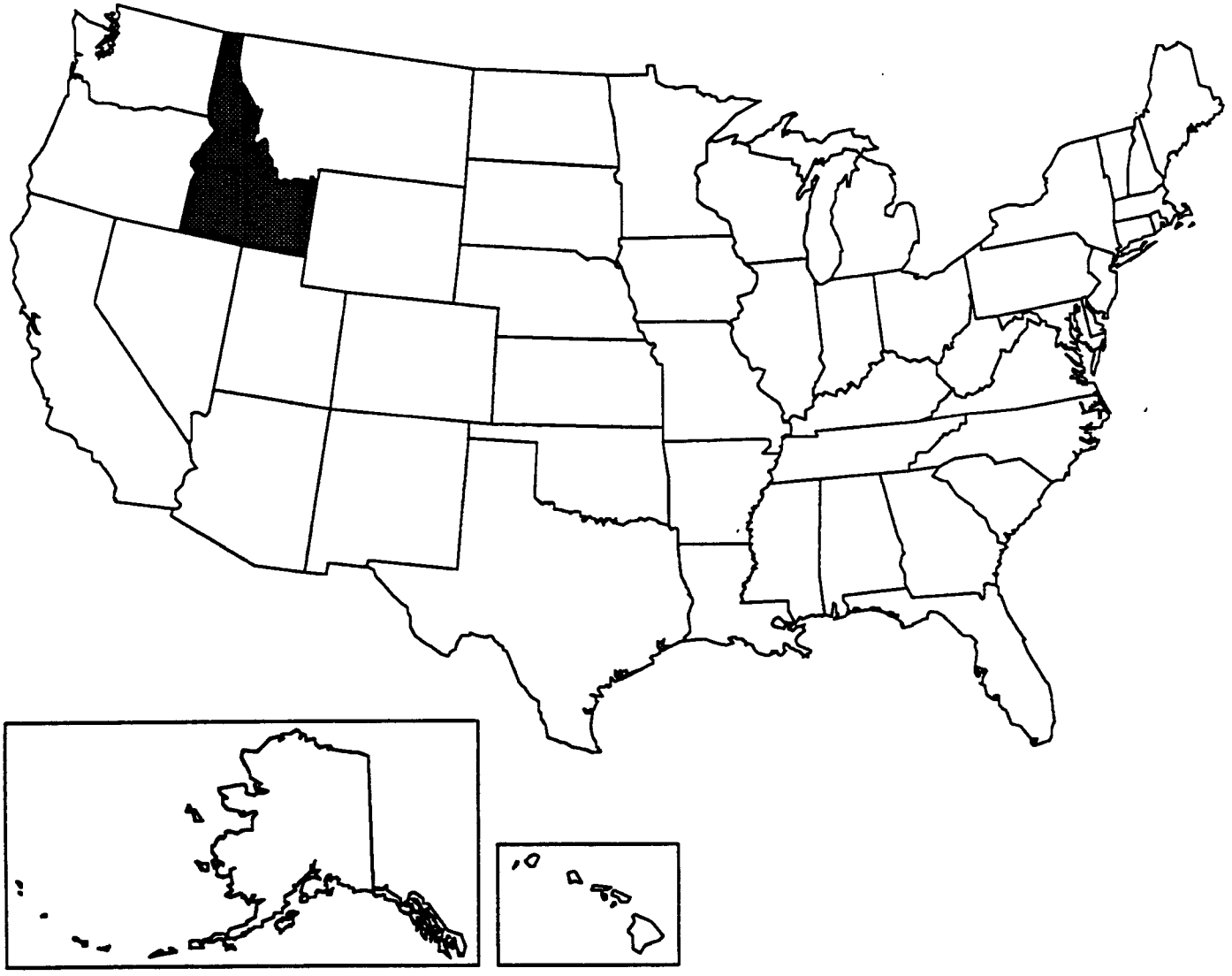
1 Excluding quantity managed by storage only.

Note: CBI data are not included in this table to preserve confidentiality.

Idaho

Region X





IDAHO

EPA Region Address:	U.S. EPA Region X Waste Management Branch Mail Stop HW-112 1200 6th Avenue Seattle, WA 98101
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Division of Environmental Quality Department of Health and Welfare 1410 North Hilton, Second Floor Boise, ID 83706-1253
Contact Name: Phone:	Mr. Chris Pickens (208) 334-5879

Notes: CBI data have been included in Tables 1, 2, and 3; CBI data are not included in Table 4; CBI data are excluded from Tables 5 and 6 to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IDAHO

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	20
Total Quantity of Regulated Waste Generated:	15,062 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	2
Total RCRA TSD Facilities (excluding storage-only facilities):	2
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	45,951 tons
Total RCRA TSD Facilities:	9

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
INCINERATION	M041-M049	1	0	2	2	.0
STABILIZATION	M111-M119	2	117	0	117	.3
OTHER TREATMENT	M121-M129	1	1,456	0	1,456	3.2
LANDFILL	M132	1	1,311	43,065	44,376	96.6
TOTAL		2	2,884	43,067	45,951	100.0
PERCENTAGE		-	6.3 %	93.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IDAHO

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AK	55
AZ	103
CA	23,581
CO	1,480
HI	192
IL	2
KS	43
MO	135
MT	383
ND	2,361
NJ	10
NM	3
NV	105
OR	207
SD	6
UT	2,866
WA	5,114
WI	5
WY	872
TOTAL	37,524

Exports

State	Tons Shipped
AL	10
AR	15
AZ	198
CA	532
CO	497
IL	3
OR	65
TX	2
UT	163
WA	95
TOTAL	1,579

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IDAHO

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	P020	5,508	36.6
2	MONX*	5,261	34.9
3	DONX*	2,007	13.3
4	D002	885	5.9
5	FONX*	457	3.0
6	D008	324	2.2
7	F006	231	1.5
8	D001	111	0.7
9	D003	49	0.3
10	F001	42	0.3
10	F027	42	0.3
12	UONX*	36	0.2
13	D009	20	0.1
13	D007	20	0.1
15	F002	17	0.1
16	D006	13	0.1
17	K001	10	0.1
18	U134	8	0.1
19	D004	7	<0.05
19	D010	7	<0.05
21	D011	2	<0.05
22	F003	1	<0.05
23	P037	0	0.0
23	D014	0	0.0
23	D005	0	0.0
23	U244	0	0.0
23	U122	0	0.0
23	F005	0	0.0
23	P106	0	0.0
23	U044	0	0.0
23	U188	0	0.0
23	U211	0	0.0
23	P092	0	0.0
23	U003	0	0.0
23	U102	0	0.0
23	U165	0	0.0
23	P014	0	0.0
23	P048	0	0.0
23	P093	0	0.0
23	P098	0	0.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IDAHO

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
INCINERATION	M041-M049	DOMX*	2
STABILIZATION	M111-M119	DOMX*	4
OTHER TREATMENT	M121-M129	MOMX*	1,108
		D002	325
		DOMX*	23
TOTAL			1,463

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

Note: CBI data are not included in this table.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IDAHO

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	ID4890008952	U.S. DOE NATIONAL ENGINEERING LABORATORY	SCOVILLE	6,403
02	IDD057201352	SIMCHEM	BOISE	5,508
03	IDD990727471	HEWLETT PACKARD	BOISE	865
04	IDD093120871	MICRON TECHNOLOGY INC	BOISE	263
05	IDD053798104	AMERICAN MICROSYSTEMS INC	POCATELLO	194
06	IDD009066481	BLOUNT INC	LEWISTON	120
07	IDD097762231	ZILOG INC	NAMPA	50
08	IDD055030852	UNION PACIFIC RAILROAD CO - POCATELLO	POCATELLO	50
09	IDD047111018	PRESSURE TREATED TIMBER CO	BOISE	42
10	IDD000602631	UTAH POWER & LIGHT CO - POLE YARD	IDAHO FALLS	36
11	ID0570025874	IDAHO NATIONAL GUARD	BOISE	21
12	IDD063334122	WOODGRAIN MILLWORK INC	FRUITLAND	16
13	IDD009062597	L D MCFARLAND CO	SANDPOINT	10
14	IDD000832444	CHEVRON U.S.A. INC. TWIN FALLS TERMINAL	TWIN FALLS	4
15	ID2122300054	USDA-FS BIG CREEK BRIDGE	KELLOGG	4
16	IDD075746271	UNIVERSITY OF IDAHO - MOSCOW SAFETY OFFI	MOSCOW	2
17	IDD982821175	USDOT-COAST GUARD COEUR D'ALENE ATON	HAYDEN LAKE	1
18	IDD980981559	ROGERS BROTHERS SEED COMPANY	NAMPA	1
19	IDD009061375	POTLATCH CORP - LEWISTON PULP & PAPER CO	LEWISTON	1

Note: CBI data are not included in this table to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IDAHO

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

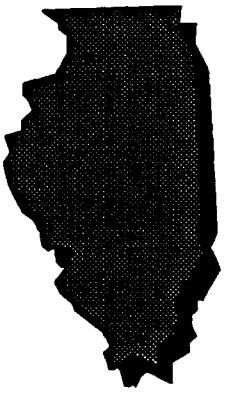
Rank	EPA ID	Site Name, City					Tot Manag
	Management Method			On Site	Off Site	Method Total	
1	ID4890008952	U.S. DOE NATIONAL ENGINEERING LABORATORY, SCOVILLE					1,
	OTHER TREATMENT		M121-M129	1,456	0	1,456	
	STABILIZATION		M111-M119	4	0	4	
	INCINERATION		M041-M049	0	2	2	

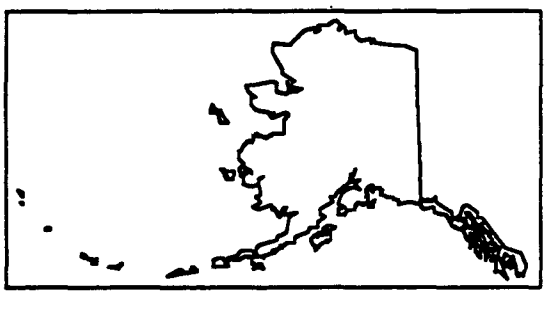
1 Excluding quantity managed by storage only.

Note: CBI data are not included in this table to preserve confidentiality.

Illinois

Region V





ILLINOIS

EPA Region Address:	U.S. EPA Region V Waste Management Division 230 S. Dearborn Street Mail Stop 5HR13 Chicago, IL 60604
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Planning and Data Management Division of Land Pollution Control Illinois Environmental Protection Agency Post Office Box 19276 Springfield, IL 62794-9276
Contact Name:	Mr. William Radlinski Manager
Phone:	(217) 785-0221

Notes: No special notes for Illinois.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ILLINOIS

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	1,425
Total Quantity of Regulated Waste Generated:	1,381,799 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	35
Facilities managing only waste generated off site	18
Facilities managing waste generated both on and off site	8
Total RCRA TSD Facilities (excluding storage-only facilities):	61
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	1,441,365 tons
Total RCRA TSD Facilities:	139

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	6	3,915	75,537	79,452	5.5
SOLVENTS RECOVERY	M021-M029	19	702	60,373	61,075	4.2
OTHER RECOVERY	M031-M039	6	4,510	2,361	6,871	.5
INCINERATION	M041-M049	13	1,398	27,270	28,668	2.0
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	6	2,884	18	2,903	.2
FUEL BLENDING	M061	10	497	41,283	41,780	2.9
AQUEOUS INORGANIC TREATMENT	M071-M079	16	161,860	71,739	233,599	16.2
AQUEOUS ORGANIC TREATMENT	M081-M089	3	775	10,552	11,327	.8
SLUDGE TREATMENT	M101-M109	3	179	21,281	21,459	1.5
STABILIZATION	M111-M119	2	1,990	0	1,990	.1
OTHER TREATMENT	M121-M129	10	280,341	6,903	287,245	19.9
LAND TREATMENT	M131	1	4,786	0	4,786	.3
LANDFILL	M132	6	33,443	139,197	172,641	12.0
UNDERGROUND INJECTION	M134	3	487,527	0	487,527	33.8
INVALID SYSTEM TYPE		5	0	43	43	.0
TOTAL		61	984,807	456,558	1,441,365	100.0
PERCENTAGE		-	68.3 %	31.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ILLINOIS

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	7,476
AR	6,122
AZ	429
CA	2,054
CO	6,785
CT	2,583
DC	5
DE	403
FC	1,006
FL	698
GA	436
IA	20,617
ID	4
IN	43,872
KS	1,705
KY	15,818
LA	450
MA	1,347
MD	770
ME	31
MI	24,976
MN	18,399
MO	48,711
MS	2,771
MT	37
NC	573
ND	688
NE	3,508
NH	1,399
NJ	10,298
NM	155
NV	9
NY	4,876
OH	10,987
OK	255
OR	496
PA	2,981
RI	26
SC	546
SD	450
TN	1,837
TX	5,011
UT	98
VA	432
VT	1
WA	6,603
WI	26,696
WV	454
WY	0
TOTAL	285,886

Exports

State	Tons Shipped
AL	11,787
AR	1,066
CO	0
CT	254
FL	5
GA	11
IA	538
ID	27
IN	86,060
KS	1,986
KY	6,843
LA	5,472
MA	91
MI	8,509
MN	2,765
MO	57,847
MS	11
NC	61
NE	1,561
NJ	1,766
NV	118
NY	231
OH	16,329
OK	25,645
OR	4
PA	864
RI	16
SC	1,689
TN	1,361
TX	1,472
UT	27
VA	1
VT	17
WA	11
WI	10,025
TOTAL	244,472

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ILLINOIS

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D002	808,211	58.5
2	K061	90,777	6.6
3	D004	73,820	5.3
4	K062	67,594	4.9
5	MOMX*	63,515	4.6
6	D001	34,903	2.5
7	F007	34,419	2.5
8	FOMX*	25,721	1.9
9	DOMX*	25,682	1.9
10	K001	25,515	1.8
11	F006	21,184	1.5
12	F003	16,201	1.2
13	D008	15,710	1.1
14	F005	10,846	.8
15	F002	10,238	.7
16	D006	7,399	.5
17	D007	7,010	.5
18	UOMX*	6,984	.5
19	KOMX*	6,973	.5
20	D000	6,640	.5
21	K049	4,723	.3
22	K048	3,941	.3
23	F001	3,334	.2
24	U051	1,972	.1
25	D003	1,397	.1
26	U159	886	.1
27	K094	691	.0
28	D009	677	.0
29	K024	664	.0
30	K046	600	.0
31	K051	469	.0
32	F019	453	.0
33	K086	394	.0
34	F008	328	.0
35	F009	287	.0
36	U220	181	.0
37	U190	122	.0
38	U239	121	.0
39	U019	85	.0
40	K085	84	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ILLINOIS

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	K061	53,100
		D0MX*	17,807
		D002	8,218
		F006	132
SOLVENTS RECOVERY	M021-M029	D001	28,026
		F0MX*	10,631
		F002	9,747
		F001	6,162
OTHER RECOVERY	M031-M039	K0MX*	2,498
		K062	2,010
		D001	1,202
		D002	639
INCINERATION	M041-M049	M0MX*	7,011
		F0MX*	6,073
		D001	4,905
		D0MX*	4,212
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	U0MX*	2,093
		D001	750
		F002	32
		F005	9
FUEL BLENDING	M061	D001	13,369
		F0MX*	9,119
		M0MX*	8,788
		F003	5,341
AQUEOUS INORGANIC TREATMENT	M071-M079	D002	190,847
		D0MX*	12,438
		D007	8,280
		K062	7,937
AQUEOUS ORGANIC TREATMENT	M081-M089	F0MX*	7,811
		D001	3,496
		D002	20
SLUDGE TREATMENT	M101-M109	F006	16,986
		D008	1,405
		K062	927
		D007	910
STABILIZATION	M111-M119	M0MX*	1,988
		D0MX*	2
OTHER TREATMENT	M121-M129	D002	242,968
		F007	34,139
		F006	8,959
		K046	600

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
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Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989 (continued)

Management Method	Code	Waste Type	Quantity Managed in State (tons)
LAND TREATMENT	M131	K048	2,241
		K049	1,773
		K051	402
		D002	351
LANDFILL	M132	K061	66,954
		K046	28,209
		D008	20,445
		F006	15,648
UNDERGROUND INJECTION	M134	D002	369,628
		D004	73,450
		K062	44,449
INVALID SYSTEM TYPE		MOMX*	22
		D001	9
		D002	4
		U144	2
TOTAL			1,441,365

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ILLINOIS

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	ILD006278170	ALLIED-SIGNAL INC	METROPOLIS	404,540
02	ILD042075333	CABOT CORPORATION	TUSCOLA	369,631
03	ILD005463344	ALLIED SIGNAL INC	DANVILLE	73,629
04	ILD000781591	REPUBLIC ENGINEERED STEELS	HENNEPIN	48,469
05	ILD005263157	NORTHWESTERN STEEL & WIRE #2	STERLING	41,705
06	ILD006271696	OLIN CORP	EAST ALTON	39,554
07	ILD984775338	JOSLYN MFG CO	FRANKLIN PARK	25,515
08	ILD010279222	US STEEL CORP	CHICAGO	25,012
09	ILD087157251	ENVIRONMENTAL WASTE RESOURCES	COAL CITY	24,995
10	ILD980613913	SAFETY KLEEN ENVIROSYSTEMS CO	DOLTON	24,116
11	ILD000714881	KEYSTONE STEEL & WIRE CO	BARTONVILLE	14,559
12	ILD000805812	PEORIA DISPOSAL CO #1	PEORIA	10,142
13	ILD005476882	MARATHON PETROLEUM CO	ROBINSON	7,975
14	ILD056623598	LTV STEEL CO	CHICAGO	7,560
15	ILD098642424	TRADE WASTE INCINERATION INC	SAUGET	7,362
16	ILD980793020	NUTRASWEET INC	UNIVERSITY PARK	6,696
17	ILD000672329	SAUGET WWTP	SAUGET	5,393
18	ILD000672121	CWM CHEMICAL SERVICES INC	CHICAGO	5,078
19	ILD005215769	HENKEL CORP	KANKAKEE	4,688
20	ILD054236443	3-M COMPANY	CORDOVA	4,681
21	ILD066918327	CLAYTON CHEMICAL CO	SAUGET	4,343
22	ILD057836256	THE STEEL CO	CHICAGO	4,231
23	ILD080012305	SHELL OIL CO	ROXANA	4,181
24	ILD074411745	LARAWAY RECYCLING & DISP FAC	ELWOOD	3,990
25	ILD005456439	SHERWIN WILLIAMS CO	CHICAGO	3,782
26	ILD065873630	LAND & LAKES/WILLOW RANCH	ROMEOVILLE	3,743
27	ILD005174404	TEEPAK INC	DANVILLE	3,711
28	ILD045683810	MARCROS CHEMICAL INC	CHICAGO	3,545
29	ILT180019713	ACCUTRONICS	CARY	3,437
30	ILD069496248	HANNAH MARINE CORP	LEMONT	3,312
31	ILD000805911	SAFETY-KLEEN CORP	ELGIN	3,215
32	ILD001309657	CHICAGO MAGNET WIRE CORP	ELK GROVE VILLAGE	3,160
33	ILD005450697	SAFETY-KLEEN CORP	CHICAGO	2,923
34	ILD055409940	ABBOTT LABORATORIES	NORTH CHICAGO	2,855
35	ILD064403199	MOBIL OIL CORP	JOLIET	2,844
36	ILD005083316	CARGILL INC	CARPENTERSVILLE	2,768
37	ILD062480850	ENTECH RECOVERY INC	JOLIET	2,646
38	ILD005164611	KOPPERS INDUSTRIES INC	CHICAGO	2,638
39	ILD070012265	EMPIRE GALVANIZING	FRANKLIN PARK	2,634
40	ILD005096664	H H HOWARD COMPANY	CHICAGO	2,561

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ILLINOIS

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

ank	EPA ID / Management Method	Site Name, City	On Site	Off Site	Method Total	Total Managed 1
1	ILD006278170	ALLIED-SIGNAL INC., METROPOLIS				404,540
	OTHER TREATMENT	M121-M129	242,966	0	242,966	
	AQUEOUS INORGANIC TREATMENT	M071-M079	161,574	0	161,574	
2	ILD042075333	CABOT CORPORATION, TUSCOLA				369,628
	UNDERGROUND INJECTION	M134	369,628	0	369,628	
3	ILD000805812	PEORIA DISPOSAL CO #1, PEORIA				111,077
	LANDFILL	M132	6,738	104,340	111,077	
4	ILD005463344	ALLIED SIGNAL INC., DANVILLE				73,450
	UNDERGROUND INJECTION	M134	73,450	0	73,450	
5	ILD000666206	ENVIRITE CORP., HARVEY				58,601
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	37,313	37,313	
	SLUDGE TREATMENT	M101-M109	0	21,281	21,281	
	OTHER TREATMENT	M121-M129	0	7	7	
6	ILD010284248	CID #1, CALUMET CITY				52,221
	LANDFILL	M132	421	30,881	31,302	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	13,629	13,629	
	OTHER TREATMENT	M121-M129	422	6,866	7,288	
	INVALID SYSTEM TYPE		0	2	2	
7	ILD040891368	HORSEHEAD RESOURCE DEVELOPMENT, CHICAGO				49,239
	METALS RECOVERY (FOR REUSE)	M011-M019	0	49,239	49,239	
8	ILD000781591	REPUBLIC ENGINEERED STEELS, HENNEPIN				46,459
	UNDERGROUND INJECTION	M134	44,449	0	44,449	
	OTHER RECOVERY	M031-M039	2,010	0	2,010	
9	ILD006271696	OLIN CORP., EAST ALTON				37,184
	OTHER TREATMENT	M121-M129	36,865	0	36,865	
	SLUDGE TREATMENT	M101-M109	170	0	170	
	INCINERATION	M041-M049	123	27	150	
10	ILD980613913	SAFETY KLEEN ENVIROSYSTEMS CO., DOLTON				30,335
	SOLVENTS RECOVERY	M021-M029	27	15,961	15,987	
	FUEL BLENDING	M061	380	13,898	14,278	
	OTHER RECOVERY	M031-M039	0	54	54	
	INCINERATION	M041-M049	0	16	16	
11	ILD005263157	NORTHWESTERN STEEL & WIRE #2, STERLING				30,145
	LANDFILL	M132	26,284	0	26,284	
	METALS RECOVERY (FOR REUSE)	M011-M019	3,860	0	3,860	
12	ILD000805911	SAFETY-KLEEN CORP., ELGIN				29,942
	SOLVENTS RECOVERY	M021-M029	0	29,942	29,942	
13	ILD062480850	ENTECH RECOVERY INC., JOLIET				26,119
	METALS RECOVERY (FOR REUSE)	M011-M019	0	26,119	26,119	
14	ILD087157251	ENVIRONMENTAL WASTE RESOURCES, COAL CITY				23,022
	FUEL BLENDING	M061	0	22,104	22,104	
	SOLVENTS RECOVERY	M021-M029	0	918	918	
15	ILD000608471	CLEAN HARBORS OF CHICAGO INC., CHICAGO				20,639
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	20,639	20,639	
16	ILD000672121	CWM CHEMICAL SERVICES INC., CHICAGO				14,814
	INCINERATION	M041-M049	0	14,813	14,813	
	INVALID SYSTEM TYPE		0	1	1	
17	ILD098642424	TRADE WASTE INCINERATION INC., SAUGET				12,400
	INCINERATION	M041-M049	0	12,399	12,399	
	SOLVENTS RECOVERY	M021-M029	0	1	1	

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cluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

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TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tota Manage
18	ILD099215303 CENTURY RESOURCES INC., ALSIP					10,1
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	8,897	8,897	
	OTHER RECOVERY	M031-M039	0	1,230	1,230	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	27	27	
	OTHER TREATMENT	M121-M129	0	8	8	
19	ILD005450697 SAFETY-KLEEN CORP., CHICAGO					9,9
	SOLVENTS RECOVERY	M021-M029	0	9,532	9,532	
	OTHER RECOVERY	M031-M039	0	438	438	
20	ILD066918327 CLAYTON CHEMICAL CO., SAUGET					6,3
	SOLVENTS RECOVERY	M021-M029	0	3,504	3,504	
	FUEL BLENDING	M061	0	2,756	2,756	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	130	130	
21	ILD005476882 MARATHON PETROLEUM CO., ROBINSON					4,3
	LAND TREATMENT	M131	4,786	0	4,786	
22	ILD980700728 BROWNING-FERRIS INDUSTRIES #1, ZION					3,4
	LANDFILL	M132	0	3,976	3,976	
23	ILD064418353 BEAVER OIL CO INC., HODGKINS					3,1
	AQUEOUS ORGANIC TREATMENT	M081-M089	775	1,655	2,430	
	OTHER RECOVERY	M031-M039	0	639	639	
24	ILD085349264 HERITAGE ENVIRONMENTAL SERVICE, LEMONT					2,4
	FUEL BLENDING	M061	0	2,465	2,465	
	INVALID SYSTEM TYPE		0	40	40	
25	ILD064403199 MOBIL OIL CORP., JOLIET					2,
	OTHER RECOVERY	M031-M039	2,500	0	2,500	
26	ILD042659672 NATIONAL MARINE SERVICE INC., HARTFORD					2,
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2,107	0	2,107	
27	ILT180019713 ACCUTRONICS, CARY					1,
	STABILIZATION	M111-M119	1,988	0	1,988	
28	ILD054236443 3-M COMPANY, CORDOVA					1,
	INCINERATION	M041-M049	1,173	0	1,173	
29	ILD062410550 MORTON INTERNATIONAL INC., RINGWOOD					
	SOLVENTS RECOVERY	M021-M029	595	0	595	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	162	0	162	
	INCINERATION	M041-M049	24	0	24	
30	ILD093154599 DOW CHEMICAL COMPANY, CHANNAHON					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	569	0	569	
31	ILD051937068 BARON BLAKESLEE, CICERO					
	SOLVENTS RECOVERY	M021-M029	0	344	344	
32	ILD005471503 WOODSTOCK DIE CAST INC., WOODSTOCK					
	AQUEOUS INORGANIC TREATMENT	M071-M079	223	0	223	
	OTHER TREATMENT	M121-M129	82	0	82	
	SOLVENTS RECOVERY	M021-M029	11	0	11	
33	ILD005087630 UNITED REFINING & SMELTING CO., FRANKLIN PARK					
	METALS RECOVERY (FOR REUSE)	M011-M019	0	178	178	
34	ILD000781633 VAN WATERS & ROGERS INC., NORMAL					
	SOLVENTS RECOVERY	M021-M029	0	91	91	
	FUEL BLENDING	M061	0	50	50	
	INCINERATION	M041-M049	0	15	15	
	LANDFILL	M132	0	0	0	

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1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

ILLINOIS

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

ank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
35	ILD079751319 MOTOROLA INC., FRANKLIN PARK					77
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	44	0	44	
	SOLVENTS RECOVERY	M021-M029	20	0	20	
	AQUEOUS INORGANIC TREATMENT	M071-M079	13	0	13	
36	ILD005522982 BOBCO ENTERPRISES INC., CHICAGO					63
	METALS RECOVERY (FOR REUSE)	M011-M019	45	0	45	
	AQUEOUS INORGANIC TREATMENT	M071-M079	18	0	18	
37	ILD057863847 ALLIED TUBE & CONDUIT CORP., HARVEY					59
	FUEL BLENDING	M061	59	0	59	
38	ILD010219665 SUNDSTRAND AVIATION, ROCKFORD					56
	SOLVENTS RECOVERY	M021-M029	0	56	56	
	INVALID SYSTEM TYPE		0	0	0	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
39	ILD055409940 ABBOTT LABORATORIES, NORTH CHICAGO					47
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	18	18	
	SOLVENTS RECOVERY	M021-M029	0	18	18	
	FUEL BLENDING	M061	0	10	10	
	INVALID SYSTEM TYPE		0	0	0	
40	ILD005199013 BRIDGESTONE-FIRESTONE INC., DECATUR					40
	FUEL BLENDING	M061	34	0	34	
	INCINERATION	M041-M049	6	0	6	

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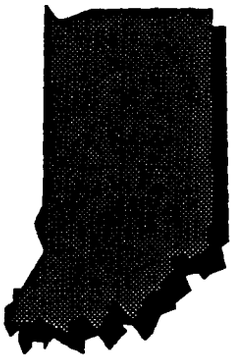
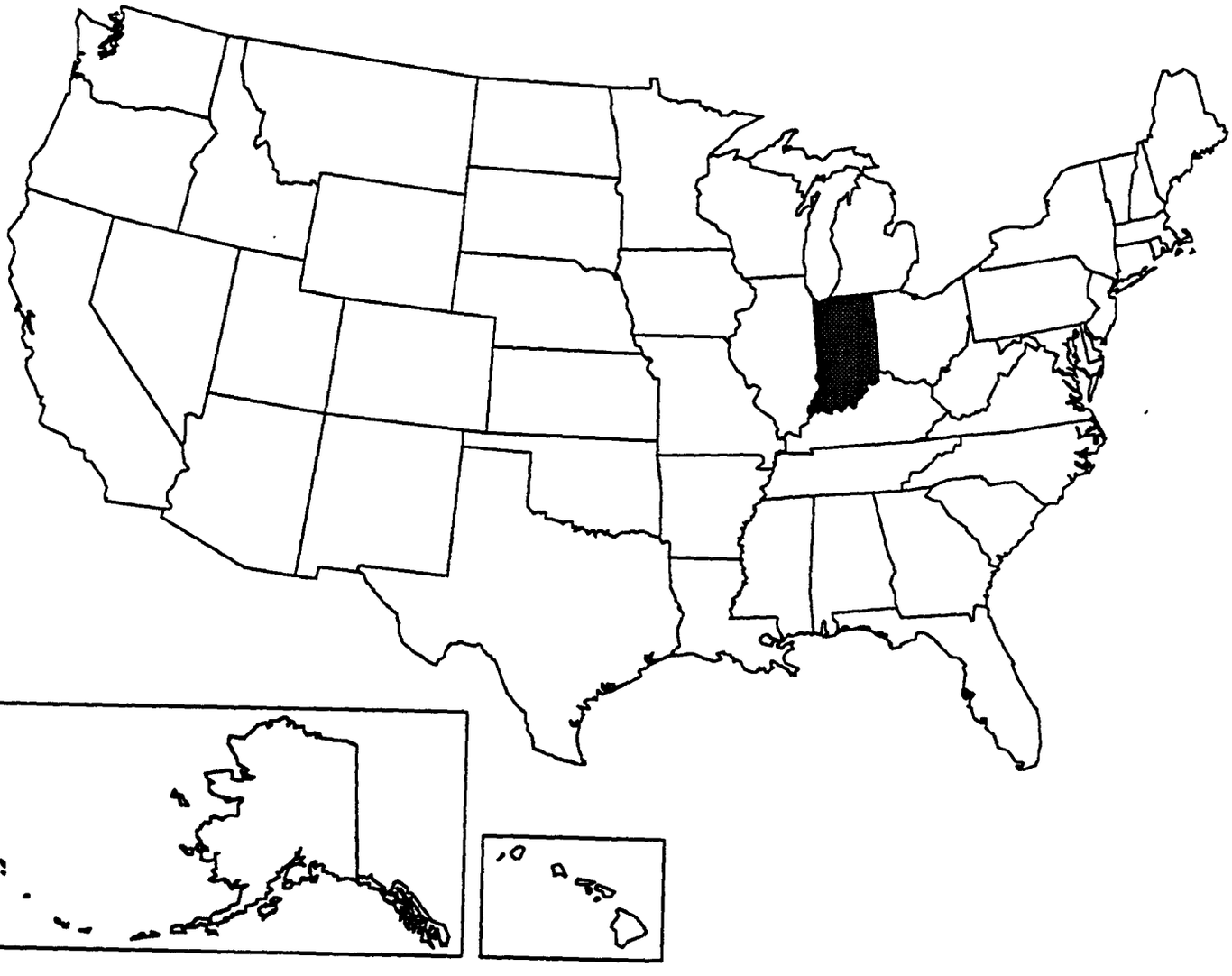
cluding quantity managed by storage only.

Indiana

Region V





INDIANA

EPA Region Address:	U.S. EPA Region V Waste Management Division 230 S. Dearborn Street Mail Stop 5HR13 Chicago, IL 60604
Biennial Report Data Collection Instrument:	State-specific annual report
Address of Participating State Environmental Authority	Solid and Hazardous Waste Office Department of Environmental Management 105 South Meridian Street Post Office Box 6015 Indianapolis, IN 46206-6015
Contact Name:	Ms. Jenny Ranck Dooley Environmental Manager
Phone:	(317) 232-8925

Notes: No special notes for Indiana.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

INDIANA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	697
Total Quantity of Regulated Waste Generated:	1,843,015 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	21
Facilities managing only waste generated off site	14
Facilities managing waste generated both on and off site	9
Total RCRA TSD Facilities (excluding storage-only facilities):	44
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	2,021,016 tons
Total RCRA TSD Facilities:	44

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	3	116	13,764	13,880	.7
SOLVENTS RECOVERY	M021-M029	10	185	17,985	18,170	.9
OTHER RECOVERY	M031-M039	4	0	7,055	7,055	.3
INCINERATION	M041-M049	9	3,138	32,220	35,358	1.7
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	4	230	81,076	81,306	4.0
FUEL BLENDING	M061	12	909	29,157	30,067	1.5
AQUEOUS INORGANIC TREATMENT	M071-M079	4	115,964	200,632	316,596	15.7
SLUDGE TREATMENT	M101-M109	2	10,522	0	10,522	.5
STABILIZATION	M111-M119	4	203,865	0	203,865	10.1
OTHER TREATMENT	M121-M129	7	1,097	25,198	26,294	1.3
LANDFILL	M132	7	1,252	329,506	330,758	16.4
UNDERGROUND INJECTION	M134	5	944,679	658	945,336	46.8
OTHER DISPOSAL	M137	1	0	1	1	.0
INVALID SYSTEM TYPE		5	0	1,809	1,809	.1
TOTAL		44	1,281,957	739,060	2,021,016	100.0
PERCENTAGE		-	63.4 %	36.6 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

INDIANA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	1,641
AR	749
AZ	3
CA	168
CO	2
CT	9,134
DE	88
FL	193
GA	119
IA	4,159
IL	66,181
KS	166
KY	17,405
LA	9
MA	4,276
MD	727
ME	32
MI	65,337
MN	2,478
MO	7,267
MS	79
MT	28
NC	2,854
ND	24
NE	22
NH	11
NJ	24,301
NM	3
NV	4
NY	2,501
OH	64,455
PA	23,628
RI	209
SC	620
SD	136
TN	1,905
TX	367
UT	2
VA	1,193
VT	1
WI	8,667
WV	2,340
TOTAL	313,484

Exports

State	Tons Shipped
AL	1,139
AR	4,375
CA	0
CO	2
CT	54
FC	144
FL	5
GA	211
IL	40,005
KS	655
KY	25,377
LA	1,145
MA	6
MI	8,651
MN	840
MO	5,155
NC	14
NE	3,677
NJ	12
NY	0
OH	36,740
OK	11
OR	40
PA	1,321
RI	2
SC	424
TN	609
TX	106
WI	1,253
WV	340
TOTAL	132,313

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

INDIANA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	K062	780,096	42.3
2	D010	370,858	20.1
3	F006	272,342	14.8
4	D001	127,305	6.9
5	FOMX*	60,215	3.3
6	DOMX*	46,900	2.5
7	F019	32,660	1.8
8	D008	29,246	1.6
9	F003	24,095	1.3
10	MOMX*	20,679	1.1
11	F001	18,014	1.0
12	KOMX*	15,251	.8
13	D002	14,915	.8
14	K061	8,433	.5
15	D007	8,160	.4
16	F008	3,452	.2
17	F005	2,819	.2
18	F002	2,484	.1
19	F007	2,043	.1
20	UOMX*	493	.0
21	D003	477	.0
22	P001	360	.0
23	D006	325	.0
24	U201	227	.0
25	K051	194	.0
26	F009	190	.0
27	K052	133	.0
28	U051	123	.0
29	U228	99	.0
30	D004	97	.0
31	K086	60	.0
32	D005	53	.0
33	K050	39	.0
34	K048	30	.0
35	U058	23	.0
36	D009	18	.0
37	LABP	16	.0
38	U188	13	.0
39	K022	13	.0
40	P003	10	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

INDIANA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	F003	8,433
		D002	2,679
		F007	1,869
		F008	783
SOLVENTS RECOVERY	M021-M029	D001	9,758
		F0MX*	2,995
		F003	2,357
		F005	2,141
OTHER RECOVERY	M031-M039	D001	4,719
		D007	1,604
		D008	560
		D0MX*	137
INCINERATION	M041-M049	F003	12,326
		D001	11,350
		F0MX*	10,209
		M0MX*	1,287
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	F0MX*	37,582
		M0MX*	13,910
		D001	10,286
		K0MX*	7,418
FUEL BLENDING	M061	F0MX*	7,118
		D001	6,726
		F003	5,275
		M0MX*	4,306
AQUEOUS INORGANIC TREATMENT	M071-M079	K062	248,190
		F006	36,586
		D0MX*	12,654
		K061	5,180
SLUDGE TREATMENT	M101-M109	F006	10,310
		D007	212
STABILIZATION	M111-M119	F006	182,506
		F019	19,516
		D008	1,836
		K051	7
OTHER TREATMENT	M121-M129	D0MX*	13,268
		D002	7,695
		M0MX*	3,719
		K062	579
LANDFILL	M132	M0MX*	99,591
		D0MX*	61,024
		F006	42,204
		D008	33,452

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

INDIANA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989 (continued)

Management Method	Code	Waste Type	Quantity Managed in State (tons)
UNDERGROUND INJECTION	M134	K062	574,478
		D010	370,858
		D002	1
OTHER DISPOSAL	M137	F002	1
		D001	0
INVALID SYSTEM TYPE		MOMX*	972
		F002	448
		D001	129
		F001	57
TOTAL			2,021,016

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

INDIANA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	IND005159199	INLAND STEEL COMPANY	EAST CHICAGO	434,612
02	IND003913423	BETHLEHEM STEEL CORP. BURNS HARBOR	BURNS HARBOR,	420,578
03	IND016584641	MIDWEST STEEL COMPANY	PORTAGE	307,659
04	IND005444062	US STEEL - GARY WORKS	GARY	107,696
05	IND000806935	ELI LILLY & CO	INDIANAPOLIS	85,350
06	IND005462601	LTV STEEL COMPANY INC	EAST CHICAGO	84,326
07	IND093219012	HERITAGE ENVIRONMENTAL SERVICES INC	INDIANAPOLIS	66,006
08	IND006366819	ALCOA--WARRICK	NEWBURGH	30,588
09	IND078911146	CHEMICAL WASTE MANAGEMENT OF INDIANA	FORT WAYNE	28,672
10	IND006420699	FORD ELECTRONICS & REFRIGERATION	CONNERSVILLE	24,633
11	IND005470885	DANA CORPORATION SPICER AXLE DIV.	FORT WAYNE	15,075
12	IND006417430	MARATHON PETROLEUM COMPANY	INDIANAPOLIS	12,714
13	IND006048417	ELI LILLY & CO	INDIANAPOLIS	12,014
14	IND000806836	GM--PLANT 5 ALLISON GAS TURBINE	INDIANAPOLIS	10,715
15	IND000810903	ARVIN NORTH AMERICAN AUTOMOTIVE	NORTH VERNON	9,967
16	IND006050967	ELI LILLY & CO-TIPPECANOE LABS	SHADELAND	9,614
17	IND072040348	ELI LILLY & CO-CLINTON LABS	CLINTON	9,233
18	IND016360265	AMERICAN CHEMICAL SERVICE	GRIFFITH	7,820
19	IND000780544	FOUR COUNTY LANDFILL	ROCHESTER	7,704
20	IND000780403	RECLAIMED ENERGY CO INC.	CONNERSVILLE	7,692
21	IND000646943	POLLUTION CONTROL INDUSTRIES/AMERICA INC	EAST CHICAGO	7,367
22	IND081534075	IBM GREEN CASTLE INDIANA	GREENCASTLE	7,226
23	IND087032611	CHRYSLER CORPORATION INDPLS FOUNDRY	INDIANAPOLIS	5,231
24	IND005557244	CORNING GLASS WORKS	BLUFFTON	4,873
25	IND981802598	SUPERIOR FIBERGLASS AND RESINS	ELKHART	4,149
26	IND980684252	AMOCO CHEMICALS CORPORATION	WHITING	3,049
27	IND980502074	OWENS-CORNING FIBERGLAS	VALPARAISO	2,927
28	IND000646950	TITAN OIL COMPANY	INDIANAPOLIS	2,830
29	IND000199653	QUEMETCO, INC.	INDIANAPOLIS	2,754
30	IND006417620	THOMSON CONSUMER ELECTRONICS	MARION	2,713
31	IND005444732	AMG RESOURCES CORPORATION VULCAN MATERIA	GARY	2,461
32	IND980503825	GMC-DELCO REMY ANDERSON	ANDERSON	2,452
33	IND093220861	AVESTA INC	NEW CASTLE	2,383
34	IND181157009	NUCOR STEEL	CRAWFORDSVILLE	2,376
35	IND098138936	DELTA FAUCET COMPANY	GREENSBURG	2,264
36	IND000810861	AMOCO OIL CO. WHITING LAKEFRONT	WHITING	2,178
37	IND005460209	MASON METALS & CHEMICAL CO.	SCHERERVILLE	2,166
38	IND005081955	GLOBE VALVE CORPORATION	DELPHI	2,041
39	IND006932305	THOMSON CONSUMER ELECTRONICS INC	INDIANAPOLIS	1,949
40	IND000714428	SAFETY KLEEN CORP .5-034-06	PORTAGE	1,856

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

INDIANA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

ank	EPA ID / Management Method	Site Name, City	On Site	Off Site	Method Total	Total Managed 1
1	IND005159199	INLAND STEEL COMPANY, EAST CHICAGO				425,665
	UNDERGROUND INJECTION	M134	425,008	657	425,665	
2	IND003913423	BETHLEHEM STEEL CORP. BURNS HARBOR, BURNS HARBOR,				403,769
	UNDERGROUND INJECTION	M134	403,769	0	403,769	
3	IND016584641	MIDWEST STEEL COMPANY, PORTAGE				307,412
	STABILIZATION	M111-M119	182,506	0	182,506	
	UNDERGROUND INJECTION	M134	113,843	0	113,843	
	SLUDGE TREATMENT	M101-M109	10,310	0	10,310	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	753	753	
4	IND078911146	CHEMICAL WASTE MANAGEMENT OF INDIANA, FORT WAYNE				219,276
	LANDFILL	M132	1,017	218,259	219,276	
5	IND000714840	KA STEEL CHEMICALS, INC., GARY				142,828
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	142,828	142,828	
6	IND005444062	US STEEL - GARY WORKS, GARY				107,334
	AQUEOUS INORGANIC TREATMENT	M071-M079	105,275	0	105,275	
	UNDERGROUND INJECTION	M134	2,059	0	2,059	
7	IND093219012	HERITAGE ENVIRONMENTAL SERVICES INC., INDIANAPOLIS				102,247
	AQUEOUS INORGANIC TREATMENT	M071-M079	10,689	57,051	67,740	
	OTHER TREATMENT	M121-M129	425	25,181	25,606	
	FUEL BLENDING	M061	149	6,374	6,523	
	OTHER RECOVERY	M031-M039	0	2,379	2,379	
8	IND980503890	HERITAGE ENVIRONMENTAL SERVICES (HES), ROACHDALE				69,421
	LANDFILL	M132	0	69,421	69,421	
9	IND000780544	FOUR COUNTY LANDFILL, ROCHESTER				41,766
	LANDFILL	M132	0	41,766	41,766	
10	IND072040348	ELI LILLY & CO-CLINTON LABS, CLINTON				40,766
	INCINERATION	M041-M049	0	31,780	31,780	
	SOLVENTS RECOVERY	M021-M029	0	8,986	8,986	
11	IND006419212	LONE STAR INDUSTRIES INC., GREENCASTLE				37,788
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	21	37,200	37,221	
	FUEL BLENDING	M061	290	278	567	
12	IND005081542	ESSROC MATERIALS INC., LOGANSPORT				35,834
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	35,834	35,834	
13	IND006366819	ALCOA--WARRICK, NEWBURGH				19,516
	STABILIZATION	M111-M119	19,516	0	19,516	
14	IND005460209	MASON METALS & CHEMICAL CO., SCHERERVILLE				13,764
	METALS RECOVERY (FOR REUSE)	M011-M019	0	13,764	13,764	
15	IND016360265	AMERICAN CHEMICAL SERVICE, GRIFFITH				11,298
	FUEL BLENDING	M061	0	9,924	9,924	
	INVALID SYSTEM TYPE		0	1,374	1,374	
16	IND000780403	RECLAIMED ENERGY CO INC., CONNERSVILLE				10,632
	SOLVENTS RECOVERY	M021-M029	0	8,552	8,552	
	FUEL BLENDING	M061	0	2,046	2,046	
	INVALID SYSTEM TYPE		0	34	34	
17	IND000646943	POLLUTION CONTROL INDUSTRIES/AMERICA INC., EAST CHICAGO				8,313
	FUEL BLENDING	M061	0	8,222	8,222	
	INVALID SYSTEM TYPE		0	74	74	
	OTHER TREATMENT	M121-M129	0	16	16	
18	IND001859032	RHONE-POULENC, HAMMOND				8,234
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	192	8,042	8,234	

cluding quantity managed by storage only.

INDIANA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
19	IND077042034 BRESLUBE USA, INC., EAST CHICAGO					4,
	OTHER RECOVERY	M031-M039	0	4,644	4,644	
20	IND980502074 OWENS-CORNING FIBERGLAS, VALPARAISO					2,
	INCINERATION	M041-M049	2,875	0	2,875	
21	IND005146683 FORD METER BOX CO., INC., WABASH					1,
	STABILIZATION	M111-M119	1,836	0	1,836	
22	IND085616837 DETREX CORPORATION SOLVENTS DIV., INDIANAPOLIS					1,
	FUEL BLENDING	M061	0	1,514	1,514	
23	IND984866541 AVGANIC INDUSTRIES INC., TERRE HAUTE					
	FUEL BLENDING	M061	74	355	430	
	INVALID SYSTEM TYPE		0	314	314	
24	IND000803726 GENERAL ELECTRIC, BLOOMINGTON					
	FUEL BLENDING	M061	336	0	336	
	SLUDGE TREATMENT	M101-M109	212	0	212	
	INCINERATION	M041-M049	80	0	80	
	SOLVENTS RECOVERY	M021-M029	77	0	77	
25	IND005449830 UNIROYAL, INC., MISHAWAKA					
	FUEL BLENDING	M061	2	401	402	
	INCINERATION	M041-M049	153	0	153	
26	IND000714832 IRECO INC., KINGSBURY					
	OTHER TREATMENT	M121-M129	384	0	384	
27	IND006050967 ELI LILLY & CO-TIPPECANOE LABS, SHADELAND					
	INCINERATION	M041-M049	0	378	378	
	OTHER RECOVERY	M031-M039	0	4	4	
	OTHER TREATMENT	M121-M129	0	0	0	
28	IND098958283 CONSOLIDATED RECYCLING CO, INC., TROY					
	SOLVENTS RECOVERY	M021-M029	0	317	317	
29	IN9210020443 US ARMY IND ARMY AMMO PLT, CHARLESTOWN					
	OTHER TREATMENT	M121-M129	268	0	268	
30	IND016621476 ASHLAND CHEMICAL INC., SOUTH BEND					
	INCINERATION	M041-M049	4	61	66	
	LANDFILL	M132	0	59	59	
	SOLVENTS RECOVERY	M021-M029	0	47	47	
	FUEL BLENDING	M061	0	44	44	
	OTHER RECOVERY	M031-M039	0	27	27	
	OTHER DISPOSAL	M137	0	1	1	
	UNDERGROUND INJECTION	M134	0	1	1	
31	IND007001050 WINDSOR PLASTICS INC., EVANSVILLE					
	LANDFILL	M132	117	0	117	
32	IND000718130 REFINED METALS CORP., BEECH GROVE					
	METALS RECOVERY (FOR REUSE)	M011-M019	116	0	116	
33	IND004320032 REA MAGNET WIRE COMPANY, FORT WAYNE					
	SOLVENTS RECOVERY	M021-M029	0	84	84	
	INVALID SYSTEM TYPE		0	12	12	
34	IND046170569 WAYNE CORPORATION, RICHMOND					
	SOLVENTS RECOVERY	M021-M029	66	0	66	
	INCINERATION	M041-M049	21	0	21	
35	IND984867481 HAYNES INTERNATIONAL INC., KOKOMO					
	LANDFILL	M132	64	0	64	

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1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

INDIANA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

nk	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
36	IND000708545 VISKASE CORPORATION, KENTLAND					54
	FUEL BLENDING	M061	52	0	52	
	SOLVENTS RECOVERY	M021-M029	2	0	2	
37	IND005177050 FRANKE PLATING WORKS, INC., FORT WAYNE					54
	LANDFILL	M132	54	0	54	
38	IND980700801 GMC INLAND FISHER GUIDE DIV., ANDERSON					26
	SOLVENTS RECOVERY	M021-M029	15	0	15	
	FUEL BLENDING	M061	6	0	6	
	INCINERATION	M041-M049	5	0	5	
39	IND000806836 GM--PLANT 5 ALLISON GAS TURBINE, INDIANAPOLIS					25
	SOLVENTS RECOVERY	M021-M029	25	0	25	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	0	0	
40	IN5210020454 US ARMY JEFFERSON PROVING GROUND, MADISON					19
	OTHER TREATMENT	M121-M129	19	0	19	

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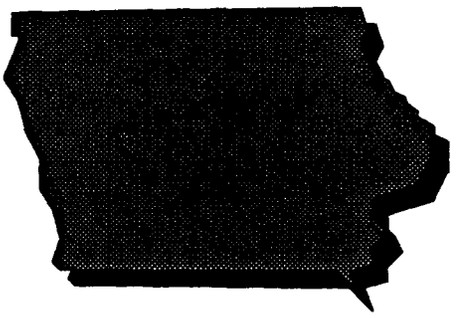
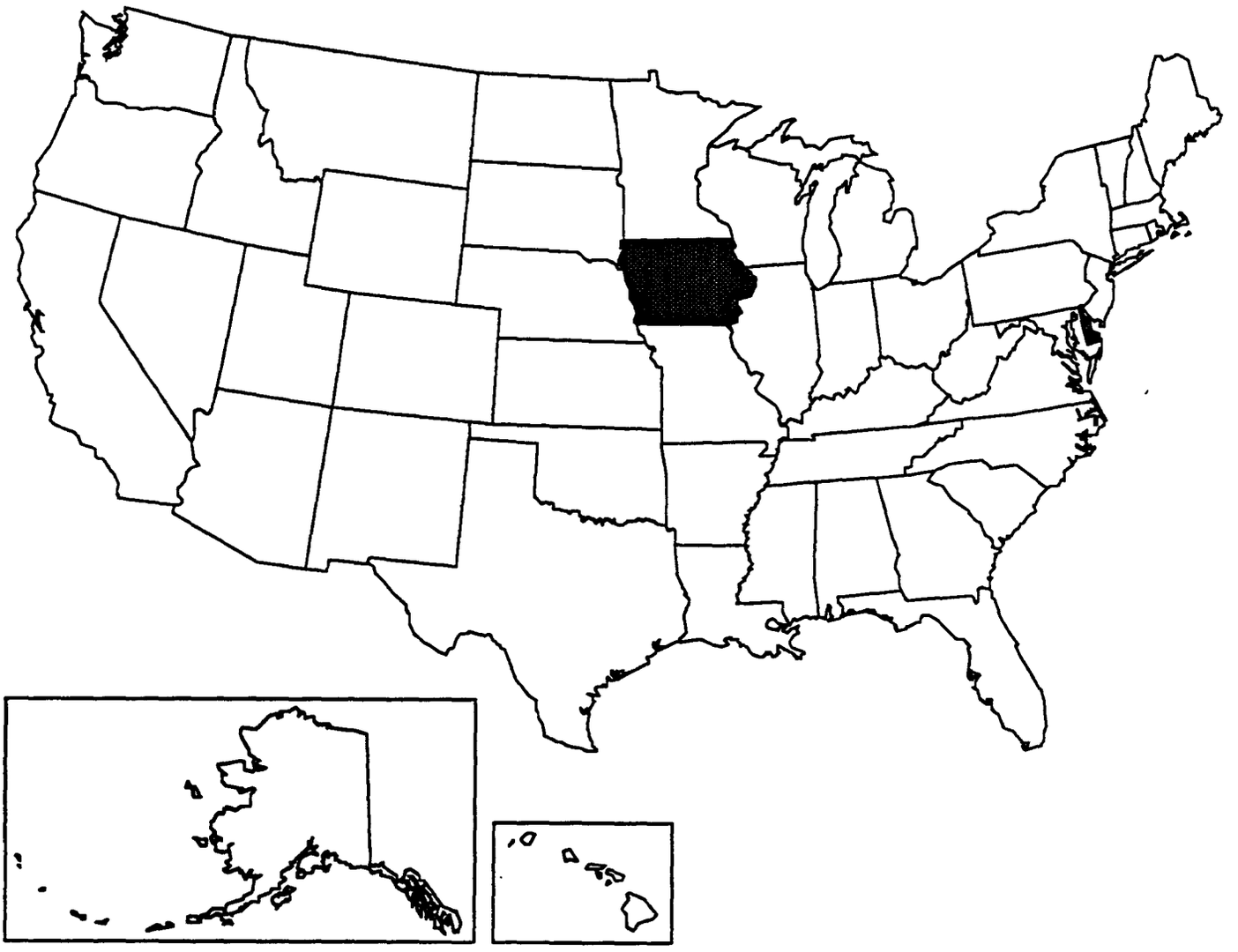
luding quantity managed by storage only.

Iowa

Region VII





IOWA

EPA Region Address:	U.S. EPA Region VII RCRA, Waste Management Division RCRA RADM 726 Minnesota Avenue Kansas City, KS 66101
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Region VII U.S. Environmental Protection Agency 726 Minnesota Avenue Kansas City, KS 66101
Contact Name:	Mr. Jim Callier Chief, Iowa Section, RCRA Branch
Phone:	(913) 551-7058

Notes: No special notes for Iowa.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IOWA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	131
Total Quantity of Regulated Waste Generated:	76,240 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	8
Facilities managing only waste generated off site	1
Facilities managing waste generated both on and off site	2
Total RCRA TSD Facilities (excluding storage-only facilities):	11
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	74,653 tons
Total RCRA TSD Facilities:	30

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	1	0	0	0	.0
SOLVENTS RECOVERY	M021-M029	3	27	0	27	.0
INCINERATION	M041-M049	3	3,014	0	3,014	4.0
FUEL BLENDING	M061	1	0	4	4	.0
AQUEOUS INORGANIC TREATMENT	M071-M079	4	51,953	0	51,953	69.6
AQUEOUS ORGANIC TREATMENT	M081-M089	1	0	0	0	.0
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	35	0	35	.0
OTHER TREATMENT	M121-M129	3	11,561	8,057	19,619	26.3
TOTAL		11	66,591	8,061	74,653	100.0
PERCENTAGE		-	89.2 %	10.8 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IOWA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
IL	687
WI	1,643
TOTAL	2,330

Exports

State	Tons Shipped
AL	519
AR	25
AZ	122
CA	41
CT	3
GA	1
IL	10,434
IN	204
KS	377
KY	412
LA	333
MI	208
MN	706
MO	965
MT	1
NC	0
NE	256
NJ	2
NY	0
OH	309
OK	470
OR	22
SD	24
TN	4
TX	719
UT	0
WA	20
WI	5,225
TOTAL	21,402

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IOWA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D007	34,877	45.7
2	DOMX*	17,770	23.3
3	F001	4,906	6.4
4	FOMX*	4,124	5.4
5	K061	3,727	4.9
6	F006	2,573	3.4
7	D001	1,818	2.4
8	D008	1,425	1.9
9	MOMX*	1,415	1.9
10	F002	1,263	1.7
11	F005	781	1.0
12	D002	720	.9
13	F003	531	.7
14	D003	110	.1
15	UOMX*	68	.1
16	F019	57	.1
17	K044	15	.0
18	D006	15	.0
19	F007	13	.0
20	K045	11	.0
21	U188	6	.0
22	F008	3	.0
23	D005	3	.0
24	U159	2	.0
25	D011	2	.0
26	U223	1	.0
27	F009	0	.0
28	P104	0	.0
29	U080	0	.0
30	D009	0	.0
31	D004	0	.0
32	U031	0	.0
33	U044	0	.0
33	U154	0	.0
34	U239	0	.0
35	U003	0	.0
36	U002	0	.0
37	U220	0	.0
38	P030	0	.0
39	P022	0	.0
40	U019	0	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IOWA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	MOMX*	0
SOLVENTS RECOVERY	M021-M029	F001	12
		FOMX*	11
		MOMX*	4
INCINERATION	M041-M049	DOMX*	2,150
		D001	800
		D003	20
		D008	19
FUEL BLENDING	M061	FOMX*	4
AQUEOUS INORGANIC TREATMENT	M071-M079	D007	46,805
		DOMX*	5,148
		MOMX*	0
AQUEOUS ORGANIC TREATMENT	M081-M089	MOMX*	0
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	D008	35
OTHER TREATMENT	M121-M129	D007	10,492
		DOMX*	8,205
		D008	800
		D003	77
TOTAL			74,653

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IOWA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	IAD069624500	DEERE, JOHN-DES MOINES WORKS	ANKENY	24,395
02	IAD005289806	JOHN DEERE WATERLOO WORKS-	WATERLOO	11,628
03	IAD069619765	GENERAL BATTERY CORPORATION	MANCHESTER	7,485
04	IAD000805168	JOHN DEERE WATERLOO WORKS	WATERLOO	5,628
05	IAD000670067	UNISYS	CLEAR LAKE	4,370
06	IAD005272398	E.I. DUPONT DENEMOURS & COMPANY	FORT MADISON	4,227
07	IAD000223354	NORTH STAR STEEL IOWA	WILTON	3,734
08	IAD005273594	MONSANTO COMPANY - MUSCATINE PLANT	MUSCATINE	3,042
09	IAD047303771	COLLIS INC.	CLINTON	2,069
10	IAD981707953	JOHN DEERE FOUNDRY WATERLOO	WATERLOO	1,157
11	IAD075846824	3M COMPANY KNOXVILLE	KNOXVILLE	635
12	IAD065205056	ROCKWELL INTERNATIONAL	CEDAR RAPIDS	474
13	IAD005285689	MAYTAG COMPANY, PLANT #2	NEWTON	379
14	IAD096526108	JPI TRANSPORTATION PRODUCTS, INC.	ATLANTIC	368
15	IAD006537237	SHELLER-GLOBE CORPORATION	IOWA CITY	356
16	IAD981504780	SIOUXLAND GALVANIZING CORP	SIOUX CITY	277
17	IAD022047112	CRYOVAC DIV. W. R. GRACE	CEDAR RAPIDS	268
18	IAD062259841	PARKER HANNIFIN CORP.	RED OAK	259
19	IAD001818327	AMERICAN NATIONAL CAN COMPANY	DES MOINES	240
20	IAT200011096	WELLBURN INDUSTRIES LTD	MASON CITY	234
21	IAD005270160	ALUMINUM CO OF AMERICA DAVENPORT WORKS	RIVERDALE	219
22	IAD005300751	WINNEBAGO INDUSTRIES	FOREST CITY	209
23	IAD007276728	VOGEL PAINT & WAX CO., INC.	ORANGE CITY	173
24	IAD062776422	CHAMBERLAIN MANUFACTURING CORP.	WATERLOO	163
25	IAD981506298	PURETHANE INCORPORATED	WEST BRANCH	163
26	IAD050691617	JAMES RIVER CORP./H. P. SMITH DIV.	IOWA CITY	161
27	IAD000610436	AMANA REFRIGERATION, INC.	AMANA	152
28	IAD005268115	INTERNATIONAL PAPER COMPANY	CLINTON	151
29	IAD005269527	JOHN DEERE DUBUQUE WORKS	DUBUQUE	141
30	IAD096515440	MODINE MANUFACTURING CO.	WASHINGTON	130
31	IAD005263801	SEARS MANUFACTURING COMPANY	DAVENPORT	119
32	IAD073489288	NORPLEX OAK	POSTVILLE	119
33	IAD005145941	CLOW VALVE COMPANY FOUNDRY	OSKALOOSA	108
34	IAD054235460	RILEY BROS., INC.	BURLINGTON	101
35	IAT200010098	IOWA PAINT MANUFACTURING CO., INC.	DES MOINES	97
36	IAT200011187	EATON CORPORATION	BELMOND	94
37	IA7213820445	IOWA ARMY AMMUNITION PLANT	MIDDLETOWN	83
38	IAD089570063	BARTON SOLVENTS, INC. CO. BLUFFS BRANCH	COUNCIL BLUFFS	78
39	IAD050688696	PROGRESSIVE FOUNDRY, INC.	PERRY	76
40	IAD069609212	DRILLTITE/SOCKET SCREW PRODUCTS	DECORAH	75

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

IOWA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City	Management Method	On Site	Off Site	Method Total	Tot Manag
1	IAD069624500 DEERE, JOHN-DES MOINES WORKS, ANKENY					24,
	AQUEOUS INORGANIC TREATMENT	M071-M079	24,286	0	24,286	
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	35	0	35	
2	IAD000805432 HON COMPANY - GENEVA PLANT, MUSCATINE					22,
	AQUEOUS INORGANIC TREATMENT	M071-M079	22,519	0	22,519	
3	IAD005289806 JOHN DEERE WATERLOO WORKS, WATERLOO					19,
	OTHER TREATMENT	M121-M129	11,560	8,054	19,614	
4	IAD000805168 JOHN DEERE WATERLOO WORKS, WATERLOO					5,
	AQUEOUS INORGANIC TREATMENT	M071-M079	5,148	0	5,148	
5	IAD005273594 MONSANTO COMPANY - MUSCATINE PLANT, MUSCATINE					2,
	INCINERATION	M041-M049	2,950	0	2,950	
6	IA7213820445 IOWA ARMY AMMUNITION PLANT, MIDDLETOWN					
	INCINERATION	M041-M049	46	0	46	
	SOLVENTS RECOVERY	M021-M029	11	0	11	
7	IAD005283023 UNIVERSAL MANUFACTURING COMPANY, INC., ALGONA					
	INCINERATION	M041-M049	19	0	19	
8	IAD065202368 THOMAS & BETTS CORPORATION, IOWA CITY					
	SOLVENTS RECOVERY	M021-M029	12	0	12	
9	IAT200010601 IOWA STATE UNIVERSITY, NORTH SCHOLL ROAD					
	SOLVENTS RECOVERY	M021-M029	4	0	4	
	OTHER TREATMENT	M121-M129	1	0	1	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	0	0	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	0	0	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
10	IAD022365480 NORTHLAND PRODUCTS COMPANY, WATERLOO					
	FUEL BLENDING	M061	0	4	4	
11	IAT200010924 THE UNIVERSITY OF IOWA, OAKDALE					
	OTHER TREATMENT	M121-M129	0	4	4	

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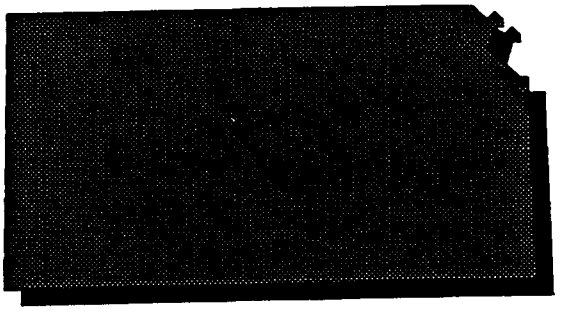
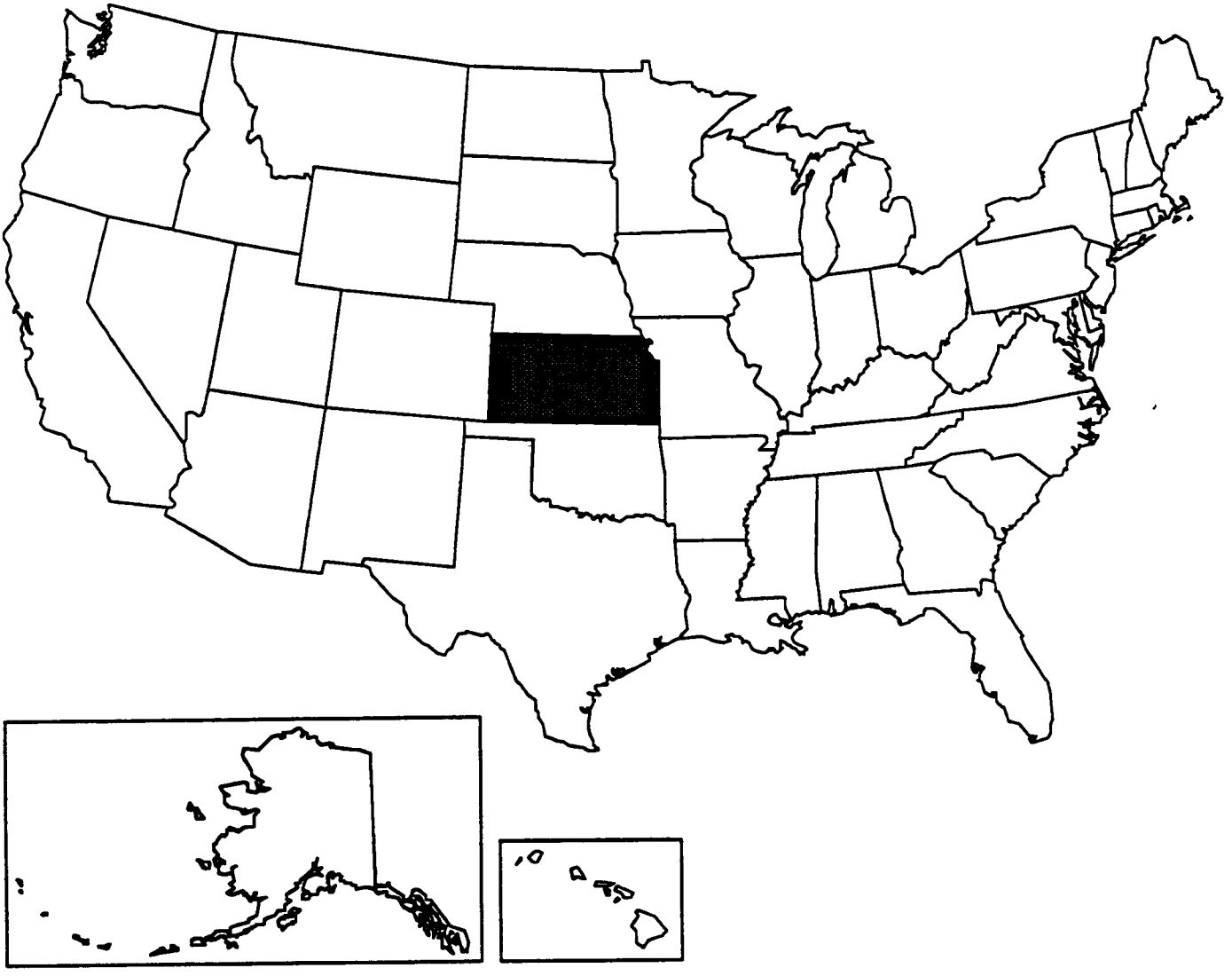
1 Excluding quantity managed by storage only.

Kansas

Region VII





KANSAS

EPA Region Address:	U.S. EPA Region VII RCRA, Waste Management Division RCRA RADM 726 Minnesota Avenue Kansas City, KS 66101
Biennial Report Data Collection Instrument:	Customized EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Section Bureau of Waste Management Department of Health and Environment Forbes Field, Building 740 6700 South Topeka Blvd. Topeka, KS 66620-0001
Contact Name:	Ms. Glynis (Gigi) Perry Administrative Officer
Phone:	(913) 296-6898

Notes: No special notes for Kansas.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KANSAS

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	192
Total Quantity of Regulated Waste Generated:	1,713,963 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	12
Facilities managing only waste generated off site	3
Facilities managing waste generated both on and off site	3
Total RCRA TSD Facilities (excluding storage-only facilities):	18
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	1,700,795 tons
Total RCRA TSD Facilities:	34

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	1	0	0	0	.0
SOLVENTS RECOVERY	M021-M029	4	1,699	301	1,999	.1
OTHER RECOVERY	M031-M039	1	526	0	526	.0
INCINERATION	M041-M049	4	2,351	749	3,100	.2
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	5	818	24,874	25,692	1.5
FUEL BLENDING	M061	1	0	1	1	.0
SLUDGE TREATMENT	M101-M109	1	544	0	544	.0
STABILIZATION	M111-M119	1	0	9	9	.0
OTHER TREATMENT	M121-M129	3	88	247	335	.0
LAND TREATMENT	M131	2	1,054	1	1,055	.1
LANDFILL	M132	1	0	4	4	.0
SURFACE IMPOUNDMENT	M133	1	1,500	0	1,500	.1
UNDERGROUND INJECTION	M134	1	1,591,023	75,003	1,666,025	98.0
INVALID SYSTEM TYPE		2	0	3	3	.0
TOTAL		18	1,599,603	101,191	1,700,795	100.0
PERCENTAGE		-	94.1 %	5.9 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KANSAS

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AR	2,264
AZ	81
CA	310
CO	289
GA	875
IA	7
ID	20
IL	482
LA	180
MI	14,546
MO	2,716
NE	42
NJ	43
OK	4
TX	3,068
UT	1,174
WA	65
TOTAL	26,167

Exports

State	Tons Shipped
AL	1,249
AR	148
FL	44
GA	23
IA	0
ID	55
IL	2,051
IN	232
KY	48
LA	5,870
MI	29
MO	1,661
NE	319
NY	1
OH	1,918
OK	24,674
PA	3
RI	0
SC	0
TN	35
TX	1,833
UT	1
WI	626
TOTAL	40,820

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

KANSAS

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MOMX*	1,592,766	92.9
2	D002	76,201	4.4
3	DOMX*	24,517	1.4
4	FOMX*	4,022	.2
5	D008	3,332	.2
6	D001	3,313	.2
7	K051	2,123	.1
8	K016	1,532	.1
9	D007	1,192	.1
10	K048	841	.0
11	F003	624	.0
12	D004	583	.0
13	KOMX*	544	.0
14	K049	542	.0
15	F002	435	.0
16	F001	321	.0
17	F006	220	.0
18	F019	213	.0
19	F005	198	.0
20	K022	187	.0
21	UOMX*	120	.0
22	D003	41	.0
23	F011	32	.0
24	F024	14	.0
25	D009	11	.0
26	K052	10	.0
27	U220	6	.0
28	D005	6	.0
29	D006	5	.0
30	F007	4	.0
31	K050	3	.0
32	F008	2	.0
33	U052	2	.0
34	D011	1	.0
35	U188	1	.0
36	U122	0	.0
37	D014	0	.0
38	U211	0	.0
39	P042	0	.0
40	U248	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KANSAS

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D009	0
SOLVENTS RECOVERY	M021-M029	FOMX*	1,681
		F002	197
		MOMX*	111
		F003	10
OTHER RECOVERY	M031-M039	K048	526
INCINERATION	M041-M049	K016	1,532
		MOMX*	1,102
		D007	424
		F005	35
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	MOMX*	20,956
		FOMX*	3,195
		D001	1,252
		K022	187
FUEL BLENDING	M061	D001	1
SLUDGE TREATMENT	M101-M109	KOMX*	544
STABILIZATION	M111-M119	DOMX*	5
		D002	3
		D001	0
OTHER TREATMENT	M121-M129	MOMX*	127
		DOMX*	115
		K051	71
		D003	17
LAND TREATMENT	M131	KOMX*	544
		K049	459
		K048	47
		K050	3
LANDFILL	M132	DOMX*	4
		D007	0
SURFACE IMPOUNDMENT	M133	K051	1,500
UNDERGROUND INJECTION	M134	MOMX*	1,591,023
		D002	75,003
INVALID SYSTEM TYPE		DOMX*	3
		D001	0
TOTAL			1,700,795

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KANSAS

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	GENERATED TOTAL GENERATED (U.S. TONS)
01	KSD007482029	VULCAN MATERIALS COMPANY	WICHITA	1,592,778
02	KSD007249980	RACON INC. (AN ATOCHEM COMPANY)	WICHITA	75,072
03	KSD981506025	APTUS - INCINERATION	COFFEYVILLE	23,485
04	KSD007237241	THE BOEING COMPANY	WICHITA	3,894
05	KSD007237746	AIR PRODUCTS AND CHEMICALS, INC.	WICHITA	2,315
06	KSD007138605	FARMLAND INDUSTRIES	COFFEYVILLE	2,026
07	KSD056577810	PRATT & LAMBERT INC.	ANDOVER	1,782
08	KS3213820878	SUNFLOWER ARMY AMMUNITION PLANT	DE SOTO	1,072
09	KSD007124506	F M C CORPORATION-PHOSPHORUS CHEM DIV	LAWRENCE	1,006
10	KSD007233422	TEXACO REFINING AND MARKETING, INC.	EL DORADO	747
11	KSD000610543	COASTAL DERBY REFINING COMPANY	WICHITA	560
12	KSD087418695	TOTAL PETROLEUM INC	ARKANSAS CITY	547
13	KSD007134695	FARMLAND INDUSTRIES	PHILLIPSBURG	508
14	KSD007482011	BEECH AIRCRAFT CORPORATION	WICHITA	471
15	KSD065764995	CONTAINER RECYCLING, INC.	KANSAS CITY	427
16	KSD007145907	GENERAL MOTORS CORP-DELCO-REMY	OLATHE	426
17	KSD981126253	GENERAL MOTORS CORP-CPC FAIRFAX PLANT	KANSAS CITY	388
18	KSD980964993	APTUS - CHEMICAL TREATMENT FACILITY	COFFEYVILLE	339
19	KSD000651307	CERTAINTEED CORPORATION PLANT #7	KANSAS CITY	333
20	KSD007233638	EATON CORPORATION-HYDRAULIC DIVISION	HUTCHINSON	281
21	KSD984966531	GE RAILCAR WHEEL & PARTS SERVICES	KANSAS CITY	256
22	KS6214020756	FT RILEY & 1ST INFANTRY DIVISION	FT RILEY	252
23	KSD981713522	E.I. DUPONT K.C FASCIA	KANSAS CITY	210
24	KSD045087566	ACME PRINTING INK COMPANY	KANSAS CITY	184
25	KSD981706039	MID CONTINENT CABINETRY-MANUFACTURING	NEWTON	183
26	KST210010062	HARCROS CHEMICALS INC.	KANSAS CITY	156
27	KST210010724	TREASURE CHEST ADVERTISING INC.	LENEXA	152
28	KSD007150477	GNB, INC.	LEAVENWORTH	150
29	KSD084891696	CR INDUSTRIES	SENECA	146
30	KSD981121197	KOCH CHEMICAL COMPANY	CRESTLINE	144
31	KSD000610725	OWENS CORNING FIBERGLAS	KANSAS CITY	137
32	KSD007250764	LAMAR ELECTRO-AIR CORPORATION	WELLINGTON	137
33	KSD007233596	CESSNA AIRCRAFT DIVISION-PAWNEE FACILITY	WICHITA	130
34	KSD000809673	CESSNA AIRCRAFT DIVISION-WALLACE FAC	WICHITA	126
35	KSD030692057	OTTAWA TRUCK CORPORATION	OTTAWA	123
36	KSD981504970	METALS PROTECTION PLATING COMPANY	KANSAS CITY	101
37	KSD007150568	HALLMARK CARDS INCORPORATED	LEAVENWORTH	98
38	KSD984967372	UNIVERSAL ENGRAVING	OVERLAND PARK	95
39	KSD980633366	PLESSEY AERO PRECISION CORP--MIDWEST DIV	WELLINGTON	90
40	KSD041917501	GENERAL ELECTRIC COMPANY	ARKANSAS CITY	77

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KANSAS

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	KSD007482029 VULCAN MATERIALS COMPANY, WICHITA					1,667,
	UNDERGROUND INJECTION	M134	1,591,023	75,003	1,666,025	
	INCINERATION	M041-M049	1,532	0	1,532	
2	KSD031203318 ASH GROVE CEMENT PLANT, CHANUTE					24,
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3	24,451	24,453	
3	KSD007138605 FARMLAND INDUSTRIES, COFFEYVILLE					2,
	SURFACE IMPOUNDMENT	M133	1,500	0	1,500	
	OTHER RECOVERY	M031-M039	526	0	526	
4	KSD007246846 HYDROCARBON RECYCLERS INC. OF WICHITA, WICHITA					1,
	INCINERATION	M041-M049	0	749	749	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	423	423	
	SOLVENTS RECOVERY	M021-M029	0	301	301	
	OTHER TREATMENT	M121-M129	0	247	247	
	STABILIZATION	M111-M119	0	9	9	
	LANDFILL	M132	0	4	4	
	INVALID SYSTEM TYPE		0	3	3	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	0	0	
5	KSD056577810 PRATT & LAMBERT INC., ANDOVER					1,
	SOLVENTS RECOVERY	M021-M029	1,681	0	1,681	
6	KSD087418695 TOTAL PETROLEUM INC., ARKANSAS CITY					1,
	LAND TREATMENT	M131	546	1	547	
	SLUDGE TREATMENT	M101-M109	544	0	544	
7	KSD007237241 THE BOEING COMPANY, WICHITA					
	INCINERATION	M041-M049	817	0	817	
8	KSD007237746 AIR PRODUCTS AND CHEMICALS, INC., WICHITA					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	609	0	609	
9	KSD007134695 FARMLAND INDUSTRIES, PHILLIPSBURG					
	LAND TREATMENT	M131	508	0	508	
10	KSD007233422 TEXACO REFINING AND MARKETING, INC., EL DORADO					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	187	0	187	
11	KSD007145956 NATIONAL COOPERATIVE REFINERY ASSOC., MCPHERSON					
	OTHER TREATMENT	M121-M129	71	0	71	
12	KSD007148034 LAFARGE CORPORATION, FREDONIA					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	20	0	20	
13	KS3213820878 SUNFLOWER ARMY AMMUNITION PLANT, DE SOTO					
	OTHER TREATMENT	M121-M129	17	0	17	
14	KSD007168834 CHARLOMA FIBERGLASS INC., CHERRYVALE					
	SOLVENTS RECOVERY	M021-M029	9	0	9	
15	KSD073309726 KBK INDUSTRIES, INC., RUSH CENTER					
	SOLVENTS RECOVERY	M021-M029	8	0	8	
16	KSD000690099 SANTA FE TOPEKA CAR SHOPS, TOPEKA					
	INCINERATION	M041-M049	2	0	2	
17	KS7680090001 US EPA LABORATORY, KANSAS CITY					
	FUEL BLENDING	M061	0	1	1	
18	KSD000809723 SAFETY-KLEEN CORPORATION, WICHITA					
	INVALID SYSTEM TYPE		0	0	0	

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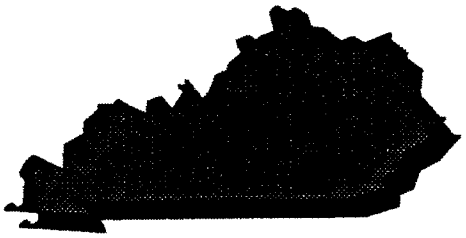
1 Excluding quantity managed by storage only.

Kentucky

Region IV



KENTUCKY

EPA Region Address:	U.S. EPA Region IV Waste Division, Waste Programs Branch State Programs Section 345 Courtland Street Atlanta, GA 30365
Biennial Report Data Collection Instrument:	State-specific annual report
Address of Participating State Environmental Authority	Hazardous Waste Branch Division of Waste Management 14 Reilly Road Frankfort, KY 40601
Contact Name:	Ms. Van Fritts Annual Report Program Coordinator
Phone:	(502) 564-6716

Notes: No special notes for Kentucky.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KENTUCKY

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	337
Total Quantity of Regulated Waste Generated:	149,612 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	9
Facilities managing only waste generated off site	8
Facilities managing waste generated both on and off site	5
Total RCRA TSD Facilities (excluding storage-only facilities):	22
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	145,481 tons
Total RCRA TSD Facilities:	51

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
INCINERATION	M041-M049	1	1,256	0	1,256	.9
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2	640	0	640	.4
AQUEOUS INORGANIC TREATMENT	M071-M079	1	0	400	400	.3
OTHER TREATMENT	M121-M129	21	47,448	92,283	139,731	96.0
OTHER DISPOSAL	M137	4	3,453	0	3,453	2.4
TOTAL		22	52,798	92,683	145,481	100.0
PERCENTAGE		-	36.3 %	63.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KENTUCKY

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	286
AR	514
CA	141
CO	7
CT	260
DE	98
FL	256
GA	1,039
IA	611
IL	7,850
IN	5,252
KS	132
LA	682
MA	191
MD	56
MI	2,933
MN	175
MO	2,555
MS	1,083
NC	869
ND	24
NE	161
NH	3
NJ	2,586
NM	1
NY	10,456
OH	32,978
OK	1
OR	3
PA	5,437
SC	5,814
SD	1
TN	1,436
TX	4,690
UT	1
VA	537
VT	1,033
WI	1,322
WV	810
TOTAL	92,282

Exports

State	Tons Shipped
AL	26,217
AR	545
FL	16
GA	22
IL	6,257
IN	10,274
KS	19
LA	1,252
MI	3,546
MN	163
MO	546
MS	1
NC	6
NJ	675
OH	5,354
PA	7,251
SC	79
TN	3,672
TX	169
WI	43
TOTAL	66,109

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KENTUCKY

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MOMX*	27,937	18.7
2	D007	27,905	18.7
3	U162	20,736	13.9
4	F003	12,657	8.5
5	U112	9,156	6.1
6	K061	7,622	5.1
7	D001	6,396	4.3
8	D002	4,294	2.9
9	F006	3,737	2.5
10	K071	3,244	2.2
11	F001	3,019	2.0
12	F005	2,944	2.0
13	U188	2,766	1.8
14	D006	2,502	1.7
15	U239	2,152	1.4
16	F002	2,045	1.4
17	U226	2,017	1.3
18	U147	1,311	.9
19	D008	1,237	.8
20	U211	1,096	.7
21	F008	735	.5
22	P037	622	.4
23	U223	597	.4
24	U077	367	.2
25	U002	300	.2
26	U129	284	.2
27	P010	256	.2
28	D009	225	.2
29	KOMX*	219	.1
30	K051	218	.1
31	U201	169	.1
32	D010	144	.1
33	K106	129	.1
34	FOMX*	118	.1
35	P004	79	.1
36	F012	55	.0
37	F019	49	.0
38	K062	44	.0
39	P044	32	.0
40	P121	29	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KENTUCKY

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
INCINERATION	M041-M049	D001	1,256
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	F003	623
		F001	17
AQUEOUS INORGANIC TREATMENT	M071-M079	K088	400
OTHER TREATMENT	M121-M129	F002	27,036
		D007	24,050
		U162	20,736
		K062	19,728
OTHER DISPOSAL	M137	U112	3,374
		F001	51
		F002	26
		U129	2
TOTAL			145,481

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

KENTUCKY

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	KYD003924198	E.I. DUPONT DE NEMOURS & CO.	LOUISVILLE	23,673
02	KYD006390017	ROHM AND HAAS KENTUCKY INC.	LOUISVILLE	20,736
03	KYD006370167	B.F. GOODRICH CO. CHEMICAL GROUP	CALVERT CITY	15,827
04	KYD088438817	L.W.D. INC.	CALVERT CITY	12,475
05	KYD006371314	B.F. GOODRICH CO., LOUISVILLE PLANT	LOUISVILLE	5,763
06	KYD054272554	TECUMSEH PRODUCTS COMPANY, SOMERSET DIVI	SOMERSET	3,776
07	KYD000207282	KENTUCKY ELECTRIC STEEL CO.	ASHLAND	3,615
08	KYD006370159	ATOCHEM AMERICA, INC.	CALVERT CITY	3,256
09	KYD991277112	NEWPORT STEEL CORPORATION	NEWPORT	3,232
10	KYD070814033	RELIANCE UNIVERSAL INC. - RESINS OPERATI	LOUISVILLE	2,765
11	KYD066899766	ATR WIRE & CABLE CO., INC.	DANVILLE	2,415
12	KYD000821942	KYANA OIL, INC.	LOUISVILLE	2,349
13	KYD000616375	MOBILE TANK CAR SERVICES	LOUISVILLE	2,152
14	KYD006373922	ATOCHEM NORTH AMERICA, INC.	CARROLLTON	1,981
15	KYD006379226	DRACKETT, INC.	FRANKLIN	1,927
16	KYD161955380	TOYOTA MOTOR MANUFACTURING USA, INC	GEORGETOWN	1,864
17	KYD005013032	ARMCO STELL CO., L.P. (COKE PLANT)	ASHLAND	1,766
18	KYD990737066	COURTAULDS COATINGS/PORTER PAINT CO.	LOUISVILLE	1,575
19	KYD092825538	ARISTECH CHEMICAL CORPORATION	FLORENCE	1,523
20	KYD071315899	FORD MOTOR COMPANY, LOUISVILLE ASSEMBLY	LOUISVILLE	1,324
21	KYD006370175	GAF CORP.	CALVERT CITY	1,243
22	KYD000605568	HI-TEK POLYMERS, INC.	LOUISVILLE	1,186
23	KYD042943985	DOW CORNING CORP.	CARROLLTON	1,096
24	KYD091514653	SAFETY-KLEEN CORPORATION	LOUISVILLE	1,056
25	KYD098103096	LOUISIANA DOCK COMPANY	LOUISVILLE	1,027
26	KYD045738127	TRINITY INDUSTRIES, INC.	DALLAS	974
27	KYD053351227	FORD MOTOR COMPANY - KY TRUCK PLANT	LOUISVILLE	970
28	KYD082390394	SHERWIN-WILLIAMS	RICHMOND	835
29	KYD006396246	OLIN CORP.	BRANDENBURG	825
30	KYD041167396	ALLIED DRUM SERVICE INC.	LOUISVILLE	820
31	KYD985066125	OWENSBORO GRAIN CO.	OWENSBORO	816
32	KYD062951801	GREEN RIVER STEEL CORP.	OWENSBORO	775
33	KYD006375489	AMERICAN STANDARD INC.	LOUISVILLE	719
34	KYD049064017	KEN-DEC, INC.	HORSE CAVE	712
35	KYD006384531	HARSHAW/FILTROL PARTNERSHIP	LOUISVILLE	694
36	KYD062979158	POLYKEN TECHNOLOGIES	FRANKLIN	688
37	KYD985067644	HENDERSON COUNTY RIVERPORT AUTHORITY	HENDERSON	622
38	KYD006387021	GENERAL ELECTRIC COMPANY	LOUISVILLE	597
39	KYD981027451	SAFETY-KLEEN CORP	ASHLAND	579
40	KYD044914356	UNIVERSAL FASTENERS INC.- DIV. OF NUCON	LAWRENCEBURG	557

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

KENTUCKY

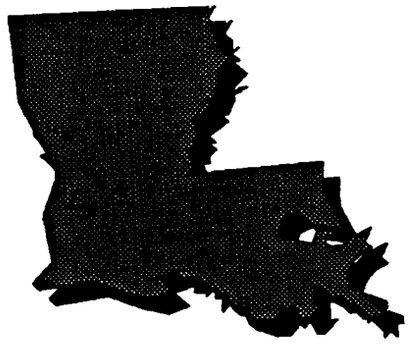
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

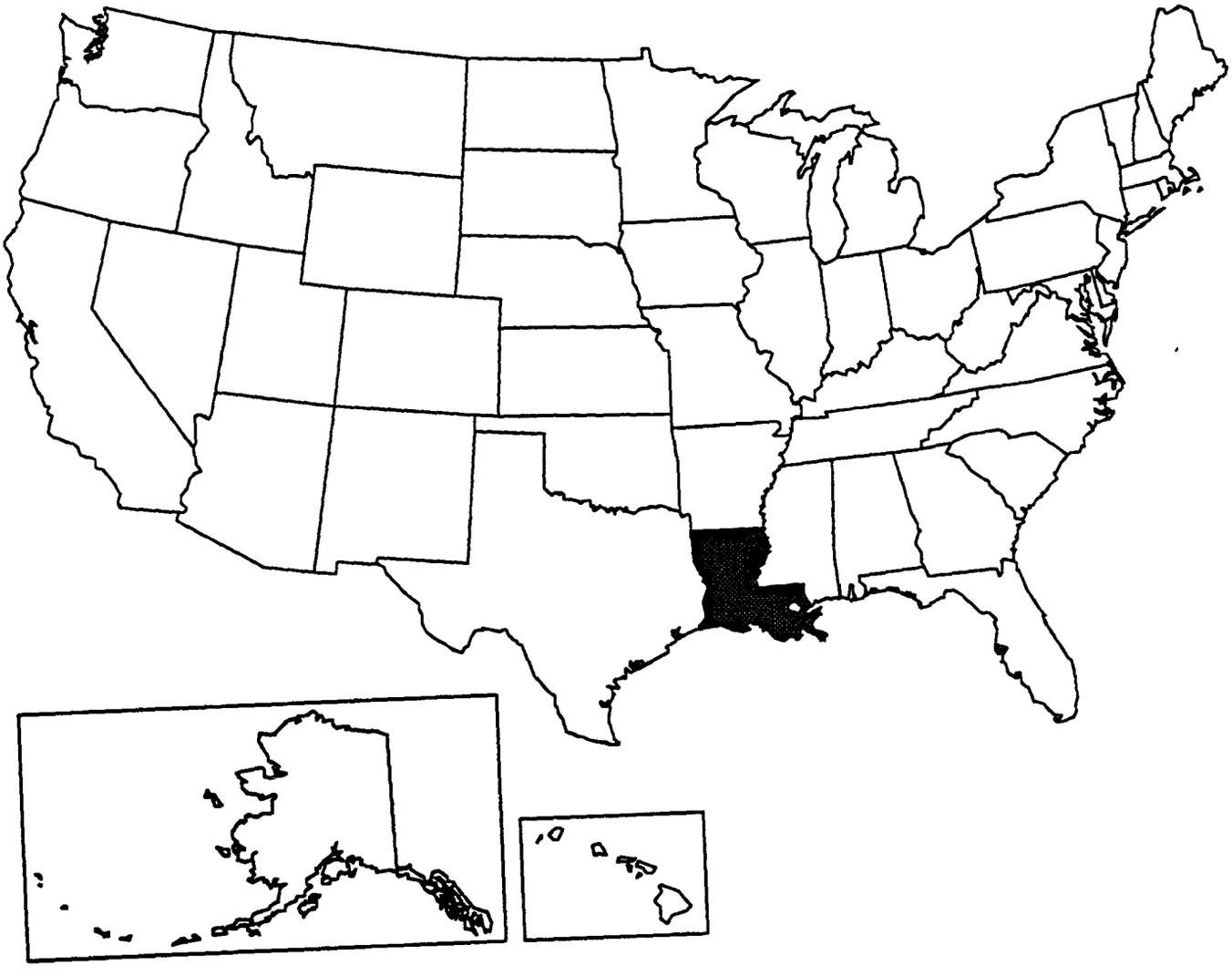
Rank	EPA ID / Site Name, City	Management Method		On Site	Off Site	Method Total	Tot Manag
1	KYD053348108 SAFETY-KLEEN CORP., NEW CASTLE						47,
		OTHER TREATMENT	M121-M129	0	47,034	47,034	
2	KYD006390017 ROHM AND HAAS KENTUCKY INC., LOUISVILLE						24,
		OTHER TREATMENT	M121-M129	20,736	3,646	24,382	
3	KYD003924198 E.I. DUPONT DE NEMOURS & CO., LOUISVILLE						23,
		OTHER TREATMENT	M121-M129	23,673	0	23,673	
4	KYD005003181 ARMCO STEEL COMPANY, L.P. WEST WORKS, ASHLAND						19,
		OTHER TREATMENT	M121-M129	0	19,716	19,716	
5	KYD088438817 L.W.D. INC., CALVERT CITY						17,
		OTHER TREATMENT	M121-M129	0	17,949	17,949	
6	KYD006370167 B.F. GOODRICH CO. CHEMICAL GROUP, CALVERT CITY						4,
		OTHER DISPOSAL	M137	3,374	0	3,374	
		OTHER TREATMENT	M121-M129	840	0	840	
7	KYD006373922 ATOCHEM NORTH AMERICA, INC., CARROLLTON						2,
		OTHER TREATMENT	M121-M129	0	2,537	2,537	
8	KYD000821942 KYANA OIL, INC., LOUISVILLE						2,
		OTHER TREATMENT	M121-M129	993	708	1,701	
		ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	623	0	623	
9	KYD006370159 ATOCHEM AMERICA, INC., CALVERT CITY						1,
		INCINERATION	M041-M049	1,256	0	1,256	
10	KYD006396246 OLIN CORP., BRANDENBURG						
		OTHER TREATMENT	M121-M129	825	125	950	
11	KYD000616375 MOBILE TANK CAR SERVICES, LOUISVILLE						
		AQUEOUS INORGANIC TREATMENT	M071-M079	0	400	400	
		OTHER TREATMENT	M121-M129	0	1	1	
12	KYD000828806 ASHLAND CHEMICAL CO. - IC&S DIVISION, CATLETTSBURG						
		OTHER TREATMENT	M121-M129	114	114	228	
		OTHER DISPOSAL	M137	51	0	51	
		ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	17	0	17	
13	KYD981027451 SAFETY-KLEEN CORP, ASHLAND						
		OTHER TREATMENT	M121-M129	0	214	214	
14	KYD074062316 C & S TRUCK SCALES INC., LOUISVILLE						
		OTHER TREATMENT	M121-M129	114	0	114	
15	KYD005009923 CALGON CARBON CORP., CATLETTSBURG						
		OTHER TREATMENT	M121-M129	20	83	103	
16	KYD091514653 SAFETY-KLEEN CORPORATION, LOUISVILLE						
		OTHER TREATMENT	M121-M129	0	86	86	
17	KYD006384531 HARSHAW/FILTROL PARTNERSHIP, LOUISVILLE						
		OTHER TREATMENT	M121-M129	72	0	72	
18	KYD024041063 ASHLAND CHEMICAL, LOUISVILLE						
		OTHER TREATMENT	M121-M129	0	70	70	
19	KY5170024173 NAVAL ORDNANCE STATION, LOUISVILLE						
		OTHER TREATMENT	M121-M129	27	0	27	
		OTHER DISPOSAL	M137	26	0	26	
20	KYD006397491 DOW CORNING CORP., ELIZABETHTOWN						
		OTHER TREATMENT	M121-M129	31	0	31	
21	KY6210020479 USA ARMC & FORT KNOX, FORT KNOX						
		OTHER TREATMENT	M121-M129	2	0	2	
		OTHER DISPOSAL	M137	2	0	2	
22	KYD042593368 VAN WATERS & ROGERS, LOUISVILLE						
		OTHER TREATMENT	M121-M129	2	0	2	

1 Excluding quantity managed by storage only.

Louisiana

Region VI





LOUISIANA

EPA Region Address:	U.S. EPA Region VI RCRA Programs Branch Mail Stop 6H-H 1445 Ross Avenue Dallas, TX 75202
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	NRPS 1 ARIM Section Hazardous Waste Division Department of Environmental Quality 7290 Bluebonnet, Fifth Floor-70810 Post Office Box 82178 Baton Rouge, LA 70884-2178
Contact Name:	Mr. Rene J. Mire
Phone:	(504) 765-0334

Notes: No special notes for Lousiana.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

LOUISIANA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	445
Total Quantity of Regulated Waste Generated:	9,094,768 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	29
Facilities managing only waste generated off site	5
Facilities managing waste generated both on and off site	10
Total RCRA TSD Facilities (excluding storage-only facilities):	44
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	9,205,887 tons
Total RCRA TSD Facilities:	46

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
OTHER RECOVERY	M031-M039	27	84,443	62,854	147,298	1.6
INCINERATION	M041-M049	12	91,476	22,131	113,607	1.2
STABILIZATION	M111-M119	2	1,255	15,491	16,746	.2
OTHER TREATMENT	M121-M129	7	362,288	100	362,388	3.9
LAND TREATMENT	M131	4	19,861	0	19,861	.2
LANDFILL	M132	3	16,361	250,279	266,640	2.9
UNDERGROUND INJECTION	M134	12	8,263,187	15,713	8,278,900	89.9
OTHER DISPOSAL	M137	1	0	447	447	.0
TOTAL		44	8,838,871	367,015	9,205,887	100.0
PERCENTAGE		-	96.0 %	4.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

LOUISIANA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	1,653
AR	17,420
AZ	63
CA	520
CO	382
CT	165
DC	5
DE	896
FL	4,213
GA	1,667
IA	254
IL	2,864
IN	902
KS	5,593
KY	477
MA	341
MD	145
MI	1,015
MN	266
MO	3,135
MS	2,367
MT	5
NC	734
ND	2
NE	58
NH	3
NJ	4,762
NM	93
NV	60
NY	344
OH	10,609
OK	4,313
OR	1
PA	2,025
PR	717
SC	198
SD	0
TN	2,396
TX	153,732
UT	7
VA	844
VI	3
WA	7
WI	85
WV	13,410
TOTAL	238,750

Exports

State	Tons Shipped
AL	4,256
AR	864
CA	410
CO	3
CT	4
DE	246
FL	20,118
GA	15
IL	198
KS	91
KY	284
MA	2
MD	5
MS	17,679
NC	0
NJ	1
NY	4
OH	127
OK	468
PA	11,549
SC	136
TN	99
TX	93,498
WI	4
TOTAL	150,058

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

LOUISIANA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D003	3,103,940	34.1
2	MOMX*	2,985,707	32.8
3	D002	1,613,331	17.7
4	F005	697,957	7.7
5	U077	251,763	2.8
6	D001	84,884	.9
7	K112	65,506	.7
8	D004	49,090	.5
9	F024	42,076	.5
10	K048	41,802	.5
11	K019	25,454	.3
12	DOMX*	18,537	.2
13	K022	18,059	.2
14	K061	12,243	.1
15	U083	10,006	.1
16	D008	9,725	.1
17	KOMX*	9,354	.1
18	K049	8,261	.1
19	K051	6,276	.1
20	K016	5,327	.1
21	K027	5,073	.1
22	F003	5,069	.1
23	K020	4,529	.0
24	D007	3,837	.0
25	UOMX*	2,986	.0
26	F002	2,901	.0
27	U328	1,098	.0
28	F001	980	.0
29	K115	907	.0
30	U221	734	.0
31	K073	654	.0
32	K030	598	.0
33	K106	565	.0
34	D009	537	.0
35	U101	526	.0
36	K114	438	.0
37	U154	431	.0
38	U037	398	.0
39	D011	351	.0
40	P077	213	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

LOUISIANA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
OTHER RECOVERY	M031-M039	D001	44,386
		K019	38,600
		K022	17,950
		K048	15,394
INCINERATION	M041-M049	F024	36,241
		MONX*	18,078
		D001	13,470
		U083	10,006
STABILIZATION	M111-M119	MONX*	10,496
		K027	736
		F001	636
		D001	600
OTHER TREATMENT	M121-M129	D002	289,201
		K112	62,892
		K020	3,126
		F024	2,938
LAND TREATMENT	M131	K048	8,511
		K049	8,025
		K051	2,172
		D003	1,124
LANDFILL	M132	MONX*	46,622
		UONX*	41,462
		K111	22,316
		DONX*	21,772
UNDERGROUND INJECTION	M134	D003	3,099,174
		MONX*	2,927,312
		D002	1,308,775
		F005	689,173
OTHER DISPOSAL	M137	D001	447
TOTAL			9,205,887

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

LOUISIANA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	LAD008186579	SHELL OIL CO REFINERY	NORCO	2,390,769
02	LAD008175390	AMERICAN CYANAMID COMPANY	WESTWEGO	2,043,294
03	LAD008213191	RUBICON INC	GEISMAR	1,090,953
04	LAD065470916	WITCO CHEMICAL CORP	TAFT	777,611
05	LAD008179707	MOBIL OIL CORPORATION	CHALMETTE	701,872
06	LAD001890367	E.I. DUPONT DE NEMOURS & CO.	LAPLACE	699,908
07	LAD001700756	MONSANTO COMPANY	LULING	289,338
08	LAD980622104	SHELL CHEMICAL CO NORCO	NORCO	264,500
09	LAD020597597	IMC STERLINGTON PLANT	STERLINGTON	202,815
10	LAD008080681	OLIN CORP LAKE CHARLES PLT RESIDUE	LAKE CHARLES	74,142
11	LAD040776809	BASF CORPORATION	GEISMAR	71,239
12	LAD000777201	CHEMICAL WASTE MANAGEMENT INC	CARLYSS	70,876
13	LAD000618256	CECOS INTERNATIONAL, INC.	WESTLAKE	56,513
14	LAD008086506	PPG INDUSTRIES INC.	WESTLAKE	37,702
15	LAD057117434	GEORGIA-GULF	PLAQUEMINE	36,775
16	LAD000618298	CECOS INTERNATIONAL	LIVINGSTON	29,807
17	LAD008187080	DOW CHEMICAL USA LOUISIANA DIV	PLAQUEMINE	28,747
18	LAD062662887	EXXON CO USA BATON ROUGE REFINERY	BATON ROUGE	21,530
19	LAD092096106	INTERNATIONAL PETRO CORP DBA NATL O	NEW ORLEANS	21,073
20	LAD990683716	CONOCO INC LAKE CHARLES REFINERY	WESTLAKE	18,907
21	LAD081999724	MARATHON OIL CO LOUISIANA REFINING	GARYVILLE	17,462
22	LAD008080350	CITGO PETROLEUM CORPORATION	LAKE CHARLES	15,331
23	LAD094919339	BAYOU STEEL CORP	LAPLACE	12,484
24	LAD041581422	UNION CARBIDE CORP IC DIV.	TAFT	10,664
25	LAD981058621	ROLLINS ENVIRONMENTAL SERVICES (FS)	BATON ROUGE	10,520
26	LAD000812818	EXXON CHEMICAL AMERICAS	BATON ROUGE	6,832
27	LAD041224932	FORMOSA PLASTICS	BATON ROUGE	6,438
28	LAD086478047	VISTA CHEM CO	WESTLAKE	6,403
29	LAD010395127	ROLLINS ENVIRONMENTAL SERVICES (LA)	CHALMETTE	5,814
30	LAD092681824	VULCAN CHEMICALS CO.	GEISMAR	5,061
31	LAD981514441	WASTE-TECH SERVICES, INC.	LAKE CHARLES	4,581
32	LAD053783445	CIBA-GEIGY CORP	ST GABRIEL	4,271
33	LAD050901669	NALCO CHEMICAL CO#	GARYVILLE	4,156
34	LAD089841902	SAFETY-KLEEN CORP 6-115-01	KENNER	4,144
35	LAD055010078	CHEVRON CHEMICAL CO ST. JAMES PLANT	ST JAMES	4,015
36	LAD081407850	HILL PETROLEUM COMPANY	KROTZ SPRINGS	3,849
37	LAD055018717	PORT ALLEN RIVER PLANT, INC.	BATON ROUGE	3,561
38	LAD981522048	WESTLAKE POLYMERS CORP.	SULPHUR	2,781
39	LAD056024391	B P OIL, INC.	BELLE CHASSE	2,649
40	LA0213820533	US ARMY LOUISIANA AMMUNITION PL	DOYLINE	2,634

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

LOUISIANA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tota Manage
1	LAD008186579 SHELL OIL CO REFINERY, NORCO					2,389,5
	UNDERGROUND INJECTION	M134	2,389,596	0	2,389,596	
2	LAD008175390 AMERICAN CYANAMID COMPANY, WESTWEGO					2,043,2
	UNDERGROUND INJECTION	M134	2,043,293	0	2,043,293	
3	LAD008213191 RUBICON INC., GEISMAR					1,089,8
	UNDERGROUND INJECTION	M134	1,089,575	0	1,089,575	
	INCINERATION	M041-M049	324	0	324	
4	LAD065470916 WITCO CHEMICAL CORP., TAFT					776,7
	UNDERGROUND INJECTION	M134	776,715	0	776,715	
5	LAD001890367 E.I. DUPONT DE NEMOURS & CO., LAPLACE					701,9
	UNDERGROUND INJECTION	M134	691,552	0	691,552	
	INCINERATION	M041-M049	7,183	2,813	9,997	
	OTHER RECOVERY	M031-M039	182	0	182	
	OTHER TREATMENT	M121-M129	182	0	182	
6	LAD008179707 MOBIL OIL CORPORATION, CHALMETTE					696,4
	UNDERGROUND INJECTION	M134	695,562	0	695,562	
	OTHER RECOVERY	M031-M039	907	0	907	
7	LAD001700756 MONSANTO COMPANY, LULING					289,2
	OTHER TREATMENT	M121-M129	289,201	0	289,201	
8	LAD980622104 SHELL CHEMICAL CO NORCO, NORCO					264,4
	UNDERGROUND INJECTION	M134	251,112	0	251,112	
	INCINERATION	M041-M049	13,378	0	13,378	
9	LAD000777201 CHEMICAL WASTE MANAGEMENT INC., CARLYSS					216,9
	LANDFILL	M132	2,842	208,701	211,543	
	OTHER RECOVERY	M031-M039	0	4,604	4,604	
	OTHER DISPOSAL	M137	0	447	447	
10	LAD020597597 IMC STERLINGTON PLANT, STERLINGTON					202,7
	UNDERGROUND INJECTION	M134	198,055	0	198,055	
	OTHER RECOVERY	M031-M039	4,730	0	4,730	
11	LAD008086506 PPG INDUSTRIES INC., WESTLAKE					80,3
	OTHER RECOVERY	M031-M039	0	44,988	44,988	
	INCINERATION	M041-M049	32,444	3,407	35,851	
12	LAD000618256 CECOS INTERNATIONAL, INC., WESTLAKE					72,
	UNDERGROUND INJECTION	M134	56,485	15,713	72,198	
13	LAD008080681 OLIN CORP LAKE CHARLES PLT RESIDUE, LAKE CHARLES					70,
	OTHER TREATMENT	M121-M129	62,892	0	62,892	
	INCINERATION	M041-M049	7,428	0	7,428	
	OTHER RECOVERY	M031-M039	41	0	41	
14	LAD040776809 BASF CORPORATION, GEISMAR					69,
	UNDERGROUND INJECTION	M134	57,226	0	57,226	
	OTHER RECOVERY	M031-M039	12,567	0	12,567	
15	LAD000618298 CECOS INTERNATIONAL, LIVINGSTON					46,
	LANDFILL	M132	13,519	23,801	37,320	
	STABILIZATION	M111-M119	0	9,241	9,241	
16	LAD010395127 ROLLINS ENVIRONMENTAL SERVICES (LA), CHALMETTE					44,
	INCINERATION	M041-M049	4,376	14,874	19,250	
	LANDFILL	M132	0	17,777	17,777	
	STABILIZATION	M111-M119	1,255	6,250	7,505	
17	LAD008187080 DOW CHEMICAL USA LOUISIANA DIV., PLAQUEMINE					29,
	INCINERATION	M041-M049	19,508	1,036	20,544	
	OTHER TREATMENT	M121-M129	9,124	0	9,124	
18	LAD057117434 GEORGIA-GULF, PLAQUEMINE					26,
	OTHER RECOVERY	M031-M039	26,875	0	26,875	

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1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

LOUISIANA

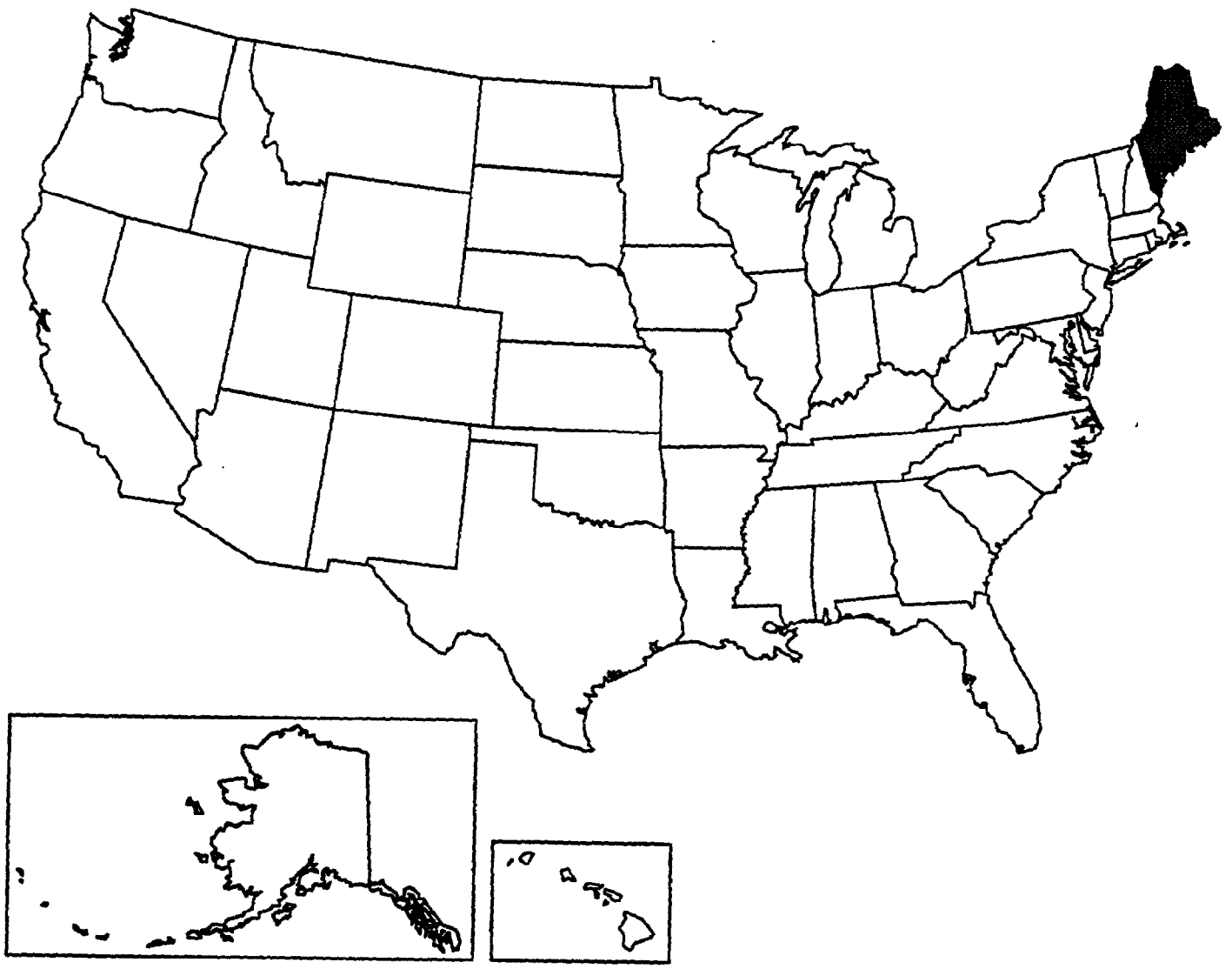
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

ank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
19	LAD081999724 MARATHON OIL CO LOUISIANA REFINING, GARYVILLE					17,455
	LAND TREATMENT	M131	15,941	0	15,941	
	OTHER RECOVERY	M031-M039	1,514	0	1,514	
20	LAD990683716 CONOCO INC LAKE CHARLES REFINERY, WESTLAKE					15,394
	OTHER RECOVERY	M031-M039	15,394	0	15,394	
21	LAD008080350 CITGO PETROLEUM CORPORATION, LAKE CHARLES					14,176
	UNDERGROUND INJECTION	M134	13,411	0	13,411	
	LAND TREATMENT	M131	765	0	765	
22	LAD079464095 GSX RECOVERY SYSTEMS INC., CROWLEY					12,851
	OTHER RECOVERY	M031-M039	0	12,840	12,840	
	OTHER TREATMENT	M121-M129	0	11	11	
23	LAD041581422 UNION CARBIDE CORP IC DIV., TAFT					10,643
	OTHER RECOVERY	M031-M039	7,258	0	7,258	
	INCINERATION	M041-M049	3,385	0	3,385	
24	LAD092681824 VULCAN CHEMICALS CO., GEISMAR					4,014
	OTHER RECOVERY	M031-M039	4,014	0	4,014	
25	LAD055010078 CHEVRON CHEMICAL CO ST. JAMES PLANT, ST JAMES					3,863
	OTHER RECOVERY	M031-M039	3,863	0	3,863	
26	LAD081407850 HILL PETROLEUM COMPANY, KROTZ SPRINGS					3,611
	OTHER RECOVERY	M031-M039	3,611	0	3,611	
27	LAD053783445 CIBA-GEIGY CORP., ST GABRIEL					2,823
	INCINERATION	M041-M049	2,823	0	2,823	
28	LAD000709998 TULANE UNIVERSITY-DELTA PRIMATE CEN, COVINGTON					2,078
	OTHER RECOVERY	M031-M039	2,078	0	2,078	
29	LAD056024391 B P OIL, INC., BELLE CHASSE					1,991
	LAND TREATMENT	M131	1,991	0	1,991	
30	LAD065485146 TEXACO INC., UNION					1,858
	LAND TREATMENT	M131	1,164	0	1,164	
	UNDERGROUND INJECTION	M134	605	0	605	
	OTHER TREATMENT	M121-M129	0	89	89	
31	LA0213820533 US ARMY LOUISIANA AMMUNITION PL, DOYLINE					890
	OTHER TREATMENT	M121-M129	889	0	889	
	INCINERATION	M041-M049	0	0	1	
32	LA4800014587 MARTIN MARIETTA-US NASA/NEW ORLEANS, NEW ORLEANS					645
	OTHER RECOVERY	M031-M039	645	0	645	
33	LAD008194060 UNIROYAL CHEMICAL COMPANY, INC., GEISMAR					626
	INCINERATION	M041-M049	626	0	626	
34	LAD008073439 FIRESTONE SYN RUB & LAT DIV FIR T&R, LAKE CHARLES					452
	OTHER RECOVERY	M031-M039	452	0	452	
35	LAD085551877 AIR PRODUCTS & CHEMICALS CO., ST GABRIEL					243
	OTHER RECOVERY	M031-M039	243	0	243	
36	LAD060817558 JEFFERSON X-RAY SERVICES INC., KENNER					157
	OTHER RECOVERY	M031-M039	0	156	157	
37	LAD981513021 X-RAY UNLIMITED, INC., LAKE CHARLES					115
	OTHER RECOVERY	M031-M039	0	115	115	
38	LAD079460895 ETHYL PLT PDC, BATON ROUGE					55
	OTHER RECOVERY	M031-M039	0	55	55	
39	LAD087029872 ALFRED'S PROCESSOR SALES/SERVICE, KENNER					54
	OTHER RECOVERY	M031-M039	0	54	54	
40	LAD062666540 PIONEER CHLOR ALKALI CO INC., ST GABRIEL					51
	OTHER RECOVERY	M031-M039	51	0	51	

cluding quantity managed by storage only.

Maine

Region I



MAINE

EPA Region Address:	U.S. EPA Region I RCRA Support Section Mail Stop HRW-CAN-3 JFK Federal Building Boston, MA 02203
Biennial Report Data Collection Instrument:	State-specific report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Department of Environmental Protection State House, Station 17 Augusta, ME 04333-0017
Contact Name:	Mr. Michael Hudson Environmental Specialist III
Phone:	(207) 289-2651

Notes: Maine did not submit wate management data; therefore no calculations of quantities of waste managed can be reported.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MAINE

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	46
Total Quantity of Regulated Waste Generated:	52,528 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	0
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	0 tons
Total RCRA TSD Facilities:	4

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent

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* Maine did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MAINE

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
TOTAL	0

Exports

State	Tons Shipped
CT	250
FC	224
IL	1
LA	22
MA	51,136
MD	40
MI	194
NH	0
NJ	373
NY	104
OH	13
PA	126
RI	140
SC	6
TX	8
TOTAL	52,635

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* Maine did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MAINE

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D008	50,281	95.7
2	D002	673	1.3
3	F006	349	.7
4	D001	315	.6
5	FOMX*	230	.4
6	DOMX*	170	.3
7	F001	134	.3
8	MOMX*	107	.2
9	F002	101	.2
10	F003	47	.1
11	D003	36	.1
12	F005	33	.1
13	F007	24	.0
14	D006	20	.0
15	D009	5	.0
16	D007	2	.0
17	D011	1	.0
18	U002	0	.0
19	U223	0	.0
20	U151	0	.0
21	U052	0	.0
22	U012	0	.0
23	D004	0	.0
24	U220	0	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

Maine did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MAINE

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

This table is not applicable because the State did not manage any hazardous waste during 1989.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MAINE

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	MED053440467	HOULTON WATER CO	HOULTON	50,080
02	MED065034183	ME ELECTRONICS	LISBON	676
03	MED001096791	SACO DEFENSE INC	SACO	231
04	MED001098458	NATIONAL SEMICONDUCTOR	SOUTH PORTLAND	225
05	MED042141408	WARREN S D COMPANY	WESTBROOK	193
06	MED980910053	SILVEX INC	WESTBROOK	149
07	MED001107051	GREAT NORTHERN PAPER, MILLINOCKET MILL	MILLINOCKET	119
08	MED001096395	PRIME TANNING CO INC	BERWICK	91
09	MED046217352	EASTERN FINE PAPER INC	BREWER	81
10	MED077469864	SPRAGUE ELECTRIC CO	SANFORD	80
11	MED982200115	STEERING Z F GEAR INC U S A	BREWER	73
12	MED086878980	MECON MANUFACTURING	OXFORD	57
13	MED001111368	FRASER PAPER LIMITED	MADAWASKA	45
14	MED083184051	UNITRODE CORP	WESTBROOK	42
15	MED001099746	G T E PRODUCTS CORP	WALDOBORO	40
16	MED040228983	PIONEER PLASTICS CORP	AUBURN	31
17	MED990813297	DATA GENERAL	WESTBROOK	30
18	MED001097203	PHILIPS ELMET CORP	LEWISTON	27
19	MED001095777	HUSSEY SEATING CO	NORTH BERWICK	24
20	MED042143297	NICHOLS W H CO	PORTLAND	23
21	MED001095470	INTERNATIONAL PAPER CO	JAY	23
22	MED086875887	JAMES RIVER OTIS INC	JAY	22
23	MED000769653	AUBURN SOLID WASTE ENERGY RECOVERY	AUBURN	20
24	MED001094374	WILNER WOOD PCDTS CO	NORWAY	16
25	MED000841064	IRWIN COMPANY	GORHAM	15
26	MED093625358	DIGITAL EQUIPMENT CORP	AUGUSTA	14
27	MED067056002	REECE CORPORATION	GORHAM	14
28	MED980731384	NEW BALANCE ATHLETIC SHOE INC	NORRIDGEWOCK	12
29	MED001106293	EDWARDS CO UNIT OF GENERAL SIGNAL	PITTSFIELD	11
30	MED001098011	GREAT NORTHERN PAPER EAST MILLINOCKET	EAST MILLINOCKET	9
31	MED061002002	UNIFIRST CORP	PORTLAND	7
32	MED001126564	CARLETON WOOLEN MILLS INC	WINTHROP	7
33	MED037719838	VINER BROTHERS INC	PRESQUE ISLE	6
34	MED018998245	J & J CLEANERS	BRUNSWICK	5
35	ME4971590001	US DEFENSE FUEL SUPPLY PT CASCO	SOUTH HARPSWELL	5
36	MED000841015	GETTY REFINING & MARKETING CO	SOUTH PORTLAND	5
37	MED046221115	MOBIL OIL PORTLAND TERMINAL	SOUTH PORTLAND	4
38	MED981888928	IDEXX CORP	PORTLAND	4
39	MED001094051	TIBBETS INDUSTRIES INC	CAMDEN	3
40	MED006948954	AUGUSTA SERVICE BUILDING	AUGUSTA	3

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* Maine did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

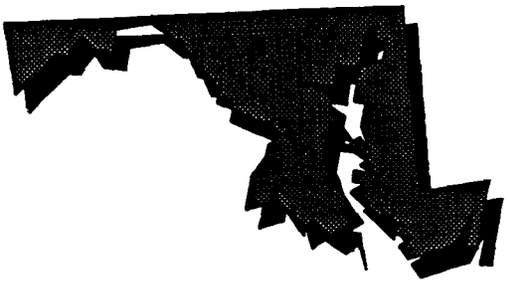
MAINE

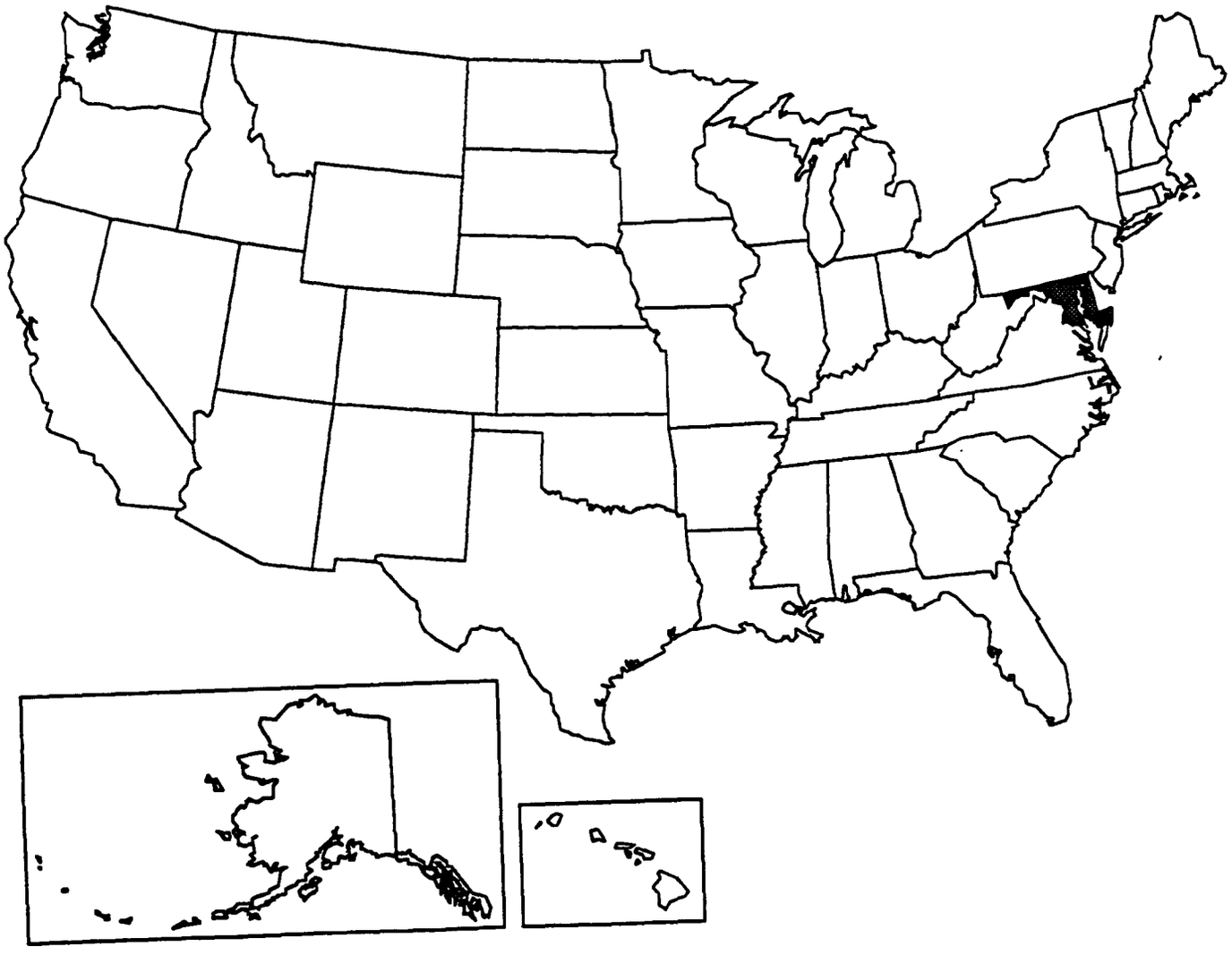
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

This table is not applicable because the State did not manage any hazardous waste during 19

Maryland

Region III





MARYLAND

EPA Region Address:	U.S. EPA Region III Waste Management Branch Mail Stop 3HW53 841 Chestnut Street Philadelphia, PA 19107
Biennial Report Data Collection Instrument:	Customized EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Program Department of the Environment 2500 Broening Highway, Building 40 Baltimore, MD 21224
Contact Name:	Mr. Jim Francis Chief, RCRA Permits Division
Phone:	(410) 631-3343

Notes: No special notes for Maryland.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MARYLAND

Table 1. RCRA Hazardous Waste Generation and Management, 1989

l Number of RCRA Large Quantity Generators:	385
l Quantity of Regulated Waste Generated:	265,227 tons
TSD Facilities (excluding storage-only facilities)	
acilities managing only waste generated on site	9
acilities managing only waste generated off site	2
acilities managing waste generated both on and off site	1
l RCRA TSD Facilities (excluding storage-only facilities):	12
l Quantity of RCRA Regulated Waste Managed in RCRA TSD units: excluding quantity managed only in storage)	211,256 tons
l RCRA TSD Facilities:	37

l Disposition of Wastes Managed in RCRA Processes

gement Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
ENTS RECOVERY	M021-M029	1	109	0	109	.1
NERATION	M041-M049	3	6,261	0	6,261	3.0
GY RECOVERY (REUSE AS FUEL)	M051-M059	1	806	0	806	.4
OUS INORGANIC TREATMENT	M071-M079	3	192,890	7,191	200,081	94.7
GE TREATMENT	M101-M109	2	968	1	969	.5
R TREATMENT	M121-M129	6	3,002	2	3,005	1.4
R DISPOSAL	M137	2	26	0	26	.0
LID SYSTEM TYPE		1	0	0	0	.0
TOTAL		12	204,061	7,195	211,256	100.0
PERCENTAGE		-	96.6 %	3.4 %	100%	-

umn may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MARYLAND

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
CT	72
DC	357
DE	56
IA	0
IL	5
MA	1,275
NC	180
ND	0
NH	4
NJ	333
NY	150
OH	50
PA	3,482
RI	99
SC	74
TN	22
VA	1,471
VT	9
WI	1
WV	92
TOTAL	7,731

Exports

State	Tons Shipped
AL	2,008
AR	791
CO	97
CT	80
DE	20
FL	122
GA	194
IL	1,141
IN	888
KS	50
KY	63
LA	937
MA	1,601
MI	685
MN	24
MO	0
NC	857
NJ	23,424
NV	2
NY	283
OH	6,963
OR	2
PA	24,115
SC	4,304
TN	39
TX	97
UT	11
VA	102
WI	14
TOTAL	68,913

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MARYLAND

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D007	143,406	54.1
2	D008	58,396	22.0
3	D0MX*	15,798	6.0
4	D002	12,825	4.8
5	D001	8,587	3.2
6	F006	5,550	2.1
7	F003	4,913	1.9
8	M0MX*	3,813	1.4
9	F0MX*	2,704	1.0
10	K061	2,590	1.0
11	D003	1,545	.6
12	K062	980	.4
13	K087	968	.4
14	F002	598	.2
15	F001	591	.2
16	U028	472	.2
17	K051	470	.2
18	F005	455	.2
19	D006	120	.0
20	U221	89	.0
21	U0MX*	70	.0
22	D005	58	.0
23	D010	55	.0
24	U159	42	.0
25	F019	22	.0
26	U069	17	.0
27	P047	14	.0
28	D013	11	.0
29	K007	10	.0
30	D011	10	.0
31	U122	7	.0
32	P029	5	.0
33	D009	5	.0
34	F004	3	.0
35	U148	2	.0
36	F009	2	.0
37	U080	2	.0
38	U019	2	.0
39	U102	2	.0
40	U044	2	.0

These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MARYLAND

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F002	109
INCINERATION	M041-M049	F003	5,673
		D0MX*	587
		D003	1
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	M0MX*	803
		D008	3
AQUEOUS INORGANIC TREATMENT	M071-M079	D007	131,602
		D008	57,965
		D0MX*	6,030
		D002	4,254
SLUDGE TREATMENT	M101-M109	K087	968
		D0MX*	1
OTHER TREATMENT	M121-M129	D002	1,786
		D003	1,166
		D0MX*	50
		U122	1
OTHER DISPOSAL	M137	D003	26
INVALID SYSTEM TYPE		D009	0
TOTAL			211,256

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MARYLAND

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
MDD053945432	BETHLEHEM STEEL - SPARROWS POINT PL	SPARROWS POINT	132,832
MDD003091972	GENERAL MOTORS TRUCK & BUS GROUP	BALTIMORE	63,121
MDD003071875	F M C CORORATION - AGRI CHEM GROUP	BALTIMORE	12,463
MDD000731356	MARYLAND (STATE)- HAWKINS	BALTIMORE	4,538
MDD046279311	GENERAL ELECTRIC	COLUMBIA	4,392
MDD086140944	EASTERN STAINLESS STEEL COMPANY	BALTIMORE	4,337
MDD001715705	BALTIMORE SPECIALTY STEELS, CORP.	BALTIMORE	3,167
MDD003093119	AMG RESOURCES CORPORATION	SPARROWS POINT	2,933
MDD980555189	CLEAN HARBORS OF BALTIMORE	BALTIMORE	2,885
MDD000731570	PEPCO CHALK POINT GEN STATION	AQUASCO	2,566
MDD000797365	BROWNING-FERRIS INC.	LINTHICUM	2,437
MDD003084464	ATOCHEM NORTH AMERICA	BALTIMORE	2,385
MDD003063476	ALCOLAC	BALTIMORE	1,924
MDP000004343	P R P RESPONDENT - SPECTRON	ELKTON	1,707
MDD053936464	PEPCO-MORGANTOWN GEN. STATION	NEWBURG	1,349
MD4170024109	US, NAVAL ORDANCE STATION	INDIAN HEAD	1,299
MDD003060860	SOUTHERN GALVANIZING CO.	BALTIMORE	934
MDD061367280	TEXAS EASTERN-ACCIDENT FL	ACCIDENT	881
MDD002901197	CARR-LOWREY G ASS CO. PLT.	BALTIMORE	861
MDD003093499	MOBAY CORP - PEMCO PRODUCT.	BALTIMORE	809
MDD982363426	ROHR INDUSTRIES, INC.	HAGERSTOWN	788
MDD030324073	MARYLAND PORT ADMIN. - DUNDALK	BALTIMORE	778
MDD003419090	MARTIN MARIETTA AERO & NAVAL SYSTEMS	BALTIMORE	733
MDD982571663	ATLANTIC ELECTRONICS INC	BALTIMORE	690
MDD003067121	THIOKOL CORP.	ELKTON	629
MDD069380657	CHESAPEAKE FINISHED METALS	BALTIMORE	597
MDD038942884	KANASCO LTD.	BALTIMORE	543
MDD001890060	HULS AMERICA INC.	CHESTERTOWN	488
MDD990686156	CHEVRON USA, INC.	BALTIMORE	470
MDD000215160	SHERWIN-WILLIAMS CO.	BALTIMORE	429
MDD003075942	AMERICAN CYANAMID COMPANY	HAVRE DE GRACE	346
MDD003065984	CONOCO INC.	BALTIMORE	313
MDD980694012	GORE, W.L. & ASSOCIATES INC.	ELKTON	299
MDD005971650	AMERICAN NATIONAL CAN COMPANY	SPARROWS POINT	290
MDD042644385	NEUTRON PRODUCTS INC.	DICKERSON	287
MDD000622092	NOXEL CORPORATION	COCKEYSVILLE	278
MDD003062114	BYRON, W. D. & SONS, INC.	WILLIAMSPORT	244
MD6150004095	NATIONAL INSTITUTES OF HEALTH	BETHESDA	229
MDD061378030	ROTOREX COMPANY	WALKERSVILLE	211
MDD990686552	ESSEX INDUSTRIAL CHEM. INC.	BALTIMORE	205

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MARYLAND

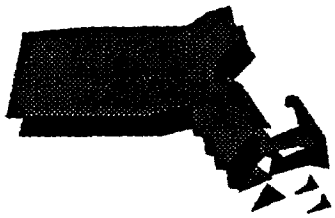
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	MDD053945432 BETHLEHEM STEEL - SPARROWS POINT PL, SPARROWS POINT					132,
	AQUEOUS INORGANIC TREATMENT	M071-M079	131,255	0	131,255	
	SLUDGE TREATMENT	M101-M109	968	0	968	
2	MDD003091972 GENERAL MOTORS TRUCK & BUS GROUP, BALTIMORE					62,
	AQUEOUS INORGANIC TREATMENT	M071-M079	61,634	0	61,634	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	806	0	806	
	OTHER TREATMENT	M121-M129	50	0	50	
3	MDD980555189 CLEAN HARBORS OF BALTIMORE, BALTIMORE					7,
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	7,191	7,191	
	SLUDGE TREATMENT	M101-M109	0	1	1	
4	MDD003071875 F M C CORORATION - AGRI CHEM GROUP, BALTIMORE					5,
	INCINERATION	M041-M049	5,673	0	5,673	
5	MDD003063476 ALCOLAC, BALTIMORE					1,
	OTHER TREATMENT	M121-M129	1,785	0	1,785	
6	MD4170024109 US, NAVAL ORDANCE STATION, INDIAN HEAD					1,
	OTHER TREATMENT	M121-M129	1,141	1	1,142	
7	MDD003067121 THIOKOL CORP., ELKTON					
	INCINERATION	M041-M049	587	0	587	
	OTHER DISPOSAL	M137	25	0	25	
8	MDD003075942 AMERICAN CYANAMID COMPANY, HAVRE DE GRACE					
	SOLVENTS RECOVERY	M021-M029	109	0	109	
9	MD0170023444 US, NAVAL SURFACE WARFARE CTR., SILVER SPRING					
	OTHER TREATMENT	M121-M129	25	0	25	
10	MDD980554653 GSX SERVICES, INC., LAUREL					
	OTHER TREATMENT	M121-M129	0	1	1	
	INVALID SYSTEM TYPE		0	0	0	
11	MD4170090001 US NAVY, NAVEODTECHCEN, INDIAN HEAD					
	INCINERATION	M041-M049	1	0	1	
	OTHER DISPOSAL	M137	1	0	1	
12	MDD003064334 CAMBRIDGE WIRE CLOTH CO. I, CAMBRIDGE					
	OTHER TREATMENT	M121-M129	1	0	1	

1 Excluding quantity managed by storage only.

Massachusetts

Region I



MASSACHUSETTS

EPA Region Address:	U.S. EPA Region I RCRA Support Section Mail Stop HRW-CAN-3 JFK Federal Building Boston, MA 02203
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Division of Hazardous Waste Department of Environmental Protection One Winter Street Boston, MA 02108
Contact Name:	Ms. Victoria Phillips Biennial Report Coordinator
Phone:	(617) 292-5812

Notes: Massachusetts did not submit waste management data; therefore no calculations of quantities of waste managed, nor the number of TSD facilities, can be reported. Also, the state failed to provide information on wastes received from off site; therefore, the total imports in Table 2 is shown as zero.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MASSACHUSETTS

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	494
Total Quantity of Regulated Waste Generated:	34,142 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	0
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	0 tons
Total RCRA TSD Facilities:	0

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent

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* Massachusetts did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MASSACHUSETTS

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
TOTAL	0

Exports

State	Tons Shipped
AL	105
AR	299
CA	3
CT	10,635
FL	15
GA	2
IL	119
IN	154
KS	5
LA	798
MD	6
ME	3
MI	723
NC	46
NH	139
NJ	4,164
NY	5,039
OH	132
PA	1,191
RI	1,111
SC	526
TN	5
VA	116
VT	1
WV	106
TOTAL	25,444

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MASSACHUSETTS

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D002	5,387	15.8
2	F003	5,023	14.7
3	D001	3,927	11.5
4	F006	3,631	10.6
5	F005	2,147	6.3
6	MOMX*	2,094	6.1
7	D008	2,079	6.1
8	DOMX*	1,858	5.4
9	FOMX*	1,735	5.1
10	F002	1,644	4.8
11	F001	1,381	4.0
12	D007	1,020	3.0
13	D011	422	1.2
14	D009	271	.8
15	F019	234	.7
16	D005	184	.5
17	D006	184	.5
18	D003	165	.5
19	D004	107	.3
20	UOMX*	99	.3
21	F011	94	.3
22	F007	89	.3
23	U226	65	.2
24	F004	51	.1
25	F009	50	.1
26	D010	39	.1
27	F012	31	.1
28	U009	26	.1
29	F008	19	.1
30	U188	13	.0
31	U122	11	.0
32	K086	7	.0
33	U223	5	.0
34	P098	5	.0
35	K061	4	.0
36	P106	3	.0
37	P030	3	.0
38	U239	2	.0
39	U028	2	.0
40	U052	2	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

Massachusetts did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MASSACHUSETTS

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

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* Massachusetts did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MASSACHUSETTS

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	MAD001115765	JAMES RIVER GRAPHICS	SOUTH HADLEY	2,555
02	MAD076575513	BOSTON SERVICE CENTER	DORCHESTER	1,448
03	MAD001408517	GENERAL ELECTRIC COMPANY	LYNN	1,282
04	MAD001005370	AT&T	NORTH ANDOVER	989
05	MAD069348829	GTE PRODUCTS CORPORATION	IPSWICH	862
06	MAD007325814	TEXAS INSTRUMENTS INC.	ATTLEBORO	828
07	MAD002084093	GENERAL ELECTRIC	PITTSFIELD	753
08	MAD001050152	MILLIPORE CORPORATION	BEDFORD	620
09	MAD000192559	POLYSAR INC.	LEOMINSTER	604
10	MAD001136035	FLEXCON COMPANY INC.	SPENCER	587
11	MAD001014026	FOXBORO COMPANY	E. BRIDGEWATER	541
12	MAD001055235	RAYTHEON COMPANY	ANDOVER	532
13	MAD001046325	IONICS, INC.	WATERTOWN	531
14	MAD000844597	WATERS ASSOCIATES	TAUNTON	525
15	MAD000844977	STAHL FINISH	PEABODY	523
16	MAD000769620	SHELL OIL COMPANY	W BOYLSTON	483
17	MAD056019979	IDEAL TAPE COMPANY	LOWELL	446
18	MAD000769638	SHELL OIL COMPANY	FALL RIVER	445
19	MAD001764794	HAMBLET AND HAYES CO.	SALEM	437
20	MAD001012244	PRINTED CIRCUIT CORPORATION	WOBURN	381
21	MAD041710609	TECH-ETCH, INC	PLYMOUTH	357
22	MAD001041383	SURFACE COATINGS INC	WILMINGTON	342
23	MAD001113059	EASTERN ETCHING & MFG CO	CHICOPEE	331
24	MAD000649640	ANALOG DEVICES SEMICONDUCTOR	WILMINGTON	312
25	MAD062402060	KRAMER SCRAP, INC	GREENFIELD	283
26	MAD001047620	DUNCAN GALVANIZING CORPORATION	EVERETT	269
27	MAD053449393	AMETEK AEROSPACE PRODUCTS, INC.	WILMINGTON	269
28	MAD001033190	GLOBE MFG. CO.	FALL RIVER	266
29	MAD000191700	PRINCESS HOUSE INC.	NORTH DIGHTON	264
30	MAD001027861	CALIFORNIA PRODUCTS CORPORATION	CAMBRIDGE	262
31	MAD001008812	LEBARON FOUNDRY INC.	BROCKTON	260
32	MAD065781197	GALILEO ELECTRO-OPTICS CORPORATION	STURBRIDGE	256
33	MAD981061419	EASCO HAND TOOLS INC	SPRINGFIELD	233
34	MAD051778934	PARLEX CORPORATION	METHUEN	232
35	MAD051505477	ICI AMERICAS INC.	DIGHTON	230
36	MAD001021245	PLATING TECHNOLOGY INC.D.B.A.STAR PLAT	NEW BEDFORD	225
37	MAD043409879	POLAROID CORP.	WALTHAM	223
38	MAD000844571	WANG LABORATORIES, INC.	METHUEN	216
39	MAD000791780	RAYTHEON POWER TUBE OPERATION	WALTHAM	215
40	MAD980525505	EASTERN MANUACTURING CORPORATION	AMESBURY	205

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* Massachusetts did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MASSACHUSETTS

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

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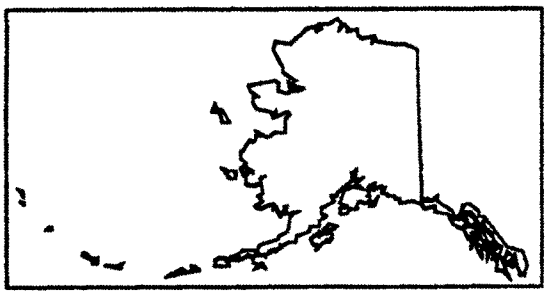
* Massachusetts did not provide data on RCRA TSD facilities or management of RCRA hazardous waste.

Michigan

Region V



MICHIGAN

EPA Region Address:	U.S. EPA Region V Waste Management Division 230 S. Dearborn Street Mail Stop 5HR13 Chicago, IL 60604
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Waste Management Division Department of Natural Resources Post Office Box 30241 Lansing, MI 48909
Contact Name:	Mr. Kenneth J. Burda Chief, Hazardous Waste Permit Section
Phone:	(517) 373-0530

Notes: No special notes for Michigan.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MICHIGAN

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	824
Total Quantity of Regulated Waste Generated:	35,143,264 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	39
Facilities managing only waste generated off site	17
Facilities managing waste generated both on and off site	8
Total RCRA TSD Facilities (excluding storage-only facilities):	64
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	35,067,217 tons
Total RCRA TSD Facilities:	232

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	2	33	58,497	58,530	.2
SOLVENTS RECOVERY	M021-M029	15	19,652	19,215	38,867	.1
OTHER RECOVERY	M031-M039	1	144	0	144	.0
INCINERATION	M041-M049	6	15,569	12,532	28,102	.1
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	4,151	0	4,151	.0
FUEL BLENDING	M061	7	7,417	136,251	143,668	.4
AQUEOUS INORGANIC TREATMENT	M071-M079	21	161,394	16,287	177,681	.5
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	2	33,715,978	14,527	33,730,505	96.2
SLUDGE TREATMENT	M101-M109	4	7,082	3,283	10,365	.0
STABILIZATION	M111-M119	4	89,471	158,612	248,082	.7
OTHER TREATMENT	M121-M129	15	356,557	9,844	366,402	1.0
LANDFILL	M132	3	175	200,000	200,175	.6
UNDERGROUND INJECTION	M134	1	60,405	0	60,405	.2
OTHER DISPOSAL	M137	1	1	0	1	.0
INVALID SYSTEM TYPE		9	0	139	139	.0
TOTAL		64	34,438,028	629,189	35,067,217	100.0
PERCENTAGE		-	98.2 %	1.8 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MICHIGAN

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	192
AR	1
AZ	5
CA	1,653
CT	15,625
DC	31
DE	1,156
FC	3,596
FL	1,526
GA	1,201
IA	217
ID	0
IL	5,918
IN	14,341
KS	52
KY	4,124
MA	2,250
MD	916
ME	853
MN	561
MO	17,483
MS	346
MT	215
NC	1,097
NE	7
NH	164
NJ	7,463
NM	5
NY	19,736
OH	62,702
OK	98
PA	28,442
PR	20
RI	241
SC	1,483
SD	4
TN	1,117
TX	134
VA	984
VT	2
WA	6
WI	2,729
WV	938
TOTAL	199,634

Exports

State	Tons Shipped
AL	2,713
AR	22,171
CA	0
CT	20
FC	7,068
FL	5
GA	539
IL	21,495
IN	73,596
KS	15,929
KY	1,765
LA	1,461
MA	10
MN	19
MO	544
NC	3
NE	5,946
NJ	688
NY	59
OH	66,349
OK	18
OR	89
PA	5,081
SC	160
TN	114
TX	1,635
WI	381
TOTAL	227,860

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MICHIGAN

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MOMX*	34,115,967	97.1
2	D002	211,090	.6
3	D007	138,260	.4
4	DOMX*	124,127	.4
5	D006	109,337	.3
6	K062	98,398	.3
7	K061	68,511	.2
8	F006	64,648	.2
9	FOMX*	47,964	.1
10	D001	46,844	.1
11	F003	25,723	.1
12	U019	21,235	.1
13	U239	19,422	.1
14	D008	16,171	.0
15	F002	11,879	.0
16	F005	8,984	.0
17	F001	2,902	.0
18	U240	1,981	.0
19	D003	1,372	.0
20	F019	1,306	.0
21	UOMX*	973	.0
22	K043	835	.0
23	U028	781	.0
24	U008	716	.0
25	D009	671	.0
26	F007	531	.0
27	K051	460	.0
28	U210	433	.0
29	U188	372	.0
30	D016	294	.0
31	D005	241	.0
32	D011	99	.0
33	U121	98	.0
34	F008	92	.0
35	D010	75	.0
36	U002	63	.0
37	U084	61	.0
38	U221	53	.0
39	U211	38	.0
40	U226	35	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MICHIGAN

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	K062	58,497
		D002	30
		D0MX*	3
SOLVENTS RECOVERY	M021-M029	F001	14,778
		M0MX*	9,715
		F003	9,310
		D001	3,025
OTHER RECOVERY	M031-M039	K062	144
INCINERATION	M041-M049	M0MX*	8,509
		D001	6,428
		F003	3,065
		F005	2,575
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	D001	4,151
FUEL BLENDING	M061	M0MX*	67,986
		F003	25,967
		D001	18,440
		F0MX*	13,870
AQUEOUS INORGANIC TREATMENT	M071-M079	D007	128,757
		D006	17,519
		D0MX*	17,393
		D008	2,496
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	M0MX*	33,730,505
SLUDGE TREATMENT	M101-M109	D008	6,977
		K062	3,283
		D002	105
		D005	0
STABILIZATION	M111-M119	M0MX*	93,493
		K061	42,642
		F006	28,900
		D002	18,387
OTHER TREATMENT	M121-M129	D002	356,928
		D008	6,978
		D0MX*	1,434
		M0MX*	538
LANDFILL	M132	K061	50,120
		F006	46,111
		D008	33,129
		U239	31,420

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MICHIGAN

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989 (continued)

Management Method	Code	Waste Type	Quantity Managed in State (tons)
UNDERGROUND INJECTION	M134	D0MX*	60,405
		D002	0
OTHER DISPOSAL	M137	D002	1
INVALID SYSTEM TYPE		F005	40
		M0MX*	33
		D004	19
		D001	17
TOTAL			35,067,217

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MICHIGAN

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	MID000724724	THE DOW CHEMICAL COMPANY	MIDLAND	33,760,292
02	MID006013643	PARKE DAVIS & CO	HOLLAND	171,182
03	MID005344544	J D PLATING CO	MADISON HEIGHTS	105,813
04	MID000724831	MICHIGAN DISPOSAL, INC.	BELLEVILLE	93,364
05	MID096963194	CHEM-MET SERVICES INC	WYANDOTTE	89,855
06	MID052035425	APOLLO PLATING INC	ROSEVILLE	89,592
07	MID000820381	UPJOHN CO THE	KALAMAZOO	74,538
08	MID055663538	CLARK BROTHERS METAL FABRICATORS	GROSSE ILE	74,364
09	MID980615298	PETRO-CHEM PROCESSING INC	DETROIT	69,569
10	MID060975844	MICHIGAN RECOVERY SYSTEMS	ROMULUS	57,170
11	MID103514048	LANTZ W S CORP	DETROIT	37,276
12	MID980617435	THE DOW CHEMICAL COMPANY	MIDLAND	36,137
13	MID017422304	MCLOUTH STEEL-TRENTON PLANT	TRENTON	27,624
14	MID980904478	THE DOW CHEMICAL COMPANY	AUBURN	20,935
15	MID093048957	COLUMBUS STEEL DRUM OF PONTIAC	PONTIAC	20,140
16	MID078400165	ROMEO ENGINE PLT	ROMEO	19,426
17	MID006020457	MIDWEST PLATING CO INC	GRAND RAPIDS	16,417
18	MID098011992	CYANOKEM	DETROIT	15,032
19	MID005227228	LEAR SIEGLER PLASTICS CORP.	MENDON	14,541
20	MIT270010325	LECO CORPORATION	ST JOSEPH	14,081
21	MID087738431	ROUGE STEEL CO	DEARBORN	13,928
22	MID052052081	VOSS STEEL CORP	TAYLOR	13,208
23	MID004320479	NATIONAL STEEL CORPORATION GREAT LAKES D	ECORSE	12,216
24	MID982073496	JEFFERSON CONNORS PROJECT	DETROIT	12,161
25	MID000809632	DOW CORNING CORP MIDLAND PLT	MIDLAND	11,761
26	MID981954860	DUNDEE WIRE AND MFG	DUNDEE	7,615
27	MID085031599	BRAUN ENGINEERING COMPANY	DETROIT	6,986
28	MID005068143	ELECTRO-VOICE INC	BUCHANAN	6,860
29	MID005356878	GMC-SAGINAW DIVISION	SAGINAW	6,418
30	MID097239669	HEIDTMAN STEEL PRODUCTS, INC.	ERIE	5,610
31	MID068806520	NATIONAL METAL PROCESSING	DETROIT	5,456
32	MID005363114	ATOCHEM NORTH AMERICA	WYANDOTTE	5,344
33	MID006031785	COIL ANODIZERS DIV LORIN IND	MUSKEGON	5,077
34	MID006014666	LACKS INDUSTRIES INC	GRAND RAPIDS	4,988
35	MID072782857	COMMONWEALTH INDUSTRIES	DETROIT	4,669
36	MID007138746	BASF CORPORATION COATINGS & COLORANTS DI	DETROIT	4,648
37	MID005356621	GMC DELCO PRODUCTS DIVISION	LIVONIA	4,620
38	MID005379714	FORD MOTOR CO WIXOM ASSEMBLY PLT	WIXOM	4,384
39	MID095947552	MIDWEST ALUMINUM MFG CO	KALAMAZOO	4,288
40	MID981195936	PVS CHEMICALS INC MICHIGAN	WYANDOTTE	3,992

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MICHIGAN

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

ank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
1	MID000724724 THE DOW CHEMICAL COMPANY, MIDLAND					33,738,640
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	33,715,978	0	33,715,978	
	INCINERATION	M041-M049	14,470	4,042	18,511	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	4,151	0	4,151	
2	MID006013643 PARKE DAVIS & CO., HOLLAND					340,641
	OTHER TREATMENT	M121-M129	340,641	0	340,641	
3	MID048090633 WAYNE DISPOSAL, INC., BELLEVILLE					200,071
	LANDFILL	M132	175	199,896	200,071	
4	MID096963194 CHEM-MET SERVICES INC., WYANDOTTE					121,106
	STABILIZATION	M111-M119	89,419	31,687	121,106	
5	MID000724831 MICHIGAN DISPOSAL, INC., BELLEVILLE					114,149
	STABILIZATION	M111-M119	0	114,149	114,149	
6	MID052035425 APOLLO PLATING INC., ROSEVILLE					89,575
	AQUEOUS INORGANIC TREATMENT	M071-M079	89,575	0	89,575	
7	MID074259565 DYNECOL INC., DETROIT					76,624
	METALS RECOVERY (FOR REUSE)	M011-M019	0	58,497	58,497	
	STABILIZATION	M111-M119	0	12,776	12,776	
	SLUDGE TREATMENT	M101-M109	0	3,283	3,283	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	1,878	1,878	
	OTHER TREATMENT	M121-M129	0	191	191	
8	MID980615298 PETRO-CHEM PROCESSING INC., DETROIT					74,085
	FUEL BLENDING	M061	7,236	66,849	74,085	
9	MID000820381 UPJOHN CO THE, KALAMAZOO					61,554
	UNDERGROUND INJECTION	M134	60,405	0	60,405	
	INCINERATION	M041-M049	1,083	53	1,136	
	INVALID SYSTEM TYPE		0	13	13	
10	MID005379607 LAFARGE CORP., ALPENA					55,594
	FUEL BLENDING	M061	0	55,594	55,594	
11	MID980617435 THE DOW CHEMICAL COMPANY, MIDLAND					23,012
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	14,527	14,527	
	INCINERATION	M041-M049	0	8,388	8,388	
	LANDFILL	M132	0	97	97	
12	MID006020457 MIDWEST PLATING CO INC., GRAND RAPIDS					16,401
	AQUEOUS INORGANIC TREATMENT	M071-M079	16,401	0	16,401	
13	MID098011992 CYANOKEM, DETROIT					16,252
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	10,735	10,735	
	OTHER TREATMENT	M121-M129	0	5,481	5,481	
	INVALID SYSTEM TYPE		0	35	35	
14	MID005227228 LEAR SIEGLER PLASTICS CORP., MENDON					14,412
	AQUEOUS INORGANIC TREATMENT	M071-M079	14,412	0	14,412	
15	MID005068507 SUNDSTRAND HEAT TRANSFER INC., DOWAGIAC					14,283
	SOLVENTS RECOVERY	M021-M029	14,283	0	14,283	
16	MID005344544 J D PLATING CO., MADISON HEIGHTS					14,041
	AQUEOUS INORGANIC TREATMENT	M071-M079	14,041	0	14,041	
17	MIT270010325 LECO CORPORATION, ST JOSEPH					13,972
	AQUEOUS INORGANIC TREATMENT	M071-M079	13,972	0	13,972	
18	MID058816927 JOHNSON CONTROLS GLOBE BATTERY OWOSSO, OWOSSO					13,954
	SLUDGE TREATMENT	M101-M109	6,977	0	6,977	
	OTHER TREATMENT	M121-M129	6,977	0	6,977	
19	MID057002602 ENVIRONMENTAL WASTE CONTROL INC., INKSTER					13,390
	FUEL BLENDING	M061	0	8,085	8,085	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	3,663	3,663	
	OTHER TREATMENT	M121-M129	0	1,613	1,613	
	INVALID SYSTEM TYPE		0	29	29	

xcluding quantity managed by storage only.

MICHIGAN

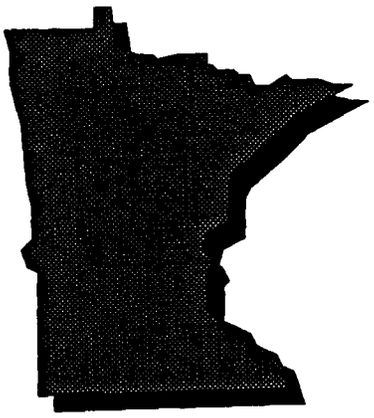
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

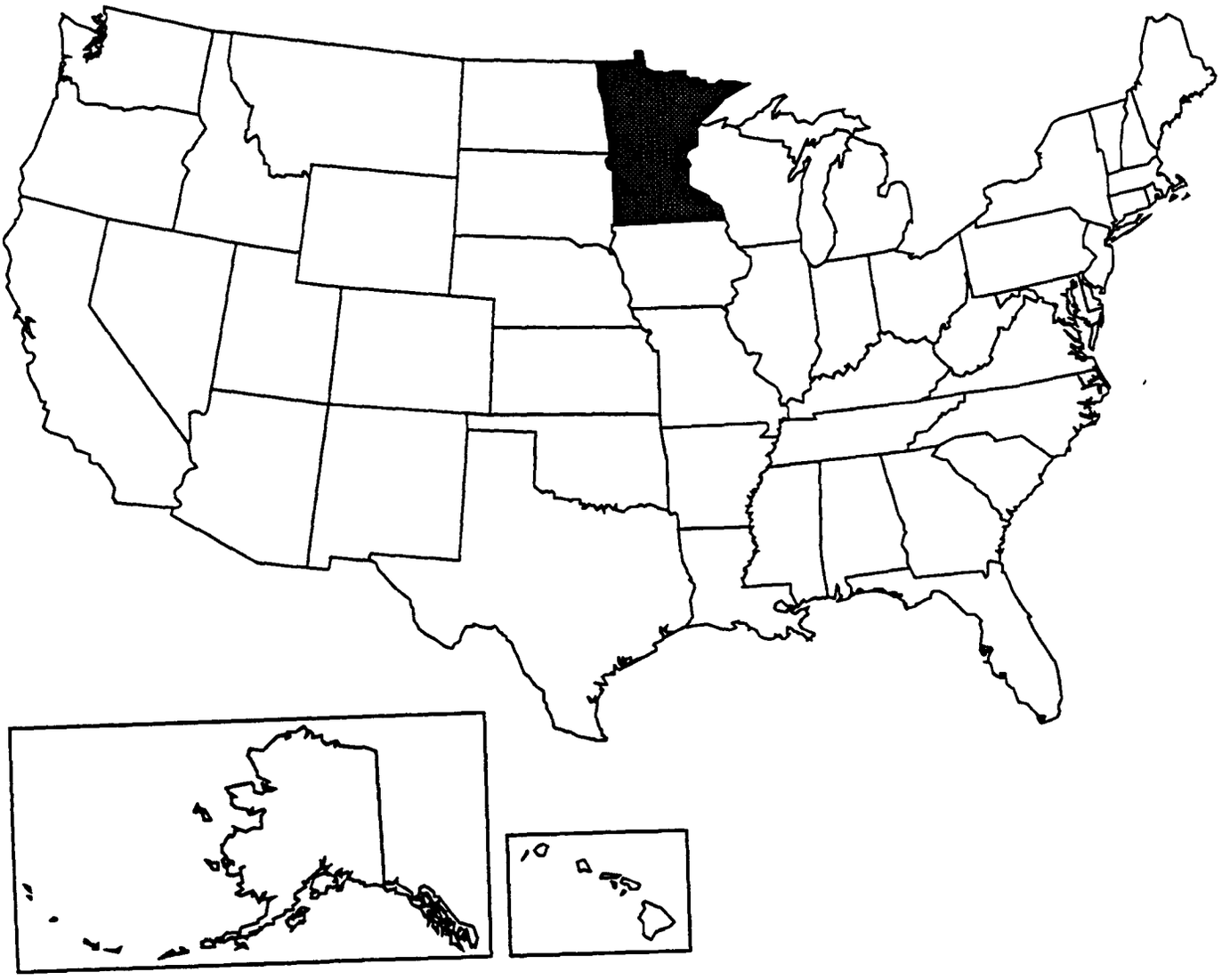
Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
20	MID060975844 MICHIGAN RECOVERY SYSTEMS, ROMULUS					12,
	SOLVENTS RECOVERY	M021-M029	0	6,678	6,678	
	FUEL BLENDING	M061	0	5,699	5,699	
	INVALID SYSTEM TYPE		0	47	47	
21	MID981954860 DUNDEE WIRE AND MFG., DUNDEE					7
	OTHER TREATMENT	M121-M129	7,577	0	7,577	
22	MID006523385 US CHEMICAL CO INC., ROSEVILLE					7
	SOLVENTS RECOVERY	M021-M029	0	7,573	7,573	
23	MID990858003 ORGANIC CHEMICALS INC., GRANDVILLE					4
	SOLVENTS RECOVERY	M021-M029	0	4,683	4,683	
24	MID072782857 COMMONWEALTH INDUSTRIES, DETROIT					4
	AQUEOUS INORGANIC TREATMENT	M071-M079	4,170	0	4,170	
25	MID083684290 HEXCEL CORP CHEMICAL PRODUCTS DIV., ZEELAND					3
	SOLVENTS RECOVERY	M021-M029	3,795	0	3,795	
26	MID005503263 MODERN HARD CHROME SERVICE CO., WARREN					3
	AQUEOUS INORGANIC TREATMENT	M071-M079	3,531	0	3,531	
27	MID981088297 BIG RAPIDS PRODUCTS, INC., BIG RAPIDS					2
	AQUEOUS INORGANIC TREATMENT	M071-M079	2,502	0	2,502	
28	MID088754668 EDWARDS OIL SERVICE INC., DETROIT					2
	OTHER TREATMENT	M121-M129	0	2,262	2,262	
29	MIT270012669 GRAND RAPIDS DIE CASTING, GRAND RAPIDS					1
	AQUEOUS INORGANIC TREATMENT	M071-M079	1,518	0	1,518	
30	MID001868595 COATINGS AND COLORANTS DIV., GRAND RAPIDS					1
	SOLVENTS RECOVERY	M021-M029	1,163	0	1,163	
31	MID092947928 DRUG & LABORATORY DISPOSAL INC., PLAINWELL					
	OTHER TREATMENT	M121-M129	522	292	814	
	STABILIZATION	M111-M119	51	0	51	
	AQUEOUS INORGANIC TREATMENT	M071-M079	39	11	50	
32	MID005339460 CADON PLATING CO., WYANDOTTE					
	AQUEOUS INORGANIC TREATMENT	M071-M079	897	0	897	
33	MID006131890 GREDE FOUNDRIES INC IRON MOUNTAIN PLANT, KINGSFORD					
	OTHER TREATMENT	M121-M129	568	0	568	
34	MID020906764 DETREX CORPORATION- SOLVENTS DIVISION, GRAND RAPIDS					
	SOLVENTS RECOVERY	M021-M029	0	282	282	
35	MID072569510 KOCH CHEMICAL COMPANY, WHITEHALL					
	SOLVENTS RECOVERY	M021-M029	277	0	277	
36	MID005378161 MICHIGAN CHROME & CHEMICAL CO., DETROIT					
	OTHER TREATMENT	M121-M129	160	0	160	
	AQUEOUS INORGANIC TREATMENT	M071-M079	36	0	36	
37	MID070299268 M N P MFG CORP., UTICA					
	OTHER RECOVERY	M031-M039	144	0	144	
38	MID044973642 ARMORCLAD INC., FARMINGTON					
	AQUEOUS INORGANIC TREATMENT	M071-M079	138	0	138	
39	MIT270012131 CATHODIC ELECTROCOATING CO., ECORSE					
	FUEL BLENDING	M061	125	0	125	
40	MID006016547 STEELCASE INC., GRAND RAPIDS					
	OTHER TREATMENT	M121-M129	99	0	99	
	FUEL BLENDING	M061	0	24	24	

1 Excluding quantity managed by storage only.

Minnesota

Region V





MINNESOTA

EPA Region Address:	U.S. EPA Region V Waste Management Division 230 S. Dearborn Street Mail Stop 5HR13 Chicago, IL 60604
Biennial Report Data Collection Instrument:	State-specific annual report
Address of Participating State Environmental Authority	Generator Technical Assistance Unit Hazardous Waste Division Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, MN 55155-3898
Contact Name:	Mr. Edward R. Meyer Supervisor
Phone:	(612) 297-8333

Notes: No special notes for Minnesota.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MINNESOTA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	241
Total Quantity of Regulated Waste Generated:	239,098 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	77
Facilities managing only waste generated off site	10
Facilities managing waste generated both on and off site	7
Total RCRA TSD Facilities (excluding storage-only facilities):	94
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	348,586 tons
Total RCRA TSD Facilities:	237

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	5	162	80,000	80,162	23.0
SOLVENTS RECOVERY	M021-M029	8	231	0	231	.1
OTHER RECOVERY	M031-M039	19	259	0	259	.1
INCINERATION	M041-M049	7	3,886	0	3,886	1.1
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3	27	0	27	.0
AQUEOUS INORGANIC TREATMENT	M071-M079	7	75,079	0	75,079	21.5
AQUEOUS ORGANIC TREATMENT	M081-M089	1	48,113	0	48,113	13.8
SLUDGE TREATMENT	M101-M109	2	24,192	0	24,192	6.9
STABILIZATION	M111-M119	1	551	0	551	.2
OTHER TREATMENT	M121-M129	60	75,065	0	75,065	21.5
LAND TREATMENT	M131	3	9,735	0	9,735	2.8
LANDFILL	M132	5	27	0	27	.0
OTHER DISPOSAL	M137	2	1	0	1	.0
INVALID SYSTEM TYPE		16	0	31,257	31,257	9.0
TOTAL		94	237,329	111,257	348,586	100.0
PERCENTAGE		-	68.1 %	31.9 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MINNESOTA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	1,192
AR	6
AZ	21
CA	387
CO	1
FL	9
GA	12
IA	842
ID	2
IL	2,385
IN	857
KS	3
KY	170
LA	18
MA	8
MD	24
MI	49
MO	2,845
NC	2
ND	102
NE	6
NJ	168
NV	1
NY	149
OH	58
OK	282
OR	345
PA	509
PR	25
SC	28
SD	316
TN	5
TX	400
UT	7
VA	2
WA	0
WI	1,200
WV	146
TOTAL	12,581

Exports

State	Tons Shipped
AL	1,134
AR	911
AZ	169
CA	101
CT	61
ID	15
IL	19,903
IN	1,318
KS	21
KY	10
LA	560
MA	40
MI	922
MO	207
NC	2
NJ	68
NY	21
OH	117
OK	5,203
OR	2
PA	0
SC	7
SD	1
TN	15
TX	29
UT	2
WI	7,965
TOTAL	38,805

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MINNESOTA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D007	103,134	43.1
2	DOMX*	43,355	18.1
3	MOMX*	29,108	12.2
4	D002	22,089	9.2
5	FOMX*	7,885	3.3
6	K048	7,435	3.1
7	D008	5,878	2.5
8	K061	4,915	2.1
9	D001	3,539	1.5
10	F006	3,270	1.4
11	F005	2,719	1.1
12	F002	1,019	.4
13	F003	986	.4
14	F001	840	.4
15	D011	592	.2
16	F009	591	.2
17	K046	462	.2
18	F007	320	.1
19	K051	283	.1
20	D003	258	.1
21	K050	186	.1
22	D006	109	.0
23	D004	42	.0
24	F019	20	.0
25	D009	18	.0
26	UOMX*	15	.0
27	F008	8	.0
28	P067	6	.0
29	U220	2	.0
30	U019	2	.0
31	U223	2	.0
32	D005	2	.0
33	U188	1	.0
34	P120	1	.0
35	U211	1	.0
36	U044	1	.0
37	U002	1	.0
38	U239	1	.0
39	U080	0	.0
40	U158	0	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MINNESOTA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D008	80,030
		D002	88
		F006	44
SOLVENTS RECOVERY	M021-M029	F0MX*	109
		M0MX*	64
		F001	29
		F002	28
OTHER RECOVERY	M031-M039	M0MX*	143
		D001	49
		F003	28
		D0MX*	13
INCINERATION	M041-M049	F005	2,048
		D001	1,554
		D0MX*	118
		D002	105
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	D001	20
		D008	6
		D0MX*	1
AQUEOUS INORGANIC TREATMENT	M071-M079	D0MX*	40,733
		D007	32,901
		D002	1,228
		D003	196
AQUEOUS ORGANIC TREATMENT	M081-M089	M0MX*	47,914
		D002	173
		D001	26
SLUDGE TREATMENT	M101-M109	M0MX*	23,957
		D002	173
		F006	49
		D001	13
STABILIZATION	M111-M119	D0MX*	551
OTHER TREATMENT	M121-M129	D007	67,709
		D002	6,873
		F002	109
		D011	90
LAND TREATMENT	M131	M0MX*	7,751
		K001	1,680
		K050	186
		D002	110

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MINNESOTA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989 (continued)

Management Method	Code	Waste Type	Quantity Managed in State (tons)
LANDFILL	M132	F006	21
		MOMX*	4
		D008	2
		F002	0
OTHER DISPOSAL	M137	D008	1
INVALID SYSTEM TYPE		D001	9,646
		D002	7,743
		F005	4,386
		F003	3,413
TOTAL			348,586

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MINNESOTA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	MNT280010257	NICO PRODUCTS, INC.	MINNEAPOLIS	68,266
02	MND006161756	IBM ROCHESTER	ROCHESTER	42,659
03	MND000686071	KOCH REFINING COMPANY	ROSEMOUNT	32,109
04	MND000823922	UNISYS CORP. - SHEPARD ROAD	SAINT PAUL	24,582
05	MND006172969	3M-CHEMOLITE	COTTAGE GROVE	12,111
06	MND079731519	UNISYS CORP.-ROSEVILLE	ROSEVILLE	7,719
07	MND041775008	NORTH STAR STEEL	SAINT PAUL	4,915
08	MND050730175	HARD CHROME INC.	MINNEAPOLIS	4,761
09	MND006148092	GOPHER SMELTING COMPANY	EAGAN	4,375
10	MND006147847	VISION EASE LENS DIV./CAMELOT IND.	ST. CLOUD	3,361
11	MND006172902	3M/MAGNETIC A/V PRODUCTS DIV.	HUTCHINSON	2,451
12	MND006147268	SHELDAHL INC. EAST PLANT	NORTHFIELD	1,698
13	MND001037639	ADVANCE CIRCUITS INC.	ROSEVILLE	1,695
14	MND981098478	METRO RECOVERY SYSTEMS (LANCY)	ROSEVILLE	1,639
15	MND000823914	UNISYS CORP. - EAGAN	EAGAN	1,558
16	MND071496368	STROH BREWERY CO	SAINT PAUL	1,438
17	MND006253801	SUPERIOR PLATING INC	MINNEAPOLIS	1,252
18	MND006156590	FEDERAL-HOFFMAN, INC.	ANOKA	1,248
19	MND006251839	WOLKERSTORFER CO. INC.	NEW BRIGHTON	1,137
20	MND980700900	BUREAU OF ENGRAVING INC.	MINNEAPOLIS	1,022
21	MND006207773	FORD MOTOR COMPANY	SAINT PAUL	924
22	MND042651687	ADVANCE CIRCUITS INC.	MINNETONKA	902
23	MND006172621	COOPERATIVE PLATING	SAINT PAUL	884
24	MND041786930	AF2 INC.	COLUMBIA HEIGHTS	788
25	MND006154918	ELECTRO-PLATING ENGINEERING CO. INC.	SAINT PAUL	725
26	MN3170022914	NAVAL SYSTEMS DIV. OF FMC CORP.	MINNEAPOLIS	562
27	MND990860470	BMC INDUSTRIES, INC	SAINT PAUL	537
28	MND047250444	OSMONICS INC	MINNETONKA	492
29	MND000819284	HONEYWELL INC. - GOLDEN VALLEY	GOLDEN VALLEY	455
30	MND006456768	HUTCHINSON TECHNOLOGY INC.	HUTCHINSON	454
31	MND022995690	SMITH SYSTEM MFG. CO.	PRINCETON	383
32	MND000819268	ALLIANT TECHSYSTEMS INC.	ARDEN HILLS	349
33	MND006167332	ANDERSEN CORPORATION	BAYPORT	349
34	MND006162820	ASHLAND - ST PAUL PARK REFINERY	ST. PAUL PARK	322
35	MND077636397	LITCHFIELD PRECISION COMPONENTS	LITCHFIELD	292
36	MND006160014	PLATING INCORPORATED	SAINT PAUL	268
37	MND000608547	CONTROL DATA CORP (MEADOWBROOK)	MINNEAPOLIS	255
38	MND980680540	ADVANCE CIRCUITS INC.	HOPKINS	244
39	MND050742014	CROWN CORK & SEAL COMP. INC.- FARIBAULT	FARIBAULT	243
40	MND980501167	CRENLO, INC.-PLANT #2	ROCHESTER	239

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MINNESOTA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
1	MND000686071 KOCH REFINING COMPANY, ROSEMOUNT					80,312
	AQUEOUS ORGANIC TREATMENT	M081-M089	48,113	0	48,113	
	SLUDGE TREATMENT	M101-M109	24,143	0	24,143	
	LAND TREATMENT	M131	8,055	0	8,055	
2	MND006148092 GOPHER SMELTING COMPANY, EAGAN					80,000
	METALS RECOVERY (FOR REUSE)	M011-M019	0	80,000	80,000	
3	MNT280010257 NICO PRODUCTS, INC., MINNEAPOLIS					67,578
	OTHER TREATMENT	M121-M129	67,578	0	67,578	
4	MND006161756 IBM ROCHESTER, ROCHESTER					41,652
	AQUEOUS INORGANIC TREATMENT	M071-M079	41,647	0	41,647	
	OTHER TREATMENT	M121-M129	4	0	4	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	0	1	
5	MND000823922 UNISYS CORP. - SHEPARD ROAD, SAINT PAUL					24,139
	AQUEOUS INORGANIC TREATMENT	M071-M079	23,882	0	23,882	
	INVALID SYSTEM TYPE		0	140	140	
	OTHER TREATMENT	M121-M129	117	0	117	
6	MND006172969 3M-CHEMOLITE, COTTAGE GROVE					20,630
	INVALID SYSTEM TYPE		0	16,768	16,768	
	INCINERATION	M041-M049	3,862	0	3,862	
7	MND981098478 METRO RECOVERY SYSTEMS (LANCY), ROSEVILLE					9,835
	INVALID SYSTEM TYPE		0	9,823	9,823	
	OTHER TREATMENT	M121-M129	13	0	13	
8	MND079731519 UNISYS CORP.-ROSEVILLE, ROSEVILLE					7,677
	AQUEOUS INORGANIC TREATMENT	M071-M079	7,556	0	7,556	
	METALS RECOVERY (FOR REUSE)	M011-M019	72	0	72	
	SLUDGE TREATMENT	M101-M109	49	0	49	
	OTHER TREATMENT	M121-M129	1	0	1	
9	MND006147847 VISION EASE LENS DIV./CAMELOT IND., ST. CLOUD					3,357
	OTHER TREATMENT	M121-M129	2,794	0	2,794	
	STABILIZATION	M111-M119	551	0	551	
	SOLVENTS RECOVERY	M021-M029	12	0	12	
10	MND981190242 APTUS (NEI), LAKEVILLE					1,850
	INVALID SYSTEM TYPE		0	1,850	1,850	
11	MND000686196 BURLINGTON NORTHERN TIE PLANT, BRAINERD					1,680
	LAND TREATMENT	M131	1,680	0	1,680	
12	MND000823914 UNISYS CORP. - EAGAN, EAGAN					1,512
	AQUEOUS INORGANIC TREATMENT	M071-M079	1,479	0	1,479	
	OTHER TREATMENT	M121-M129	33	0	33	
13	MND054497052 VAN WATERS & ROGERS, INC., MINNEAPOLIS					1,116
	INVALID SYSTEM TYPE		0	1,116	1,116	
14	MND006253801 SUPERIOR PLATING INC., MINNEAPOLIS					973
	OTHER TREATMENT	M121-M129	966	0	966	
	LANDFILL	M132	7	0	7	
15	MND000685941 SOLV-OIL SERVICE AND SUPPLY CO., HOPKINS					933
	INVALID SYSTEM TYPE		0	933	933	
16	MND006154918 ELECTRO-PLATING ENGINEERING CO. INC., SAINT PAUL					647
	OTHER TREATMENT	M121-M129	647	0	647	
17	MND041786930 AF2 INC., COLUMBIA HEIGHTS					630
	OTHER TREATMENT	M121-M129	630	0	630	
18	MND000686709 ASHLAND CHEMICAL COMPANY, SHAKOPEE					535
	INVALID SYSTEM TYPE		0	535	535	

Excluding quantity managed by storage only.

MINNESOTA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City / Management Method			On Site	Off Site	Method Total	Tota Manage
19	MND047250444 OSMONICS INC., MINNETONKA						4
	OTHER TREATMENT	M121-M129		468	0	468	
20	MND000819284 HONEYWELL INC. - GOLDEN VALLEY, GOLDEN VALLEY						3
	AQUEOUS INORGANIC TREATMENT	M071-M079		351	0	351	
	INVALID SYSTEM TYPE			0	6	6	
21	MND022995690 SMITH SYSTEM MFG. CO., PRINCETON						3
	OTHER TREATMENT	M121-M129		348	0	348	
22	MND006160014 PLATING INCORPORATED, SAINT PAUL						2
	OTHER TREATMENT	M121-M129		266	0	266	
23	MN3170022914 NAVAL SYSTEMS DIV. OF FMC CORP., MINNEAPOLIS						1
	AQUEOUS INORGANIC TREATMENT	M071-M079		143	0	143	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059		20	0	20	
	SOLVENTS RECOVERY	M021-M029		17	0	17	
	OTHER TREATMENT	M121-M129		1	0	1	
24	MND064767858 GLASSTITE INC., DUNNELL						1
	OTHER RECOVERY	M031-M039		174	0	174	
	OTHER TREATMENT	M121-M129		0	0	0	
25	MND077636397 LITCHFIELD PRECISION COMPONENTS, LITCHFIELD						1
	OTHER TREATMENT	M121-M129		151	0	151	
26	MNT280010372 ROSEMOUNT INC. - EDEN PRAIRIE, EDEN PRAIRIE						1
	OTHER TREATMENT	M121-M129		137	0	137	
	OTHER RECOVERY	M031-M039		3	0	3	
	OTHER DISPOSAL	M137		1	0	1	
27	MND006963508 NORTHWEST AIRLINES-BLDG B MAIN BASE, ST. PAUL						1
	OTHER TREATMENT	M121-M129		125	0	125	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059		6	0	6	
	LANDFILL	M132		4	0	4	
28	MND006261267 PRECISION PLATING INC., MINNEAPOLIS						
	OTHER TREATMENT	M121-M129		125	0	125	
29	MND980501134 MCLAUGHLIN GORMLEY KING CO., MINNEAPOLIS						
	SOLVENTS RECOVERY	M021-M029		93	0	93	
30	MND081138604 ALLIANT TECHSYSTEMS PROVING GROUND		ELK RIVER				1
	OTHER TREATMENT	M121-M129		46	0	46	
	INVALID SYSTEM TYPE			0	21	21	
	INCINERATION	M041-M049		18	0	18	
31	MND000293365 MEDTRONIC INC.		FRIDLEY				1
	SOLVENTS RECOVERY	M021-M029		54	0	54	
	INVALID SYSTEM TYPE			0	28	28	
32	MND982419756 CLEANCO TRUCK WASH		ROSEVILLE				1
	OTHER TREATMENT	M121-M129		82	0	82	
33	MND001970334 HONEYWELL INC. - ORDNANCE DIVISION		HOPKINS				
	OTHER TREATMENT	M121-M129		71	0	71	
	INVALID SYSTEM TYPE			0	3	3	
34	MND006962492 BLACKS PHOTOGRAPHY USA INC.		MINNEAPOLIS				
	OTHER TREATMENT	M121-M129		73	0	73	
35	MND000608554 CONTROL DATA CORP. (80TH STREET)		BLOOMINGTON				
	METALS RECOVERY (FOR REUSE)	M011-M019		72	0	72	

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1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MINNESOTA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

ank	EPA ID / Management Method	Site Name, City		On Site	Off Site	Method Total	Total Managed 1
36	MND042651687	ADVANCE CIRCUITS INC.	MINNETONKA				71
	OTHER TREATMENT		M121-M129	71	0	71	
37	MND000819300	HONEYWELL - AVIONICS - ST. LOUIS PARK	ST. LOUIS PARK				55
	SOLVENTS RECOVERY		M021-M029	55	0	55	
38	MND985668227	PRECISION DIVERSIFIED IND. INC.	PLYMOUTH				52
	OTHER TREATMENT		M121-M129	52	0	52	
39	MND006249668	METAL-MATIC INC	MINNEAPOLIS				45
	OTHER TREATMENT		M121-M129	30	0	30	
	OTHER RECOVERY		M031-M039	15	0	15	
40	MND077632610	TECHNICAL PLATING INC.	MINNEAPOLIS				31
	OTHER TREATMENT		M121-M129	31	0	31	

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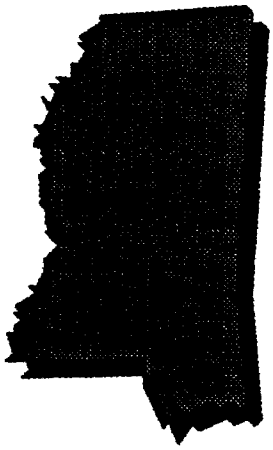
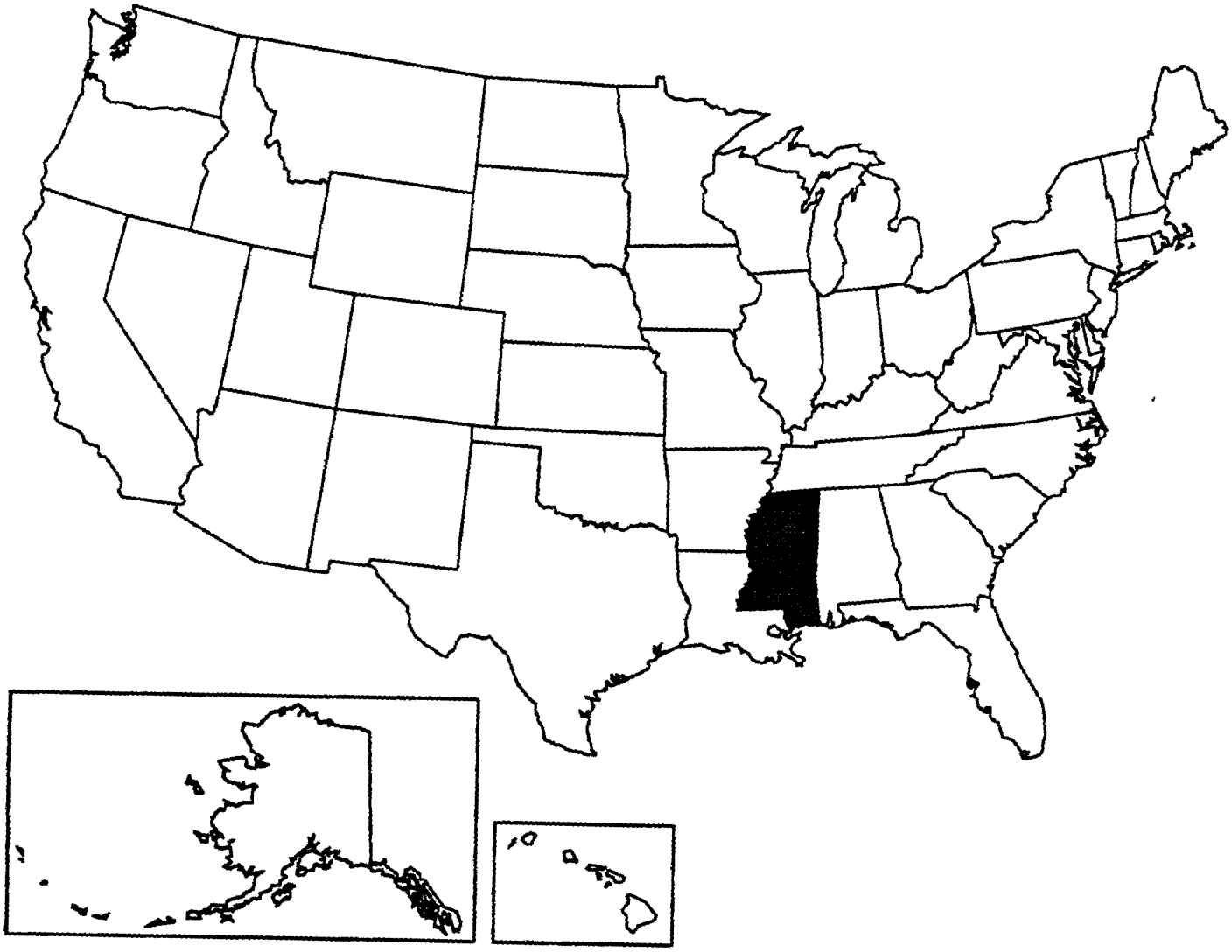
cluding quantity managed by storage only.

Mississippi

Region IV





MISSISSIPPI

EPA Region Address:	U.S. EPA Region IV Waste Division, Waste Programs Branch State Programs Section 345 Courtland Street Atlanta, GA 30365
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Division Office of Pollution Control Department of Environmental Quality Post Office Box 10385 Jackson, MS 39289-0385
Contact Name:	Mr. Michael J. Weaver Data Base Administrator
Phone:	(601) 961-5314

Notes: No special notes for Mississippi.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSISSIPPI

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	153
Total Quantity of Regulated Waste Generated:	717,291 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	8
Facilities managing only waste generated off site	3
Facilities managing waste generated both on and off site	2
Total RCRA TSD Facilities (excluding storage-only facilities):	13
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed only in storage)	697,961 tons
Total RCRA TSD Facilities:	31

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	4	167	264	431	.1
INCINERATION	M041-M049	2	4	74	78	.0
FUEL BLENDING	M061	1	0	210	210	.0
AQUEOUS INORGANIC TREATMENT	M071-M079	5	327,831	17	327,848	47.0
STABILIZATION	M111-M119	1	0	19	19	.0
OTHER TREATMENT	M121-M129	1	3,290	0	3,290	.5
LAND TREATMENT	M131	2	2,561	17,679	20,240	2.9
LANDFILL	M132	2	3,367	0	3,367	.5
UNDERGROUND INJECTION	M134	1	342,473	0	342,473	49.1
OTHER DISPOSAL	M137	1	5	0	5	.0
INVALID SYSTEM TYPE		2	0	0	0	.0
TOTAL		13	679,698	18,263	697,961	100.0
PERCENTAGE		-	97.4 %	2.6 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSISSIPPI

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	6
AR	246
CA	18
IL	0
IN	1
KY	5
LA	17,690
MO	14
TN	648
TX	21
TOTAL	18,649

Exports

State	Tons Shipped
AL	11,532
AR	65
AZ	18
FL	8
GA	78
IL	2,766
IN	64
KY	711
LA	8,162
MI	577
MO	678
NY	0
OH	35
OK	270
PA	717
SC	46
TN	13,028
TX	4,661
TOTAL	43,415

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MISSISSIPPI

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D003	670,297	93.4
2	DONX*	19,252	2.7
3	D001	3,521	.5
4	MONX*	3,519	.5
5	K061	2,303	.3
6	K051	2,128	.3
7	F019	2,027	.3
8	D002	1,719	.2
9	FONX*	1,681	.2
10	K104	1,406	.2
11	F006	1,231	.2
12	K083	1,184	.2
13	U051	792	.1
14	F005	785	.1
15	D007	669	.1
16	D008	666	.1
17	U220	584	.1
18	F001	561	.1
19	F007	543	.1
20	K048	464	.1
21	K001	396	.1
22	P048	298	.0
23	F003	276	.0
24	F002	258	.0
25	P020	193	.0
26	PONX*	157	.0
27	D004	95	.0
28	K052	70	.0
29	UONX*	64	.0
30	K050	40	.0
31	U122	33	.0
32	P123	32	.0
33	KONX*	16	.0
34	F008	9	.0
35	D006	6	.0
36	K045	5	.0
37	D009	3	.0
38	U211	3	.0
39	U190	2	.0
40	F009	2	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSISSIPPI

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F0MX*	400
		D001	14
		F003	8
		F001	7
INCINERATION	M041-M049	D001	24
		F0MX*	14
		D002	8
		D0MX*	8
FUEL BLENDING	M061	F0MX*	137
		F003	47
		D001	17
		M0MX*	6
AQUEOUS INORGANIC TREATMENT	M071-M079	D003	324,453
		D0MX*	2,000
		F019	775
		D002	489
STABILIZATION	M111-M119	F006	19
		D002	0
OTHER TREATMENT	M121-M129	D0MX*	3,290
LAND TREATMENT	M131	K048	18,143
		K051	1,987
		K052	70
		K050	40
LANDFILL	M132	D003	3,367
		F003	0
UNDERGROUND INJECTION	M134	D003	342,473
OTHER DISPOSAL	M137	F0MX*	5
INVALID SYSTEM TYPE		D001	0
		F0MX*	0
TOTAL			697,961

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSISSIPPI

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	MSD008186587	MORTON INTERNATIONAL, INC.	MOSS POINT	670,720
02	MSD980601686	CATERPILLAR, INC.	CORINTH	11,296
03	MSD054179403	CHEVRON U.S.A, INC.	PASCAGOULA	5,885
04	MSD033417031	FIRST CHEMICAL CORPORATION	PASCAGOULA	3,174
05	MSD079461406	AMERADA HESS CORPORATION	PURVIS	2,561
06	MSD008158685	MISSISSIPPI STEEL DIVISION	FLOWOOD	2,306
07	MSD004001244	GENCORP POLYMER PRODUCTS	COLUMBUS	2,053
08	MSD050648757	INGALLS SHIPBUILDING, INC. (WEST BANK)	PASCAGOULA	1,694
09	MS6210020560	MISSISSIPPI ARMY AMMUNITION PLANT	STENNIS SPACE CENTER	1,434
10	MSD098590615	INGALLS SHIPBUILDING, INC. (EAST BANK)	PASCAGOULA	1,381
11	MSD000693176	ENTERPRISE RECOVERY SYSTEMS, INC.	BYHALIA	821
12	MSD980842231	LAWN-BOY, INC.	OXFORD	787
13	MSD054531215	TRUE TEMPER SPORTS	AMORY	771
14	MSD081387730	KERR-MCGEE CHEMICAL CORP.	MERIDIAN	645
15	MSD006294771	CHROMCRAFT FURNITURE	SENATOBIA	642
16	MSD990714081	CEDAR CHEMICAL COMPANY	VICKSBURG	565
17	MSD007031230	VISTA POLYMERS	ABERDEEN	545
18	MSD980601512	MORTON INTERNATIONAL, INC.	MOSS POINT	498
19	MSD041165747	AKZO COATINGS, INC.	CLINTON	458
20	MSD982114712	REMAN, INC.	POLKVILLE	428
21	MSD980709646	KEMANORD, INC.	COLUMBUS	425
22	MSD010406809	AUTOMATIC PROCESSING, INC.	MOSS POINT	386
23	MSD053778668	T & M TERMINAL COMPANY	COLLINS	356
24	MSD066106923	PLATTE CHEMICAL COMPANNY	GREENVILLE	347
25	MSD081341729	RINGIER AMERICA, INC.	CORINTH	344
26	MSD004010724	UNITED TECHNOLOGIES MOTOR SYSTEMS	COLUMBUS	341
27	MSD063947790	PIPER IMPACT, INC.	NEW ALBANY	311
28	MSD050999127	AMOCO PETROLEUM ADDITIVES CO.	NATCHEZ	299
29	MSD054176052	COAST ENGINEER & MANUFACTURING CO.	GULFPORT	285
30	MSD000742668	GE PLASTICS	PEARLINGTON	278
31	MSD000287417	THOMPSON & FORMBY INC.	OLIVE BRANCH,	272
32	MSD007019623	HEATCRAFT INC.	GRENADA	223
33	MSD008182081	HERCULES INC.	HATTIESBURG	168
34	MSD000272385	RED PANTHER CHEMICAL	CLARKSDALE	163
35	MSD033359266	VICKERS, INC.	JACKSON	155
36	MSD990866329	KERR-MCGEE CHEMICAL CORP.	COLUMBUS	147
37	MSD004003513	CECO BUILDINGS DIV.	COLUMBUS	146
38	MSD980708846	VAN LEER CONTAINERS, INC.	CANTON	141
39	MS8210022812	AVCRAD	GULFPORT	123
40	MSD096076781	IPC CORINTH DIVISION, INC.	CORINTH	123

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSISSIPPI

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID	Site Name, City	Management Method	On Site	Off Site	Method Total	Total Manage
1	MSD008186587	MORTON INTERNATIONAL, INC., MOSS POINT					670,7
			UNDERGROUND INJECTION M134	342,473	0	342,473	
			AQUEOUS INORGANIC TREATMENT M071-M079	324,880	0	324,880	
			LANDFILL M132	3,367	0	3,367	
2	MSD083543009	ROGERS' RENTAL & LANDFILL CO., CENTREVILLE					17,6
			LAND TREATMENT M131	0	17,679	17,679	
3	MSD054179403	CHEVRON U.S.A, INC., PASCAGOULA					5,2
			OTHER TREATMENT M121-M129	3,290	0	3,290	
			AQUEOUS INORGANIC TREATMENT M071-M079	2,000	0	2,000	
			OTHER DISPOSAL M137	5	0	5	
4	MSD079461406	AMERADA HESS CORPORATION, PURVIS					2,5
			LAND TREATMENT M131	2,561	0	2,561	
5	MSD980842231	LAWN-BOY, INC., OXFORD					
			AQUEOUS INORGANIC TREATMENT M071-M079	775	0	775	
6	MSD000693176	ENTERPRISE RECOVERY SYSTEMS, INC., BYHALIA					
			SOLVENTS RECOVERY M021-M029	145	261	406	
			FUEL BLENDING M061	0	210	210	
			LANDFILL M132	0	0	0	
7	MSD000829150	ASHLAND CHEMICAL INC., JACKSON					
			AQUEOUS INORGANIC TREATMENT M071-M079	60	17	76	
			INCINERATION M041-M049	0	74	74	
			STABILIZATION M111-M119	0	19	19	
			SOLVENTS RECOVERY M021-M029	0	3	3	
8	MSD096076781	IPC CORINTH DIVISION, INC., CORINTH					
			AQUEOUS INORGANIC TREATMENT M071-M079	116	0	116	
9	MSD981856933	MISSISSIPPI NAPTHA DISTRIBUTORS, JACKSON					
			SOLVENTS RECOVERY M021-M029	14	0	14	
10	MSD067695742	FMC CORPORATION, TUPELO					
			SOLVENTS RECOVERY M021-M029	8	0	8	
11	MS6210020560	MISSISSIPPI ARMY AMMUNITION PLANT, STENNIS SPACE CENTER					
			INCINERATION M041-M049	4	0	4	
12	MSD000644617	SYSTEM ENERGY RESOURCES, INC., PORT GIBSON					
			INVALID SYSTEM TYPE	0	0	0	
13	MSD981030984	SAFETY-KLEEN CORP. 6-094-01, SOUTHHAVEN					
			INVALID SYSTEM TYPE	0	0	0	

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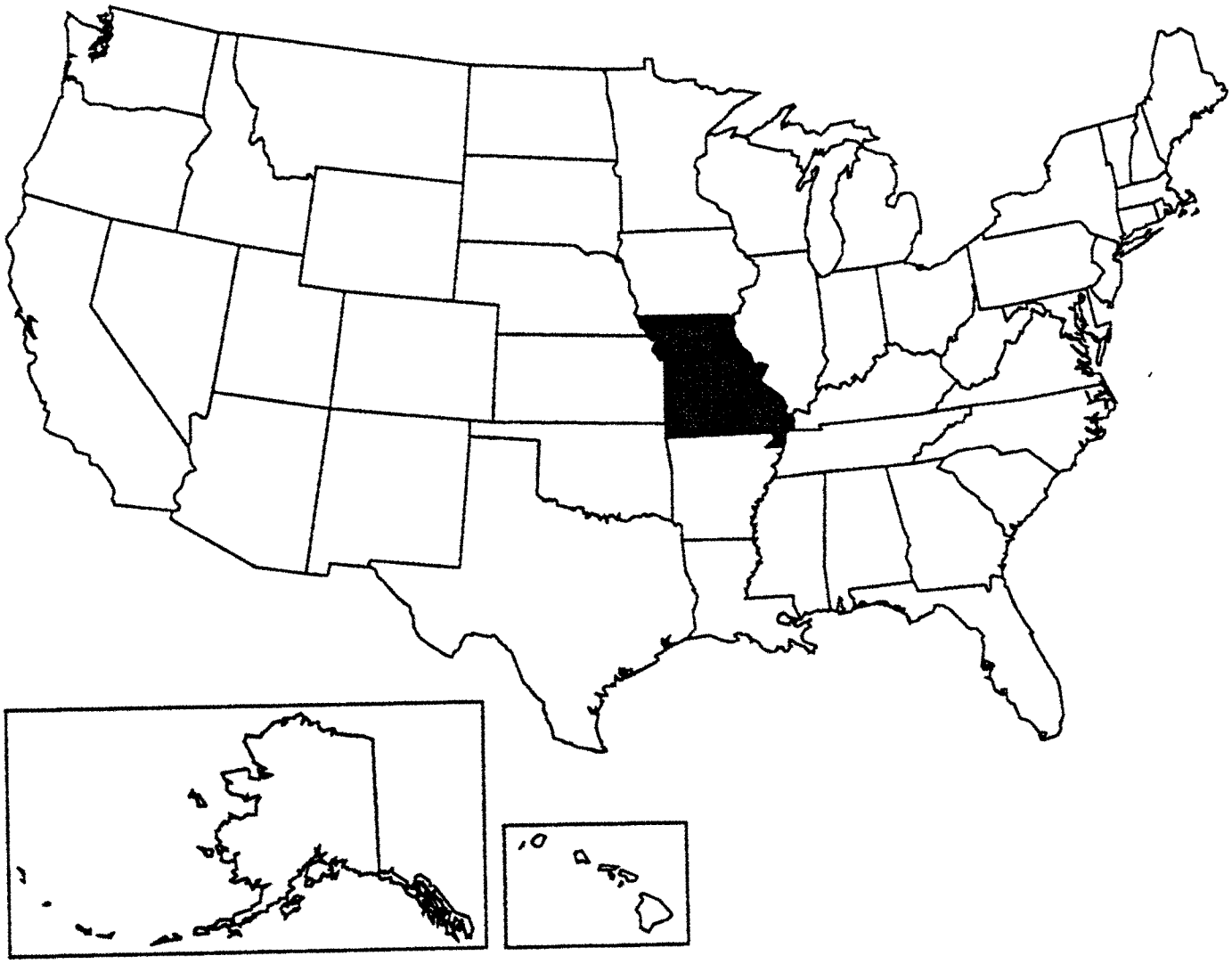
1 Excluding quantity managed by storage only.

Missouri

Region VII



MISSOURI

EPA Region Address:	U.S. EPA Region VII RCRA, Waste Management Division RCRA RADM 726 Minnesota Avenue Kansas City, KS 66101
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Program Department of Natural Resources Post Office Box 176 Jefferson City, MO 65102
Contact Name: Phone:	Mr. Joe Davis (314) 751-5537

Notes: No special notes for this State.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSOURI

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	298
Total Quantity of Regulated Waste Generated:	384,289 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	18
Facilities managing only waste generated off site	7
Facilities managing waste generated both on and off site	4
Total RCRA TSD Facilities (excluding storage-only facilities):	29
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	289,531 tons
Total RCRA TSD Facilities:	74

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	3	41	16,775	16,816	5.8
SOLVENTS RECOVERY	M021-M029	11	103	118	221	.1
OTHER RECOVERY	M031-M039	1	0	0	0	.0
INCINERATION	M041-M049	10	68,736	267	69,003	23.8
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2	33	40,702	40,734	14.1
FUEL BLENDING	M061	6	59,615	56,065	115,681	40.0
AQUEOUS INORGANIC TREATMENT	M071-M079	4	37,880	0	37,880	13.1
OTHER TREATMENT	M121-M129	9	793	106	899	.3
LAND TREATMENT	M131	1	0	27	27	.0
LANDFILL	M132	3	5,665	36	5,700	2.0
OTHER DISPOSAL	M137	2	0	2,530	2,530	.9
INVALID SYSTEM TYPE		1	0	38	38	.0
TOTAL		29	172,866	116,665	289,531	100.0
PERCENTAGE		-	59.7 %	40.3 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSOURI

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AR	659
AZ	65
CA	158
CO	23
GA	129
IA	936
IL	48,245
IN	5,353
KS	977
KY	23,365
LA	79
MI	41
MN	246
MS	485
MT	0
ND	3
NE	46
NJ	2,503
NV	17
NY	571
OH	1,437
OR	155
SD	3
TN	113
TX	932
UT	13
VA	61
WA	17
WI	10,313
TOTAL	96,944

Exports

State	Tons Shipped
AL	933
AR	1,339
AZ	1,256
CT	4
FL	62
GA	56
IA	2
ID	4
IL	45,479
IN	7,806
KS	1,690
KY	1,967
LA	3,587
ME	4
MI	15,128
MN	1,171
MS	37
NJ	1
NV	0
NY	29
OH	231
OK	10,644
PA	10,056
RI	0
SC	371
TN	865
TX	1,933
UT	112
VT	0
WI	387
TOTAL	105,154

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MISSOURI

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MONX*	179,436	46.7
2	K046	47,125	12.3
3	D007	28,501	7.4
4	K038	25,594	6.7
5	D008	20,960	5.5
6	F006	20,784	5.4
7	FONX*	11,548	3.0
8	K061	9,957	2.6
9	DONX*	9,426	2.5
10	D001	8,054	2.1
11	F003	6,060	1.6
12	D002	4,409	1.1
13	F019	3,058	.8
14	F002	2,588	.7
15	D006	2,539	.7
16	U051	829	.2
17	F001	826	.2
18	F005	824	.2
19	K086	456	.1
20	K001	287	.1
21	U240	258	.1
22	D003	142	.0
23	K052	122	.0
24	D009	53	.0
25	U122	53	.0
26	D011	45	.0
27	U154	45	.0
28	UONX*	44	.0
29	P081	41	.0
30	D005	35	.0
31	F004	34	.0
32	U210	25	.0
33	U220	24	.0
34	D014	18	.0
35	U223	17	.0
36	U188	15	.0
37	F009	11	.0
38	U044	11	.0
39	F007	7	.0
40	D004	6	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSOURI

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	K061	12,809
		D008	1,942
		MOMX*	1,431
		F006	595
SOLVENTS RECOVERY	M021-M029	F002	61
		F001	51
		D001	38
		F005	24
OTHER RECOVERY	M031-M039	DOMX*	0
INCINERATION	M041-M049	MOMX*	41,446
		K038	25,594
		DOMX*	1,349
		D001	435
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	D001	19,455
		MOMX*	17,386
		FOMX*	2,507
		K024	850
FUEL BLENDING	M061	MOMX*	59,819
		F003	25,245
		D001	18,431
		F001	6,871
AQUEOUS INORGANIC TREATMENT	M071-M079	MOMX*	37,095
		DOMX*	785
OTHER TREATMENT	M121-M129	MOMX*	683
		D003	125
		D001	28
		DOMX*	22
LAND TREATMENT	M131	D002	9
		F006	8
		D007	8
		DOMX*	2
LANDFILL	M132	D008	5,665
		DOMX*	20
		D002	11
		D001	5
OTHER DISPOSAL	M137	MOMX*	2,377
		UOMX*	115
		P106	31
		K051	5
INVALID SYSTEM TYPE		D001	38
TOTAL			289,531

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSOURI

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	MOD050226075	AMERICAN CYANAMID CO.	PALMYRA	67,814
02	MOD029729688	SAFETY-KLEEN, INC.	CLARKSVILLE	57,299
03	MOD007174485	LOZIER CORP.	JOPLIN	49,661
04	MO4213820489	LAKE CITY ARMY AMMUNITION PLANT	INDEPENDENCE	47,584
05	MOD075888487	MCDONNELL DOUGLAS ELECTRONICS	ST CHARLES	37,896
06	MOD980633325	SULLIVAN PRECISION METAL FINISHING	SULLIVAN	24,570
07	MOD006272876	FORD MOTOR CO.-ST. LOUIS ASSEMBLY PLANT	HAZELWOOD	14,658
08	MOD007118029	ARMCO, INC.	KANSAS CITY	10,012
09	MOD980686992	GATES CORPORATION	WARRENSBURG	5,830
10	MOD030712822	SCHUYLKILL METALS, INC.	FOREST CITY	5,668
11	MOD046740148	EAGLE-PICHER INDUSTRIES, INC.	JOPLIN	5,554
12	MOD000818963	MCDONNELL DOUGLAS, INC.	HAZELWOOD	3,619
13	MO9890010524	US DEPT OF ENERGY-KC PLANT (ALLIED SIG.)	KANSAS CITY	3,577
14	MOD000610766	SOLVENT RECOVERY, INC.	KANSAS CITY	3,020
15	MOD006302277	QUAKER WINDOW PRODUCTS CO.	FREEBURG	2,999
16	MOD084093368	ALCOLAC, INC.	SEDALIA	2,086
17	MOD086787371	COOK COMPOSITES AND POLYMERS CO.	NORTH KANSAS CITY	1,972
18	MOD071991434	E. I. DUPONT DE NEMOURS & CO., INC.	MOBERLY	1,776
19	MOD004954111	MONSANTO CO.	ST LOUIS CITY	1,651
20	MOT300010261	BOC GROUP-GM WENTZVILLE CENTER	WENTZVILLE	1,636
21	MOD085002319	CHRYSLER CORPORATION	FENTON	1,553
22	MOD007118078	FORD MOTOR CO.	CLAYCOMO	1,351
23	MOD043935048	TRANS WORLD AIRLINES, INC.	KANSAS CITY	1,343
24	MOD006266365	PPG INDUSTRIES WORKS NINE	CRYSTAL CITY	1,328
25	MOD043937895	3M CO.	SPRINGFIELD	1,306
26	MOD006273726	SIGMA CHEMICAL CO.	ST LOUIS	1,255
27	MOD980962773	SIGMA CHEMICAL CO.	ST LOUIS CITY	1,123
28	MOD096726484	MALLINCKRODT, INC.	ST LOUIS CITY	1,114
29	MOD006324099	PETROLITE, INC.	ST LOUIS CITY	1,107
30	MOD006272355	CHEVRON CHEMICAL CO.	MARYLAND HEIGHTS	969
31	MOD980632954	INDUSTRIAL FUELS & RESOURCES/MO, IN	SCOTT CITY	838
32	MOD007128978	KERR-MCGEE CHEMICAL	KANSAS CITY	829
33	MOD007152903	LITTON SYSTEMS: ADVANCED CIRCUITRY	SPRINGFIELD	787
34	MOD103202636	FLAT RIVER GLASS CO.	FLAT RIVER	680
35	MOD077887909	ATLAS POWDER CO.	JOPLIN	658
36	MOD052612850	PLASTENE SUPPLY CO.	PORTAGEVILLE	655
37	MOD000610634	SPRINGFIELD REMANUFACTURING, INC.	SPRINGFIELD	571
38	MOD000818906	MCDONNELL DOUGLAS, INC.	BERKELEY	549
39	MOD089290118	KELSEY-HAYES COMPANY	SEDALIA	547
40	MOD981715824	EFCO, INC.	MONETT	513

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSOURI

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tota Manage
1	MOD029729688 SAFETY-KLEEN, INC., CLARKSVILLE					111,0
	FUEL BLENDING	M061	57,270	53,784	111,054	
2	MOD050226075 AMERICAN CYANAMID CO., PALMYRA					66,9
	INCINERATION	M041-M049	66,966	0	66,966	
3	MOD054018288 CONTINENTAL CEMENT COMPANY, INC., HANNIBAL					57,5
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	30	40,702	40,732	
	METALS RECOVERY (FOR REUSE)	M011-M019	3	16,775	16,777	
	INVALID SYSTEM TYPE		0	38	38	
4	MOD075888487 MCDONNELL DOUGLAS ELECTRONICS, ST CHARLES					37,4
	AQUEOUS INORGANIC TREATMENT	M071-M079	37,095	0	37,095	
	INCINERATION	M041-M049	367	0	367	
	SOLVENTS RECOVERY	M021-M029	14	0	14	
5	MOD030712822 SCHUYLKILL METALS, INC., FOREST CITY					5,6
	LANDFILL	M132	5,665	0	5,665	
6	MOT300010808 ROCK CREEK WASTE TREATMENT FACILITY, INDEPENDENCE					2,5
	OTHER DISPOSAL	M137	0	2,530	2,530	
7	MOD000610766 SOLVENT RECOVERY, INC., KANSAS CITY					2,4
	FUEL BLENDING	M061	2,340	0	2,340	
	OTHER TREATMENT	M121-M129	16	104	120	
8	MOD981505555 HERITAGE ENVIRONMENTAL SERVICES, KANSAS CITY					1,0
	FUEL BLENDING	M061	0	1,671	1,671	
9	MOD004954111 MONSANTO CO., ST LOUIS CITY					1,3
	INCINERATION	M041-M049	1,347	0	1,347	
10	MO9890010524 US DEPT OF ENERGY-KC PLANT (ALLIED SIG.), KANSAS CITY					
	AQUEOUS INORGANIC TREATMENT	M071-M079	785	0	785	
11	MOD981123391 INTERSTATE ENVIRONMENTAL SERVICES, KANSAS CITY					
	FUEL BLENDING	M061	0	575	575	
	INCINERATION	M041-M049	0	109	109	
	LAND TREATMENT	M131	0	27	27	
	SOLVENTS RECOVERY	M021-M029	0	22	22	
	LANDFILL	M132	0	12	12	
	OTHER TREATMENT	M121-M129	0	1	1	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	0	0	
12	MOD077887909 ATLAS POWDER CO., JOPLIN					
	OTHER TREATMENT	M121-M129	672	0	672	
13	MOD007158157 VAN WATERS & ROGERS, INC., KANSAS CITY					
	SOLVENTS RECOVERY	M021-M029	0	92	92	
	INCINERATION	M041-M049	0	81	81	
14	MOD029719200 IRECO, INC., CARTHAGE					
	OTHER TREATMENT	M121-M129	101	0	101	
15	MOD031005341 ASHLAND CHEMICAL INC., ST LOUIS CITY					
	FUEL BLENDING	M061	0	35	35	
	LANDFILL	M132	0	23	23	
	INCINERATION	M041-M049	0	14	14	
	SOLVENTS RECOVERY	M021-M029	0	4	4	
	OTHER RECOVERY	M031-M039	0	0	0	
16	MOT300010253 FARMLAND INDUSTRIES PAINT PLANT, NORTH KANSAS CITY					
	SOLVENTS RECOVERY	M021-M029	48	0	48	
	INCINERATION	M041-M049	21	0	21	

1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MISSOURI

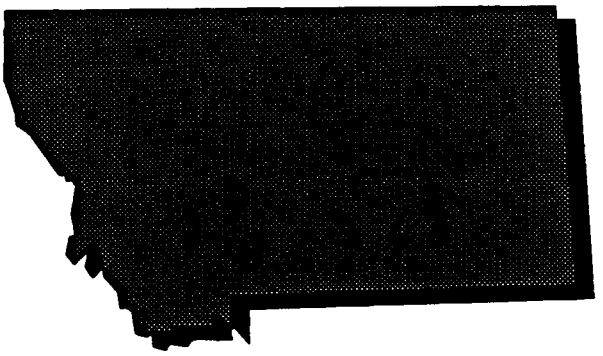
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

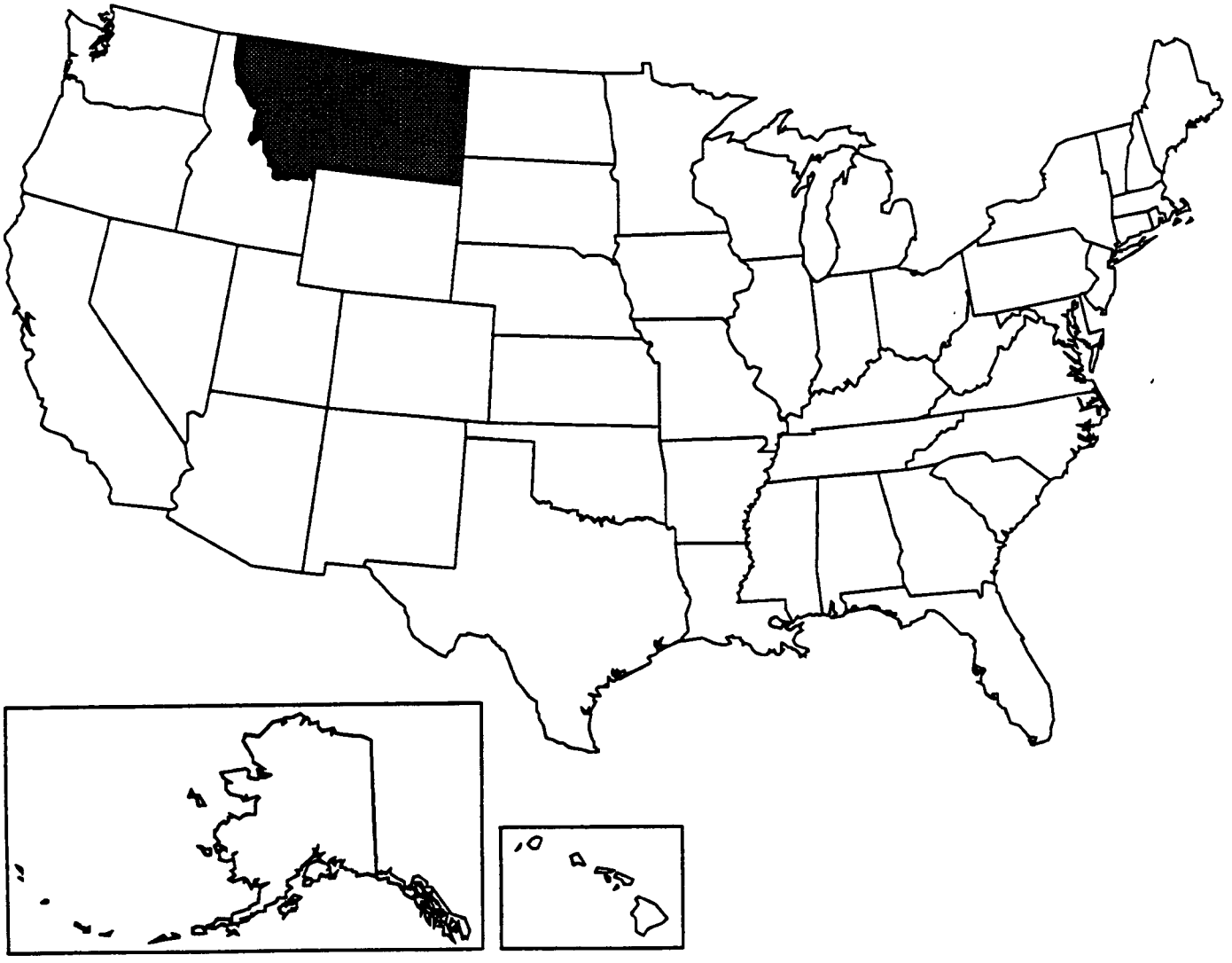
Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
17	MOD056389828 MOBAY CORPORATION, KANSAS CITY					67
	INCINERATION	M041-M049	4	64	67	
18	MO3213720979 US ARMY ENGINEER CENTER, FORT LEONARD WOOD					39
	METALS RECOVERY (FOR REUSE)	M011-M019	39	0	39	
	AQUEOUS INORGANIC TREATMENT	M071-M079	1	0	1	
	OTHER TREATMENT	M121-M129	0	0	0	
19	MO4213820489 LAKE CITY ARMY AMMUNITION PLANT, INDEPENDENCE					35
	INCINERATION	M041-M049	30	0	30	
	OTHER TREATMENT	M121-M129	5	0	5	
20	MOD071991434 E. I. DUPONT DE NEMOURS & CO., INC., MOBERLY					28
	SOLVENTS RECOVERY	M021-M029	28	0	28	
21	MOD030701296 BASF CORPORATION, KANSAS CITY					7
	FUEL BLENDING	M061	5	0	5	
	SOLVENTS RECOVERY	M021-M029	2	0	2	
22	MOD069232148 MIRACLE RECREATION EQUIPMENT CO., MONETT					7
	SOLVENTS RECOVERY	M021-M029	7	0	7	
23	MOT300010204 CZ INKS DIVISION OF JAMES RIVER II, ST LOUIS CITY					4
	SOLVENTS RECOVERY	M021-M029	4	0	4	
24	MOD007133887 PAUL MUELLER CO., SPRINGFIELD					3
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3	0	3	
	SOLVENTS RECOVERY	M021-M029	0	0	0	
25	MOD006326904 UNIVERSITY OF MISSOURI - COLUMBIA, COLUMBIA					1
	INCINERATION	M041-M049	1	0	1	
	OTHER DISPOSAL	M137	0	0	0	
26	MOD980971626 SAFETY-KLEEN, INC., COLUMBIA					0
	OTHER TREATMENT	M121-M129	0	0	0	
27	MOD000669051 SAFETY-KLEEN, INC., CAPE GIRARDEAU					0
	OTHER TREATMENT	M121-M129	0	0	0	
28	MOD071999783 DANGEROUS CHEMICALS STORAGE BLDG., ST LOUIS CITY					0
	OTHER TREATMENT	M121-M129	0	0	0	
29	MOD073046773 K. C. AREA TRANSPORTATION AUTHORITY, KANSAS CITY					0
	SOLVENTS RECOVERY	M021-M029	0	0	0	

1 Excluding quantity managed by storage only.

Montana

Region VIII





MONTANA

EPA Region Address:	U.S. EPA Region VIII Hazardous Waste Management Division Mail Stop HWM-RI 999 18th Street, Suite 500 Denver, CO 80202
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Waste Management Section Solid and Hazardous Waste Bureau Department of Health and Environmental Sciences Cogswell Building Helena, MT 59620
Contact Name:	Mr. Roger Thorvilson Supervisor
Phone:	(406) 444-2821

Notes: No special notes for Montana.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MONTANA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	28
Total Quantity of Regulated Waste Generated:	4,978 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	1
Facilities managing only waste generated off site	2
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	3
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	2,857 tons
Total RCRA TSD Facilities:	9

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	0	2,131	2,131	74.6
OTHER TREATMENT	M121-M129	1	1	0	1	.0
LAND TREATMENT	M131	1	722	0	722	25.3
INVALID SYSTEM TYPE		1	0	3	3	.1
TOTAL		3	723	2,134	2,857	100.0
PERCENTAGE		-	25.3 %	74.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MONTANA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
TOTAL	0

Exports

State	Tons Shipped
	0
AL	6
AR	27
CO	5
ID	467
IL	27
IN	11
KS	4
LA	29
MO	1
ND	7
NE	32
OR	1,057
TX	31
UT	562
WA	223
WI	10
TOTAL	2,497

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MONTANA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	K048	2,131	42.8
2	D004	949	19.1
3	K051	874	17.6
4	D008	277	5.6
5	K001	260	5.2
6	D002	115	2.3
7	DOMX*	57	1.1
8	KOMX*	47	.9
9	MOMX*	43	.9
10	F003	40	.8
11	F002	37	.7
12	D007	27	.5
13	D016	26	.5
14	D001	24	.5
15	D003	21	.4
16	F005	21	.4
17	P070	8	.2
18	FOMX*	7	.1
19	F001	6	.1
20	K052	3	.1
21	D010	2	.0
22	K050	2	.0
23	P022	0	.0
24	U151	0	.0
25	U134	0	.0
26	P030	0	.0
27	U226	0	.0
28	D006	0	.0
29	U122	0	.0
30	U239	0	.0
31	U112	0	.0
32	U007	0	.0
33	U201	0	.0
34	D009	0	.0
35	P075	0	.0
35	U133	0	.0
35	U188	0	.0
36	K049	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MONTANA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	K048	2,131
OTHER TREATMENT	M121-M129	K052	1
LAND TREATMENT	M131	K051	722
INVALID SYSTEM TYPE		D0MX*	3
		D001	0
		D002	0
		D003	0
TOTAL			2,857

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

MONTANA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	MTD006229405	CONOCO INC.	BILLINGS	2,134
02	MTD982589525	ARCO COAL COMPANY - ROCKER	ROCKER	949
03	MTD010380574	EXXON BILLINGS REFINERY	BILLINGS	737
04	MT4210090060	U.S. ARMY CORPS OF ENGINEER - FORT PECK	FORT PECK	278
05	MTD000716787	BURLINGTON NORTHERN PARADISE TIE PLANT	PARADISE	254
06	MTD000475194	MONTANA REFINING COMPANY	BLACK EAGLE	175
07	MTD093301836	WESTERN ENERGY, ROSEBUD MINE	COLSTRIP	115
08	MTD132430281	BURLINGTON NORTHERN RAILROAD	GLENDIVE	59
09	MTD982648255	LIVINGSTON REBUILD CENTER	LIVINGSTON	57
10	MTD002076370	FLYING J, INC. REFINERY	CUTBANK	47
11	MTD980807176	LOUISIANA PACIFIC	MISSOULA	41
12	MTD079711198	TRANSBAS, INC.	BILLINGS	26
13	MTD071401368	A & S TRIBAL INDUSTRIES	POPLAR	26
14	MTD006238083	FARMERS UNION CENTRAL EXCHANGE - CENEX	LAUREL	23
15	MTD982597437	ST. REGIS SPILL	ST. REGIS	8
16	MTD006233894	THE NEW ADM INC.	MISSOULA	8
17	MTD980330609	MONTANA POWER COMPANY-COLSTRIP UNIT 3&4	COLSTRIP	7
18	MTD000710236	MONTANA POWER COMPANY-COLSTRIP UNITS 1&2	COLSTRIP	7
19	MTD006232276	IDAHO POLE COMPANY	BOZEMAN	6
20	MTD006229876	CHAMPION INTERNATION CORP.	LIBBY	5
21	MTD990732984	BEALL TRAILERS OF MONTANA, INC.	BILLINGS	5
22	MTD065569048	MONTANA STATE UNIVERSITY	BOZEMAN	5
23	MT8571924556	MALMSTROM AIR FORCE BASE	GREAT FALLS	5
24	MTD981552771	NORTHERN MONTANA COLLEGE	HAVRE	2
25	MT9570090044	DEPT. OF MILITARY AFFAIRS CSMS	HELENA	1
26	MTD982648818	VALLEY COUNTY ROAD DEPARTMENT	GLASGOW	0
27	MTD982647703	BURLINGTON NORTHERN - WILDER AVENUE	HELENA	0

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

MONTANA

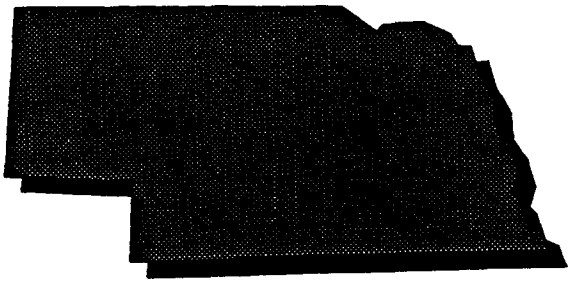
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

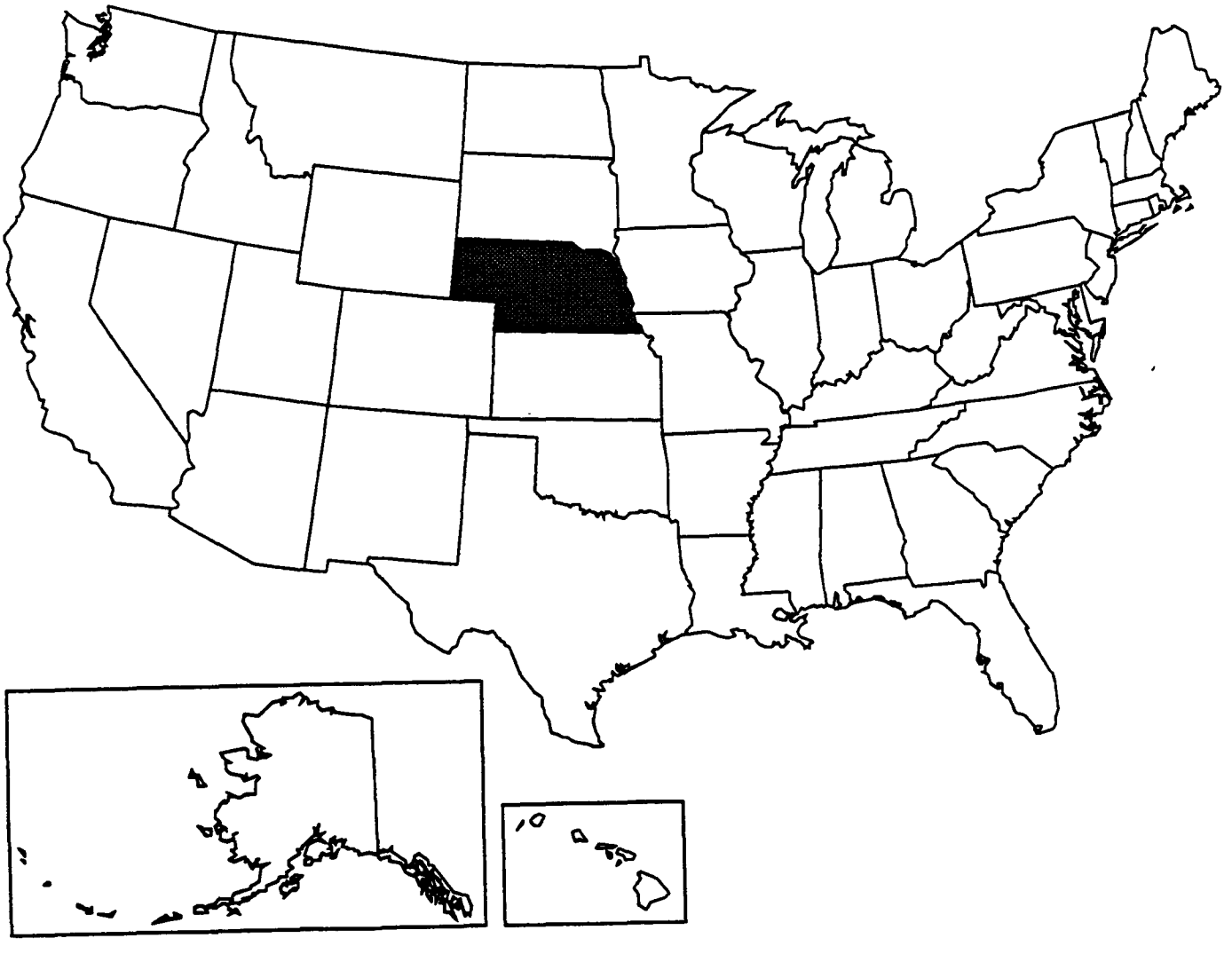
Rank	EPA ID	Site Name, City	Management Method	On Site	Off Site	Method Total	Tot Manag
1	MTD000818096	CONOCO INC. BILLINGS LANDFARM, BILLINGS					2,
			AQUEOUS ORGANIC AND INORGANIC TREATMENT M091-M099	0	2,131	2,131	
2	MTD010380574	EXXON BILLINGS REFINERY, BILLINGS					
			LAND TREATMENT M131	722	0	722	
			OTHER TREATMENT M121-M129	1	0	1	
3	MT8571924556	MALMSTROM AIR FORCE BASE, GREAT FALLS					
			INVALID SYSTEM TYPE	0	3	3	

1 Excluding quantity managed by storage only.

Nebraska

Region VII





NEBRASKA

EPA Region Address:	U.S. EPA Region VII RCRA, Waste Management Division RCRA RADM 726 Minnesota Avenue Kansas City, KS 66101
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Section Land Quality Division Department of Environmental Control 301 Centennial Mall South Post Office Box 98922 Lincoln, NE 68509-8922
Contact Name:	Ms. Teri Swarts
Phone:	(402) 471-4217

Notes: No special notes for Nebraska.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEBRASKA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	72
Total Quantity of Regulated Waste Generated:	72,209 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	4
Facilities managing only waste generated off site	2
Facilities managing waste generated both on and off site	2
Total RCRA TSD Facilities (excluding storage-only facilities):	8
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	83,959 tons
Total RCRA TSD Facilities:	12

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	1	5,056	0	5,056	6.0
SOLVENTS RECOVERY	M021-M029	1	8	3	11	.0
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	2	18,255	18,257	21.7
AQUEOUS INORGANIC TREATMENT	M071-M079	2	60,366	0	60,366	71.9
AQUEOUS ORGANIC TREATMENT	M081-M089	1	31	0	31	.0
OTHER TREATMENT	M121-M129	1	235	0	235	.3
LAND TREATMENT	M131	1	0	0	0	.0
INVALID SYSTEM TYPE		2	0	3	3	.0
TOTAL		8	65,698	18,261	83,959	100.0
PERCENTAGE		-	78.2 %	21.8 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEBRASKA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AR	684
AZ	69
CA	288
CO	117
GA	429
IA	434
IL	1,257
IN	3,541
KS	343
LA	35
MI	5,532
MN	9
MO	1,007
NC	348
NJ	42
SD	155
TX	85
WA	1,194
WI	3,333
WY	213
TOTAL	19,115

Exports

State	Tons Shipped
AL	1
AR	11
AZ	166
CO	63
FL	9
GA	5
IA	28
IL	3,307
IN	9
KS	241
KY	135
LA	31
MI	3
MN	1
MO	507
OH	0
OK	2,426
PA	21
SD	1
TN	91
TX	984
UT	1
WI	334
TOTAL	8,374

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEBRASKA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D006	41,792	57.9
2	D007	16,544	22.9
3	K061	5,353	7.4
4	D002	3,999	5.5
5	FOMX*	823	1.1
6	F006	551	.8
7	D001	547	.8
8	MOMX*	514	.7
9	D008	461	.6
10	DOMX*	414	.6
11	F003	331	.5
12	F002	258	.4
13	K062	179	.2
14	U240	121	.2
15	F001	109	.2
16	F019	99	.1
17	F005	98	.1
18	D003	7	.0
19	D009	2	.0
20	P094	2	.0
21	F009	2	.0
22	K001	1	.0
23	D011	1	.0
24	P104	1	.0
25	D005	0	.0
25	D010	0	.0
26	U211	0	.0
27	U077	0	.0
28	P030	0	.0
29	U226	0	.0
30	P012	0	.0
30	P014	0	.0
30	U123	0	.0
31	U188	0	.0
32	F004	0	.0
32	U210	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEBRASKA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	K061	5,056
SOLVENTS RECOVERY	M021-M029	F003	11
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	MOMX*	8,187
		D001	4,964
		F003	4,761
		FOMX*	283
AQUEOUS INORGANIC TREATMENT	M071-M079	D006	41,789
		D007	16,218
		D002	2,359
AQUEOUS ORGANIC TREATMENT	M081-M089	F002	31
OTHER TREATMENT	M121-M129	D002	235
LAND TREATMENT	M131	FOMX*	0
INVALID SYSTEM TYPE		FOMX*	3
		D001	0
TOTAL			83,959

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEBRASKA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	NED007281728	LINCOLN PLATING COMPANY	LINCOLN	58,032
02	NED087069050	NUCOR STEEL	NORFOLK	5,353
03	NET320010200	HASTINGS ENERGY CENTER	HASTINGS	2,359
04	NED044101442	LOCKWOOD CORPORATION	GERING	986
05	NED072901945	IMPRIMIS TECHNOLOGY	OMAHA	533
06	NED007285257	MAGNUS DIVISION/FARLEY, INC.	FREMONT	473
07	NED007259054	AT&T	OMAHA	452
08	NED000822775	BURLINGTON NORTHERN RAILROAD	LINCOLN	385
09	NED068652981	KAWASAKI MOTORS MFG. CORP.	LINCOLN	385
10	NED007263619	MONROE AUTO EQUIPMENT COMPANY	COZAD	290
11	NED091998567	DANA CORP.; ENGINE PRODUCTS DIV.	HASTINGS	270
12	NED043534635	BRUNSWICK-MAIN PLANT	LINCOLN	249
13	NED000610691	LOZIER CORPORATION	OMAHA	241
14	NED007268790	BEHLEN MANUFACTURING COMPANY	COLUMBUS	204
15	NED007273279	HUGHES BROTHER, INC.	SEWARD	187
16	NED007263353	CONTINENTAL CAN COMPANY	OMAHA	168
17	NED007265077	AMERICAN METER COMPANY	NEBRASKA CITY	138
18	NED000819078	PLATTE CHEMICAL CO.	FREMONT	121
19	NED007267214	VALMONT INDUSTRIES	VALLEY	93
20	NED065133167	EATON CORPORATION	KEARNEY	91
21	NED020184412	3M COMPANY NORFOLK	NORFOLK	89
22	NED000610709	LOZIER CORPORATION	OMAHA	83
23	NED980971733	DUNCAN AVIATION	LINCOLN	62
24	NED007286198	VICKERS INC.	OMAHA	60
25	NED045275260	NASHUA CORPORATION	OMAHA	59
26	NE8571924648	OFFUTT AIR FORCE	OFFUTT AFB	59
27	NED080219868	HYDRAULIC COMPONENTS IND.	HARTINGTON	51
28	NED072902513	SQUARE D COMPANY	LINCOLN	50
29	NED007260870	HOOVER GROUP INC.	BEATRICE	48
30	NED980965974	ANACOMP CORPORATION	OMAHA	43
31	NED080209950	LACKAWANNA LEATHER COMPANY	OMAHA	42
32	NED047047543	BECTON DICKINSON CO.	HOLDREGE	36
33	NED007262579	PETERSEN MANUFACTURING CO., INC.	DEWITT	36
34	NED000325167	FARMLAND INDUSTRIES	BEATRICE	34
35	NED980973598	MAX I. WALKER	OMAHA	31
36	NED099564684	APPLETON ELECTRIC CO.	COLUMBUS	28
37	NED042581363	BRUNING HYDRAULICS	LINCOLN	28
38	NET320010077	THERMO KING CORPORATION	HASTINGS	27
39	NED007266331	THE GOODYEAR TIRE & RUBBER COMPANY	LINCOLN	26
40	NED034782029	HASTINGS INDUSTRIES	HASTINGS	24

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEBRASKA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City	Management Method	On Site	Off Site	Method Total	Total Managed
1	NED007281728 LINCOLN PLATING COMPANY, LINCOLN					58,0
	AQUEOUS INORGANIC TREATMENT	M071-M079	58,007	0	58,007	
2	NED007260672 ASH GROVE CEMENT, LOUISVILLE					18,2
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2	18,255	18,257	
3	NED087069050 NUCOR STEEL, NORFOLK					5,0
	METALS RECOVERY (FOR REUSE)	M011-M019	5,056	0	5,056	
4	NET320010200 HASTINGS ENERGY CENTER, HASTINGS					2,3
	AQUEOUS INORGANIC TREATMENT	M071-M079	2,359	0	2,359	
5	NED043534635 BRUNSWICK-MAIN PLANT, LINCOLN					2
	OTHER TREATMENT	M121-M129	235	0	235	
	SOLVENTS RECOVERY	M021-M029	8	3	11	
6	NED980973598 MAX I. WALKER, OMAHA					
	AQUEOUS ORGANIC TREATMENT	M081-M089	31	0	31	
7	NED040906729 VAN WATERS & ROGERS, INC., OMAHA					
	INVALID SYSTEM TYPE		0	3	3	
8	NED000687186 SAFETY-KLEEN CORPORATION, GRAND ISLAND					
	INVALID SYSTEM TYPE		0	0	0	
	LAND TREATMENT	M131	0	0	0	

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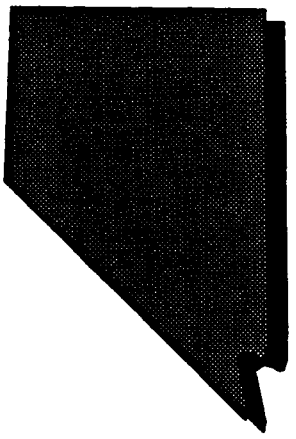
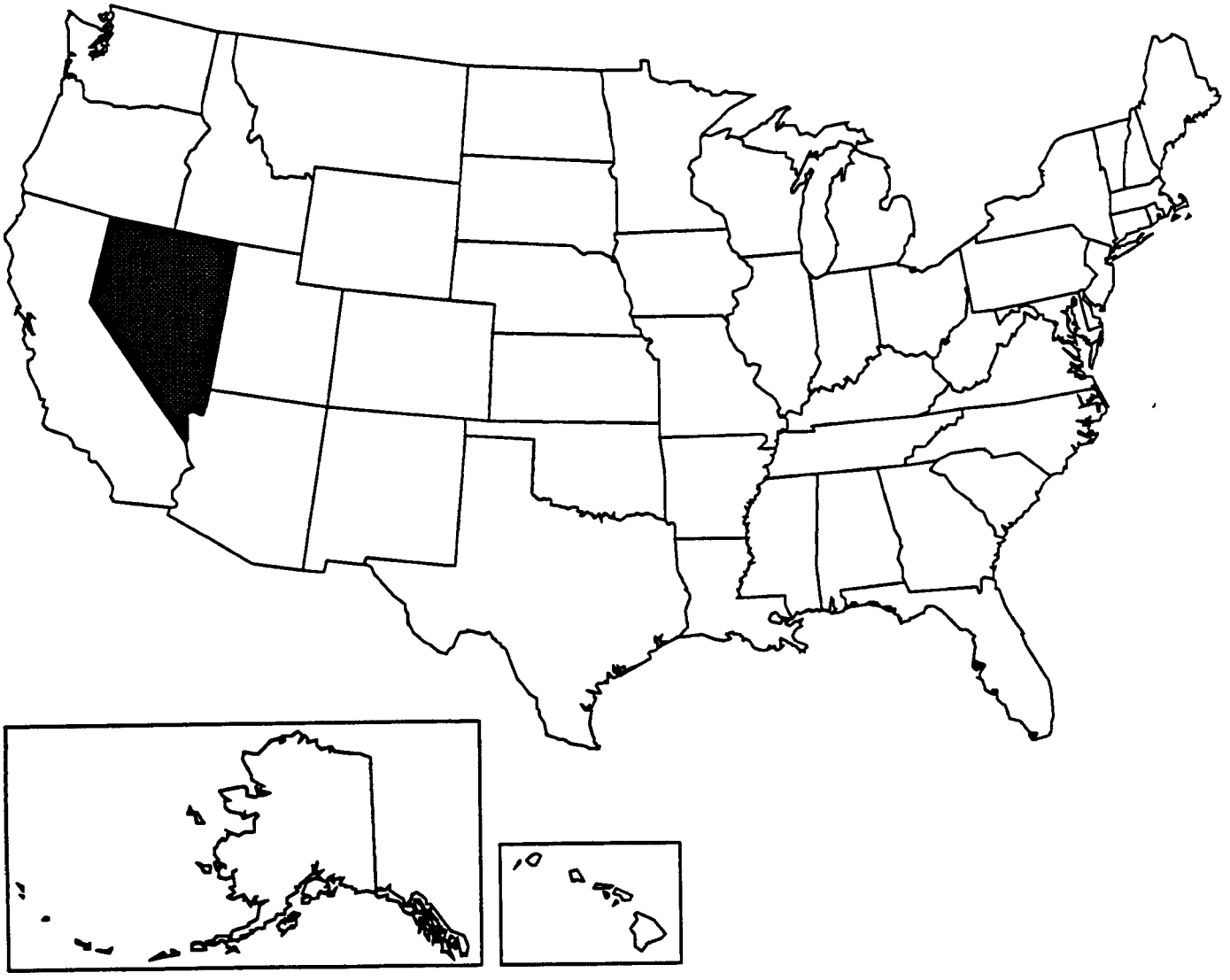
1 Excluding quantity managed by storage only.

Nevada

Region IX





NEVADA

EPA Region Address:	U.S. EPA Region IX RCRA Branch Mail Stop H-31 1235 Mission Street San Francisco, CA 94103
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Program Branch Bureau of Waste Management Division of Environmental Protection 123 West Nye Lane, Capitol Complex Carson City, NV 89710
Contact Name:	Dr. Colleen Cripps Supervisor
Phone:	(702) 687-5872

Notes: No special notes for Nevada.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEVADA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	32
Total Quantity of Regulated Waste Generated:	4,685 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	1
Facilities managing only waste generated off site	3
Facilities managing waste generated both on and off site	2
Total RCRA TSD Facilities (excluding storage-only facilities):	6
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	20,246 tons
Total RCRA TSD Facilities:	11

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	1	0	19	19	.1
INCINERATION	M041-M049	1	90	10	100	.5
AQUEOUS INORGANIC TREATMENT	M071-M079	1	0	2,789	2,789	13.8
SLUDGE TREATMENT	M101-M109	1	0	0	0	.0
OTHER TREATMENT	M121-M129	2	1	1,559	1,560	7.7
LANDFILL	M132	1	580	15,180	15,760	77.8
INVALID SYSTEM TYPE		1	0	18	18	.1
TOTAL		6	671	19,576	20,246	100.0
PERCENTAGE		-	3.3 %	96.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEVADA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AZ	1,997
CA	12,313
CO	310
HI	2
IA	1
IL	145
KS	1
KY	3
MO	1
NE	1
NM	18
OH	12
PA	1
TX	328
WA	10
TOTAL	15,142

Exports

State	Tons Shipped
AR	0
AZ	76
CA	1,417
FL	0
ID	97
IN	18
MO	19
NC	0
OK	39
TN	30
TX	3
UT	234
WA	20
TOTAL	1,954

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEVADA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D001	1,309	27.9
2	MOMX*	719	15.3
3	D007	600	12.8
4	D008	537	11.5
5	D009	512	10.9
6	DOMX*	201	4.3
7	D002	176	3.8
8	D011	132	2.8
9	FOMX*	114	2.4
10	KOMX*	106	2.3
11	F005	84	1.8
12	F002	64	1.4
13	F006	58	1.2
14	F001	38	.8
15	F003	25	.5
16	D004	4	.1
17	D003	3	.1
18	D006	3	.1
19	U220	0	.0
20	U154	0	.0
21	U002	0	.0
21	U003	0	.0
21	U188	0	.0
21	U244	0	.0
22	P098	0	.0
23	U117	0	.0
24	U211	0	.0
25	U080	0	.0
26	P030	0	.0
27	U165	0	.0
28	U167	0	.0
29	U248	0	.0
30	D010	0	.0
31	U226	0	.0
32	U228	0	.0
33	P015	0	.0
34	U044	0	.0
34	U239	0	.0
35	U019	0	.0
36	UOMX*	0	.0
37	U012	0	.0
37	U112	0	.0
37	U133	0	.0
37	U134	0	.0
37	U162	0	.0
37	U223	0	.0
38	P106	0	.0
39	F004	0	.0
39	P087	0	.0
39	U034	0	.0
39	U045	0	.0
39	U169	0	.0
40	U122	0	.0
40	U151	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEVADA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F005	19
INCINERATION	M041-M049	KOMX*	90
		D001	10
AQUEOUS INORGANIC TREATMENT	M071-M079	D002	1,630
		DOMX*	267
		D011	217
		FOMX*	181
SLUDGE TREATMENT	M101-M109	F006	0
OTHER TREATMENT	M121-M129	MOMX*	1,559
		D003	1
LANDFILL	M132	D008	7,752
		DOMX*	4,016
		D007	1,233
		MOMX*	599
INVALID SYSTEM TYPE		D001	18
TOTAL			20,246

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

NEVADA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	NVD008290330	KERR-MCGEE CHEMICAL CORP.	HENDERSON	1,144
02	NV1210090006	HAWTHORNE ARMY AMMUNITION PLANT - MAIN P	HAWTHORNE	644
03	NVT330010000	US ECOLOGY	BEATTY	581
04	NVT330010208	SAFETY-KLEEN CORP. 7-087-01	N LAS VEGAS	476
05	NVD982467250	DURA-BOND BEARING COMPANY	CARSON CITY	272
06	NVD980887319	BENTLY NEVADA CORPORATION	MINDEN	252
07	NV9170022173	FALLON NEVADA NAS	FALLON	195
08	NV3570090016	US DOE/TTR/TONOPAH TEST RANGE	TONOPAH	150
09	NVD981641434	R.R. DONNELLEY & SONS COMPANY	RENO	133
10	NVD982041345	LIFETOUCH PORTRAIT STUDIOS	RENO	120
11	NVD062081500	PIONEER CHLOR ALKALI CO., INC.	HENDERSON	79
12	NV3890090001	REYNOLDS ELECTRICAL & ENGINEERING CO.INC	LAS VEGAS	76
13	NVD982513574	AERVOE-PACIFIC CO. INC.	GARDNERVILLE	71
14	NVD092494319	PARLEX NEVADA, INC.	CARSON CITY	70
15	NV7570024110	NELLIS AFB	LAS VEGAS	54
16	NVD982478620	BOUDAR-CLEGG	SPARKS	47
17	NVD982502692	AMERICAN ELECTRIC	SPARKS	43
18	NVD092497999	PRECISION ROLLED PRODUCTS, INC.	RENO	39
19	NVD982029233	CASHMAN EQUIPMENT COMPANY	SPARKS	38
20	NVD980883714	BALLY ENGINEERED STRUCTURES, INC.	SPARKS	38
21	NVD981582760	BARRINGER LABORATORIES, INC.	SPARKS	27
22	NVD981627888	CASHMAN EQUIPMENT COMPANY	NORTH LAS VEGAS	24
23	NVD097868731	EG & G/EM FOR U.S. DOE	NORTH LAS VEGAS	22
24	NVD981694540	SUNCHEMICAL	RENO	18
25	NVD982465510	NEVADA GSI INC.	SPARKS	15
26	NVD980885685	CHEMLINE INDUSTRIES, INC.	CARSON CITY	15
27	NVD065020216	INTERNATIONAL GAME TECHNOLOGY INC.	RENO	13
28	NVD990764961	CALNEV PIPE LINE COMPANY LAS VEGAS TERMI	LAS VEGAS	10
29	NVD000630970	MOHAVE GENERATING STATION	LAUGHLIN	8
30	NVD067813006	MCDERMITT MINE	MCDERMITT	5
31	NVD098864010	CAESARS TAHOE	STATELINE	3
32	NVD981963549	UNIVERSITY OF NEVADA	RENO	3

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEVADA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City	Management Method		On Site	Off Site	Method Total	Tot Manag
1	NVT330010000 US ECOLOGY, BEATTY						15,
		LANDFILL	M132	580	15,180	15,760	
2	NVD980895338 ETICAM-NEVADA, INC., FERNLEY						2,
		AQUEOUS INORGANIC TREATMENT	M071-M079	0	2,789	2,789	
		INVALID SYSTEM TYPE		0	18	18	
		SLUDGE TREATMENT	M101-M109	0	0	0	
3	NV5210090010 HAWTHORNE ARMY AMMUNITION PLANT, HAWTHORNE						1,
		OTHER TREATMENT	M121-M129	0	1,559	1,559	
4	NV1210090006 HAWTHORNE ARMY AMMUNITION PLANT - MAIN P, HAWTHORNE						
		INCINERATION	M041-M049	90	10	100	
5	NVD981694540 SUNCHEMICAL, RENO						
		SOLVENTS RECOVERY	M021-M029	0	19	19	
6	NV7570024110 NELLIS AFB, LAS VEGAS						
		OTHER TREATMENT	M121-M129	1	0	1	

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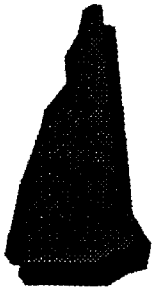
1 Excluding quantity managed by storage only.

New Hampshire

Region I



NEW HAMPSHIRE

EPA Region Address:	U.S. EPA Region I RCRA Support Section Mail Stop HRW-CAN-3 JFK Federal Building Boston, MA 02203
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Waste Management Division Department of Environmental Services Health and Welfare Building 6 Hazen Drive Concord, NH 03301-6509
Contact Name:	Ms. Wendy L. Waskin Supervisor, Reporting Branch
Phone:	(603) 271-6350

Notes: No special notes for New Hampshire.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW HAMPSHIRE

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	111
Total Quantity of Regulated Waste Generated:	18,211 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	3
Facilities managing only waste generated off site	1
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	4
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	5,952 tons
Total RCRA TSD Facilities:	6

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
OTHER RECOVERY	M031-M039	1	0	0	0	.0
INCINERATION	M041-M049	1	0	0	0	.0
FUEL BLENDING	M061	1	0	2	2	.0
AQUEOUS INORGANIC TREATMENT	M071-M079	3	5,886	0	5,886	98.9
AQUEOUS ORGANIC TREATMENT	M081-M089	1	0	1	1	.0
OTHER TREATMENT	M121-M129	1	63	0	63	1.1
LANDFILL	M132	1	0	0	0	.0
TOTAL		4	5,948	4	5,952	100.0
PERCENTAGE		-	99.9 %	.1 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW HAMPSHIRE

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
MA	208
ME	3
VT	0
TOTAL	211

Exports

State	Tons Shipped
AL	61
AR	7
CT	1,435
FL	4
IL	1,452
LA	131
MA	3,631
MD	3
ME	3
MI	172
NC	58
NJ	2,252
NY	2,885
OH	9
PA	660
RI	128
SC	196
TN	8
UT	4
TOTAL	13,100

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW HAMPSHIRE

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F006	7,228	39.7
2	D002	3,121	17.1
3	D008	1,772	9.7
4	D007	1,050	5.8
5	D001	848	4.7
6	F005	819	4.5
7	F001	744	4.1
8	DOMX*	711	3.9
9	F003	582	3.2
10	MOMX*	485	2.7
11	F002	270	1.5
12	FOMX*	245	1.3
13	D003	99	.5
14	D006	55	.3
15	U161	44	.2
16	U122	42	.2
17	D009	21	.1
18	U188	14	.1
19	K062	10	.1
20	D010	10	.1
21	F007	9	.1
22	F009	8	.0
23	D005	7	.0
24	D011	6	.0
25	U002	2	.0
26	U028	2	.0
27	P063	2	.0
28	U210	1	.0
29	U165	1	.0
30	U223	1	.0
31	P030	1	.0
32	U112	0	.0
33	U228	0	.0
34	U009	0	.0
35	P106	0	.0
36	U359	0	.0
37	K086	0	.0
37	U147	0	.0
38	F008	0	.0
38	U160	0	.0
39	U121	0	.0
40	U240	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW HAMPSHIRE

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
OTHER RECOVERY	M031-M039	F001	0
INCINERATION	M041-M049	D001	0
		U248	0
FUEL BLENDING	M061	F0MX*	1
		F005	1
		D001	0
AQUEOUS INORGANIC TREATMENT	M071-M079	F006	5,884
		D008	2
		D002	0
AQUEOUS ORGANIC TREATMENT	M081-M089	K086	0
		D001	0
		D002	0
OTHER TREATMENT	M121-M129	D008	63
LANDFILL	M132	D002	0
		D006	0
		D009	0
TOTAL			5,952

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW HAMPSHIRE

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	NHD066760927	GRANITE STATE PLATING CO., INC.	GONIC	5,895
02	NHD058537960	WATTS REGULATOR/WEBSTER VALVE	FRANKLIN	1,743
03	NHD046312559	HADCO CORPORATION	DERRY	1,496
04	NHD048724173	W.R. GRACE & CO ORGANIC CHEMICALS DIV.	NASHUA	1,052
05	NHD991302522	HADCO CORPORATION HUDSON DIVISION	HUDSON	850
06	NHD073974651	TERADYNE CIRCUITS DIVISION	NASHUA	420
07	NHD001427475	GENERAL ELECTRIC COMPANY	HOOKSETT	393
08	NHD000769869	NASHUA CORPORATION	MERRIMACK	343
09	NHD001078682	HITCHINER MANUFACTURING CO., INC.	MILFORD	338
10	NHD018953794	STURM, RUGER & CO INC	NEWPORT	294
11	NHD048729685	BAILEY CORPORATION	SEABROOK	285
12	NHD001085026	DAVIDSON INTERIOR TRIM/TEXTRON	DOVER	245
13	NHD980668156	HADCO TECH CENTER ONE	SALEM	233
14	NHD001091073	GENERAL ELECTRIC COMPANY	SOMERSWORTH	199
15	NHD073990418	BURNDY CORPORATION	LINCOLN	190
16	NHD990717092	DEXTER CORPORATION HYSOL DIVISION	SEABROOK	187
17	NHD040244428	ELECTROPAC COMPANY, INC.	MANCHESTER	186
18	NHD001085158	MARKEM CORPORATION	KEENE	173
19	NHD045011616	DAVIDSON INSTRUMENT PANEL	FARMINGTON	172
20	NHD040245607	DICEON ELECTRONICS, INC.	NASHUA	158
21	NHD001086321	NEW HAMPSHIRE BALL BEARINGS	PETERBOROUGH	143
22	NHD001079045	LOCKHEED SANDERS, INC	MANCHESTER	131
23	NH7570024847	US PEASE AIR FOCE BASE	PEASE AIR FORCE BASE	119
24	NHD064441132	KOLLSMAN	MERRIMACK	114
25	NHD081255788	ADVANCED CIRCUIT TECHNOLOGY	NASHUA	112
26	NHD064435654	ELECTRO CIRCUITS, INC.	LACONIA	108
27	NHD982203838	Z-TECH	BOW	106
28	NHD001082908	MPB CORPORATION	KEENE	93
29	NHD064433055	DYNACO CORPORATION	DERRY	92
30	NHD018925735	NEW HAMPSHIRE BALL BEARINGS, INC. ASTRO	LACONIA	81
31	NHD001078062	TELEDYNE ELECTRO-MECHANISMS	HUDSON	79
32	NH2971590003	US DEFENSE FUEL SUPPORT POINT	NEWINGTON	77
33	NHD981211881	JANCO P/C, INC.	SOMERSWORTH	76
34	NHD066752734	FREUDENBERG-NOK GENERAL PARTNERSHIP	MANCHESTER	74
35	NHD001267137	PAK 2000 DIVISION OF OCOR PRODUCTS	MIRROR LAKE	73
36	NHD066755364	BATESVILLE CASKET COMPANY INC.	NASHUA	67
37	NHD000636134	GENERAL ELECTRIC COMPANY	HOOKSETT	65
38	NHD000791889	LOCKHEED SANDERS, INC.	NASHUA	62
39	NHD052024700	SHELDAHL	NASHUA	61
40	NHD099362048	POLYCLAD LAMINATES INC	FRANKLIN	60

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW HAMPSHIRE

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	NHD066760927 GRANITE STATE PLATING CO., INC., GONIC					5,
	AQUEOUS INORGANIC TREATMENT	M071-M079	5,884	0	5,884	
2	NHD058537960 WATTS REGULATOR/WEBSTER VALVE, FRANKLIN					
	OTHER TREATMENT	M121-M129	63	0	63	
3	NHD056331077 COATING SYSTEMS INC., NASHUA					
	FUEL BLENDING	M061	0	2	2	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	1	1	
	LANDFILL	M132	0	0	0	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
	INCINERATION	M041-M049	0	0	0	
	OTHER RECOVERY	M031-M039	0	0	0	
4	NHD001083955 BEEDE ELECTRICAL INSTRUMENT CO., INC., PENACOOK					
	AQUEOUS INORGANIC TREATMENT	M071-M079	2	0	2	

1 Excluding quantity managed by storage only.

New Jersey

Region II

NEW JERSEY

EPA Region Address:	U.S. EPA Region II Hazardous Waste Program Branch 26 Federal Plaza, Room 1105 New York, NY 10278
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Hazardous Waste Regulatory Element Department of Environmental Protection and Energy 401 East State Street, Fifth Floor CN-028 Trenton, NJ 08625-0028
Contact Name: Phone:	Mr. Phil Cole (609) 633-0751

Notes: No special notes for New Jersey.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

NEW JERSEY

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	1,434
Total Quantity of Regulated Waste Generated:	47,096,658 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	6
Facilities managing only waste generated off site	8
Facilities managing waste generated both on and off site	1
Total RCRA TSD Facilities (excluding storage-only facilities):	15
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	46,931,754 tons
Total RCRA TSD Facilities:	98

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	1	0	4	4	.0
OTHER RECOVERY	M031-M039	2	956	0	956	.0
INCINERATION	M041-M049	6	22	337	359	.0
AQUEOUS INORGANIC TREATMENT	M071-M079	1	1,058	0	1,058	.0
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	46,686,000	120,611	46,806,611	99.7
OTHER TREATMENT	M121-M129	10	234	122,332	122,565	.3
LANDFILL	M132	1	0	167	167	.0
OTHER DISPOSAL	M137	1	0	14	14	.0
INVALID SYSTEM TYPE		3	0	21	21	.0
TOTAL		15	46,688,269	243,486	46,931,754	100.0
PERCENTAGE		-	99.5 %	.5 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW JERSEY

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	47
AR	3,223
AZ	30
CA	318
CT	5,656
DC	13
DE	2,374
FL	54
GA	361
IA	2
IL	683
IN	219
KY	137
MA	9,969
MD	22,215
ME	266
MI	838
MN	46
NC	2,386
NH	650
NY	12,413
OH	649
PA	94,146
PR	1
RI	79
SC	1,809
TN	215
TX	79
VA	1,628
VT	849
WI	10
WV	4,567
TOTAL	165,933

Exports

State	Tons Shipped
AL	16,094
AR	561
CT	464
DE	4
FC	2,125
FL	263
GA	333
ID	12
IL	3,795
IN	1,671
KY	2,938
LA	6,260
MA	132
MD	408
MI	9,820
MN	137
MO	3,192
NC	549
NH	2
NY	29,933
OH	27,312
OK	17,266
OR	0
PA	72,394
RI	2,001
SC	15,240
TN	106
TX	719
UT	3
VA	3,831
WA	0
WV	450
TOTAL	218,015

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW JERSEY

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MOMX*	46,686,000	99.1
2	D001	98,957	.2
3	F003	69,241	.1
4	F005	35,487	.1
5	F001	29,427	.1
6	D002	27,427	.1
7	D004	23,801	.1
8	D008	19,464	.0
9	K015	16,895	.0
10	F002	16,769	.0
11	K061	16,260	.0
12	D007	13,856	.0
13	D006	11,241	.0
14	F006	5,790	.0
15	D003	3,180	.0
16	K044	2,984	.0
17	P039	2,734	.0
18	D009	2,708	.0
19	U159	2,227	.0
20	U070	1,935	.0
21	D005	1,325	.0
22	K062	1,139	.0
23	K069	846	.0
24	U028	776	.0
25	K086	616	.0
26	U239	570	.0
27	U107	552	.0
28	U036	539	.0
29	U210	317	.0
30	U154	279	.0
31	K051	278	.0
32	K048	270	.0
33	U170	240	.0
34	U061	227	.0
35	F007	212	.0
36	K046	204	.0
37	D010	195	.0
38	D011	182	.0
39	U190	170	.0
40	U080	156	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW JERSEY

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F001	4
OTHER RECOVERY	M031-M039	D001	956
INCINERATION	M041-M049	D001	200
		F005	63
		D002	61
		U002	16
AQUEOUS INORGANIC TREATMENT	M071-M079	D008	1,058
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	MOMX*	46,686,000
		D002	70,990
		D007	14,435
		K015	13,772
OTHER TREATMENT	M121-M129	D002	37,760
		D001	16,267
		D007	15,710
		D008	10,839
LANDFILL	M132	D006	135
		D007	32
OTHER DISPOSAL	M137	D001	14
INVALID SYSTEM TYPE		D007	21
		U201	0
		U080	0
TOTAL			46,931,754

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW JERSEY

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	NJD002385730	DUPONT E I CHAMBERS WORKS	DEEPWATER	46,695,042
02	NJD002173144	AMERICAN CYANAMID CO	LINDEN	51,491
03	NJD002182897	SAFETY KLEEN CORP	LINDEN	29,894
04	NJD002454544	MARISOL INC	MIDDLESEX	22,620
05	NJD980786016	SWOPE OIL AND CHEMICAL	PENNSAUKEN	18,387
06	NJD001700707	MONSANTO COMPANY	BRIDGEPORT	18,346
07	NJD002147692	BRISTOL MYERS PRODUCTS	HILLSIDE	17,269
08	NJD002191211	HOFFMANN-LA ROCHE, INC	NUTLEY	11,412
09	NJD002194843	INTER. FLAVORS & FRAGRANCES	UNION BEACH	10,872
10	NJD001317064	MERCK & COMPANY INC	RAHWAY	10,461
11	NJD085644110	RARITAN RIVER STEEL COMPANY	PERTH AMBOY	9,781
12	NJD986566032	WARREN ENERGY RESOURCE CO	OXFORD	7,782
13	NJD053288239	ROLLINS ENVIRONMENTAL SERVIC	BRIDGEPORT	7,631
14	NJD078873270	NEW JERSEY STEEL CORP	SAYREVILLE	6,529
15	NJD002200046	CYCLE CHEM INC	ELIZABETH	5,945
16	NJD002173946	DUPONT E I	POMPTOM LAKE	5,897
17	NJD069039626	SAFETY KLEEN CORP.	CLAYTON	4,917
18	NJD061843249	NATIONAL SMELTING OF NJ INC	PEDRICKTOWN	4,170
19	NJD990753162	COASTAL EAGLE POINT OIL CO	WESTVILLE	4,101
20	NJD002444719	UNION CARBIDE CHEMICALS PLAS	PISCATAWAY	3,938
21	NJD002171593	CHEVRON CHEMICAL COMPANY	SO PLAINFIELD	3,367
22	NJD000831479	DONALD B KELLY INC	CAMDEN	3,243
23	NJD002156925	HERCULES INCORPORATED	KENVIL	3,173
24	NJD089216790	CHEMICAL WASTE MGT OF NJ	NEWARK	3,140
25	NJD980755367	JOHNSON MATTHEY INC	W DEPTFORD	2,955
26	NJD986567139	TANG REALTY INC.	POSCATAWAY	2,760
27	NJD002345247	CIRCUIT FOIL USA INC	BORDENTOWN	2,669
28	NJD002139244	METEM CORP	PARSIPPANY	2,548
29	NJD020783304	FRAGRANCES RESOURCES INC	KEYPORT	2,524
30	NJD002202869	REICHHOLD CHEMICALS INC.	ELIZABETH	2,450
31	NJD065811986	COLORAMA LAMINATING & PRINT	PASSAIC	2,357
32	NJD002173276	AMERICAN CYANAMID COMPANY	BRIDGEWATER	2,351
33	NJD064344575	GANES CHEMICALS, INC	PENNSVILLE	2,238
34	NJD002385615	ANCHOR GLASS CONTAINER CORP	SALEM	2,136
35	NJD042905752	ANCHOR GLASS CONTAINER CORP	CLIFFWOOD	2,060
36	NJD002147023	SANDOZ PHARMACEUTICALS CORP	EAST HANOVER	1,947
37	NJD000768093	CRANFORD CLEANERS	CRANFORD	1,924
38	NJD047500897	ECOLAB INC (WOODBRIDGE PLT)	AVENEL	1,884
39	NJD000768101	CHRIS KOCK FORD	TURNERSVILLE	1,804
40	NJD049861776	ZEP MANUFACTURING COMPANY	SPRINGFIELD	1,738

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW JERSEY

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tota Manage
1	NJD002385730 DUPONT E I CHAMBERS WORKS, DEEPWATER					46,891,9
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	46,686,000	120,611	46,806,611	
	OTHER TREATMENT	M121-M129	0	85,015	85,015	
	INCINERATION	M041-M049	0	176	176	
	LANDFILL	M132	0	167	167	
	INVALID SYSTEM TYPE		0	21	21	
2	NJD002454544 MARISOL INC., MIDDLESEX					28,7
	OTHER TREATMENT	M121-M129	0	28,743	28,743	
	INCINERATION	M041-M049	0	14	14	
3	NJD002141950 CP CHEMICAL INC., SEWAREN					4,3
	OTHER TREATMENT	M121-M129	0	4,324	4,324	
	INCINERATION	M041-M049	0	1	1	
4	NJD068292648 STANDARD TANK CLEANING CORP., BAYONNE					4,1
	OTHER TREATMENT	M121-M129	0	4,135	4,135	
	OTHER DISPOSAL	M137	0	14	14	
5	NJD002173946 DUPONT E I, POMPTOM LAKE					1,2
	AQUEOUS INORGANIC TREATMENT	M071-M079	1,058	0	1,058	
	OTHER TREATMENT	M121-M129	210	0	210	
6	NJD980753875 ATOCHEM NORTH AMERICA INC., WEST DEPTFORD					9
	OTHER RECOVERY	M031-M039	956	0	956	
7	NJD002155067 FRITZSCHE DODGE & OLCOTT, CLIFTON					1
	INCINERATION	M041-M049	0	146	146	
8	NJD002141190 CPS CHEMICAL COR INC., OLD BRIDGE					1
	OTHER TREATMENT	M121-M129	0	105	105	
9	NJD002521961 HERCULES INCORPORATED, PARLIN					
	OTHER TREATMENT	M121-M129	24	0	24	
10	NJD002444719 UNION CARBIDE CHEMICALS PLAS, PISCATAWAY					
	INCINERATION	M041-M049	22	0	22	
	OTHER RECOVERY	M031-M039	0	0	0	
11	NJD047318043 DETREX CORPORATION, CINNAMINSON					
	OTHER TREATMENT	M121-M129	0	9	9	
	SOLVENTS RECOVERY	M021-M029	0	4	4	
12	NJD004362059 FISHER SCIENTIFIC COMPANY, FAIR LAWN					
	OTHER TREATMENT	M121-M129	0	1	1	
	INCINERATION	M041-M049	0	0	0	
13	NJD011427895 L & L OIL SERVICE, ABERDEEN					
	OTHER TREATMENT	M121-M129	0	0	0	
14	NJD000582387 RUTGERS UNIVERSITY, PISCATAWAY					
	INVALID SYSTEM TYPE		0	0	0	
15	NJD000692111 EXXON RESEARCH & ENGINEERING, ANNANDALE					
	INVALID SYSTEM TYPE		0	0	0	

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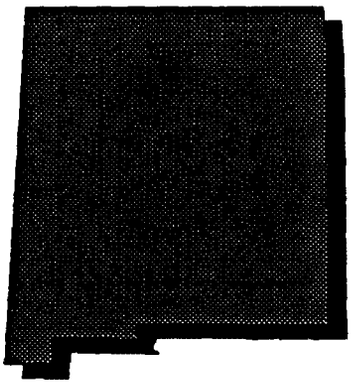
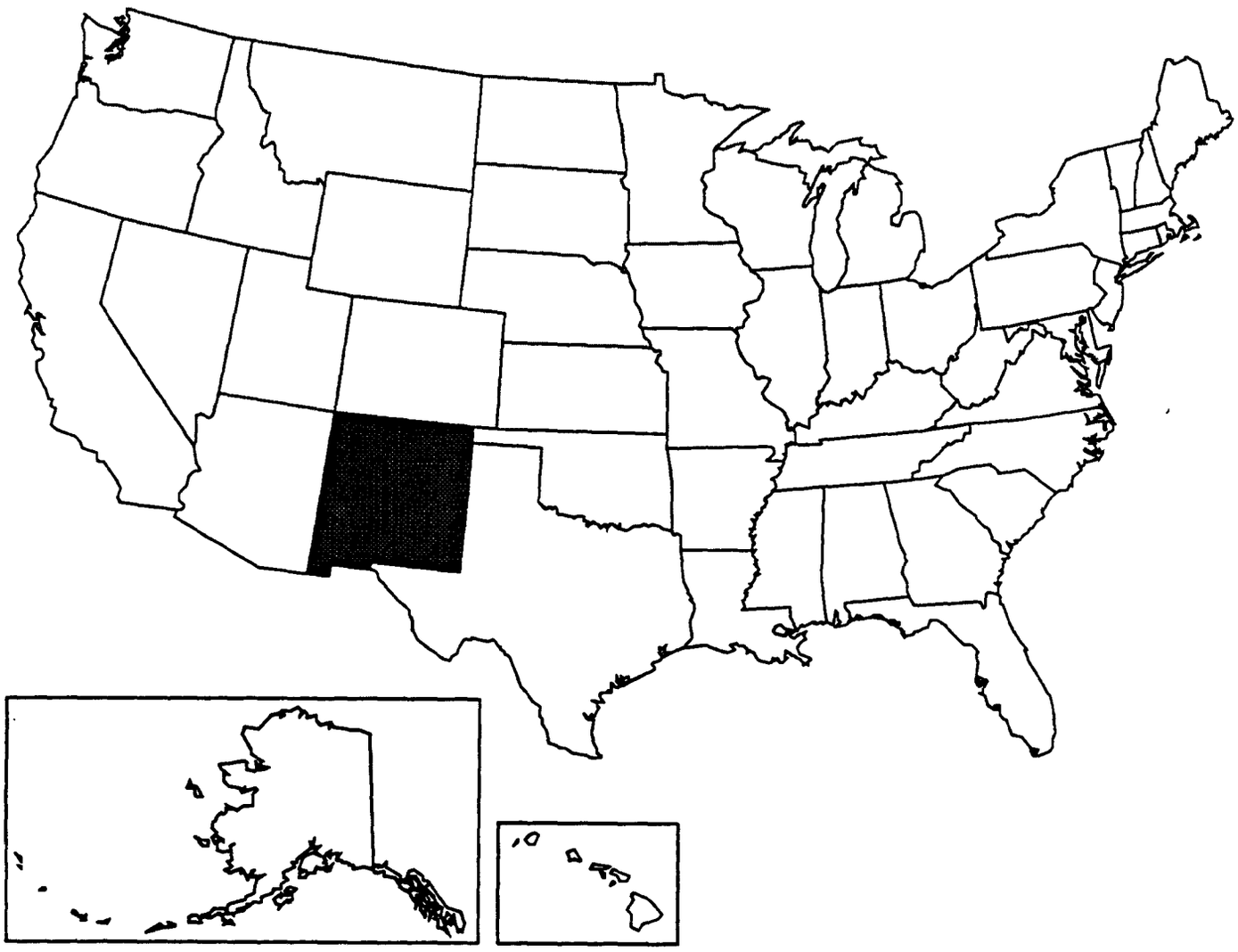
1 Excluding quantity managed by storage only.

New Mexico

Region VII





NEW MEXICO

EPA Region Address:	U.S. EPA Region VI RCRA Programs Branch Mail Stop 6H-H 1445 Ross Avenue Dallas, TX 75202
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous and Radioactive Materials Bureau Environmental Department 525 Camino De Los Marquez Post Office Box 26110 Santa Fe, NM 87502
Contact Name:	Ms. Anna Walker Management Analyst
Phone:	(505) 827-4308

Notes: No special notes for New Mexico.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW MEXICO

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	46
Total Quantity of Regulated Waste Generated:	10,961 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	10
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	10
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	6,355 tons
Total RCRA TSD Facilities:	19

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	2	21	0	21	.3
SOLVENTS RECOVERY	M021-M029	1	0	0	0	.0
INCINERATION	M041-M049	1	10	0	10	.2
AQUEOUS INORGANIC TREATMENT	M071-M079	2	6	0	6	.1
OTHER TREATMENT	M121-M129	6	1,709	0	1,709	26.9
LAND TREATMENT	M131	3	3,883	0	3,883	61.1
OTHER DISPOSAL	M137	2	727	0	727	11.4
TOTAL		10	6,355	0	6,355	100.0
PERCENTAGE		-	100.0 %	.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW MEXICO

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AZ	1
CO	15
TOTAL	16

Exports

State	Tons Shipped
AL	281
AR	49
AZ	2
CA	18
CO	1,794
FL	205
GA	21
ID	2
IL	37
IN	10
KS	26
LA	78
MI	4
NJ	1
NV	7
NY	4
OK	235
PA	0
TN	100
TX	1,851
UT	525
TOTAL	5,252

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW MEXICO

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D002	2,168	19.8
2	K051	1,799	16.4
3	F0MX*	1,646	15.0
4	F002	1,483	13.5
5	M0MX*	1,149	10.5
6	D003	750	6.8
7	K048	522	4.8
8	D0MX*	421	3.8
9	D007	242	2.2
10	F003	221	2.0
11	D001	200	1.8
12	F001	104	1.0
13	K049	58	.5
14	D008	53	.5
15	D005	32	.3
16	U0MX*	25	.2
17	D011	18	.2
18	D006	11	.1
19	K050	9	.1
20	F006	8	.1
21	D004	8	.1
22	D010	6	.1
23	D009	6	.1
24	P120	4	.0
25	F005	3	.0
26	K052	2	.0
27	U012	2	.0
28	U125	2	.0
29	P076	0	.0
30	P068	0	.0
31	P078	0	.0
32	P0MX*	0	.0
33	P056	0	.0
34	U080	0	.0
35	P015	0	.0
36	U122	0	.0
37	U002	0	.0
38	U240	0	.0
39	P095	0	.0
40	P073	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW MEXICO

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D008	18
		D009	2
		D011	1
SOLVENTS RECOVERY	M021-M029	U080	0
INCINERATION	M041-M049	D003	10
AQUEOUS INORGANIC TREATMENT	M071-M079	D005	5
		P068	0
		MOMX*	0
OTHER TREATMENT	M121-M129	D002	1,639
		MOMX*	38
		D003	10
		D001	8
LAND TREATMENT	M131	K051	1,668
		D002	1,624
		K048	522
		K049	58
OTHER DISPOSAL	M137	D003	727
TOTAL			6,355

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW MEXICO

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	NMD990753931	CLIMAX CHEMICAL COMPANY	MONUMENT	1,783
02	NMD048918817	NAVAJO REFINING COMPANY	ARTESIA	1,522
03	NMD000609339	INTEL CORPORATION	RIO RANCHO	1,484
04	NM2750211235	WHITE SANDS MISSILE RANGE	WHITE SANDS MISSILE RANGE	1,415
05	NMD000333211	GIANT REFINING COMPANY - CINIZA REFINERY	GALLUP	737
06	NM6213820974	FORT WINGATE DEPOT ACTIVITY	GALLUP	727
07	NMD000333559	UNICHEM INTERNATIONAL, INC./HOBBS PLANT	HOBBS	466
08	NM0890010515	US DOE LOS ALAMOS NATIONAL LABORATORY	LOS ALAMOS	260
09	NM4890110519	U.S. DOE ALBQ. MICROELECTRONICS FACILITY	ALBUQUERQUE	255
10	NM6572124422	HOLLOMAN AIR FORCE BASE	HOLLOMAN AIR FORCE BASE	210
11	NM5890110518	SANDIA NATIONAL LABORATORIES	ALBUQUERQUE	192
12	NMD980744551	MOTOROLA INC. CERAMIC PRODUCTS	ALBUQUERQUE	177
13	NMP360023604	TRANSWESTERN PIPELINE CO.	ROSWELL	155
14	NMD089416416	BLOOMFIELD REFINING COMPANY	BLOOMFILED	134
15	NMD000729004	TRANSWESTERN PIPELINE CO.	LAGUNA	115
16	NMD052684578	GE AIRCRAFT ENGINES	ALBUQUERQUE	113
17	NMD360010573	TRANSWESTERN PIPELINE CO.	CORONA	110
18	NMD000709782	SIGNETICS COMPANY	ALBUQUERQUE	107
19	NM8800019434	NASA JOHNSON SPACE CENTER - WSTF	LAS CRUCES	92
20	NMP360010003	TRANSWESTERN PIPELINE CO.	CARLSBAD	84
21	NMD091270017	OXY USA INC. / BLUITT GAS PLANT	MILNESAND	84
22	NMP360023593	TRANSWESTERN PIPELINE CO.	PORTALES	80
23	NMD069892594	TRANSPORTATION MFG. CORP.	ROSWELL	72
24	NMD000729053	TRANSWESTERN PIPELINE CO.	MOUNTAINAIR	63
25	NMD083212332	SPARTON TECHNOLOGY, INC.	ALBUQUERQUE	59
26	NMD980508022	THE PITTSBURG & MIDWAY COAL MINING CO.	GALLUP	58
27	NMD000610303	HONEYWELL DEFENSE AVIONICS SYSTEMS DIV.	ALBUQUERQUE	50
28	NM7572124454	U.S. AIR FORCE CANNON AFB	CANNON AIR FORCE BASE	46
29	NMD069424323	PNM - SAN JUAN GENERATING STATION	WATERFLOW	42
30	NM9570024423	KIRTLAND AIR FORCE BASE	ALBUQUERQUE	40
31	NM4890139088	WASTE ISOLATION PILOT PLANT/U.S. DOE	CARLSBAD	39
32	NMT360023404	TRANSWESTERN PIPELINE CO.	BELEN	37
33	NMD981144132	TRANSPORTATION MFG. CORP.	ROSWELL	35
34	NMD085269025	MOUNTAIN STATES CONSTRUCTORS, INC.	ALBUQUERQUE	24
35	NMD075086520	MEMORIAL GENERAL HOSPITAL	LAS CRUCES	21
36	NMD035686823	GULTON DATA SYSTEMS	ALBUQUERQUE	18
37	NMD056773765	SIEMENS COMMUNICATION SYSTEMS	ALBUQUERQUE	12
38	NMD980621197	UNIVERSITY OF NEW MEXICO	ALBUQUERQUE	12
39	NMD980622989	ETHICON INC	ALBUQUERQUE	10
40	NMD035806405	PHELPS DODGE MINING COMPANY / TYRONE BR.	TYRONE	8

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW MEXICO

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	To Mana
1	NMD990753931 CLIMAX CHEMICAL COMPANY, MONUMENT					3
	OTHER TREATMENT	M121-M129	1,624	0	1,624	
	LAND TREATMENT	M131	1,624	0	1,624	
2	NMD048918817 NAVAJO REFINING COMPANY, ARTESIA					1
	LAND TREATMENT	M131	1,522	0	1,522	
3	NMD000333211 GIANT REFINING COMPANY - CINIZA REFINERY, GALLUP					
	LAND TREATMENT	M131	737	0	737	
4	NM6213820974 FORT WINGATE DEPOT ACTIVITY, GALLUP					
	OTHER DISPOSAL	M137	727	0	727	
5	NM8800019434 NASA JOHNSON SPACE CENTER - WSTF, LAS CRUCES					
	OTHER TREATMENT	M121-M129	70	0	70	
	AQUEOUS INORGANIC TREATMENT	M071-M079	1	0	1	
	OTHER DISPOSAL	M137	0	0	0	
6	NM0890010515 US DOE LOS ALAMOS NATIONAL LABORATORY, LOS ALAMOS					
	METALS RECOVERY (FOR REUSE)	M011-M019	20	0	20	
	OTHER TREATMENT	M121-M129	8	0	8	
	AQUEOUS INORGANIC TREATMENT	M071-M079	5	0	5	
7	NM2750211235 WHITE SANDS MISSILE RANGE, WHITE SANDS MISSILE RANGE					
	INCINERATION	M041-M049	10	0	10	
	SOLVENTS RECOVERY	M021-M029	0	0	0	
8	NM5890110518 SANDIA NATIONAL LABORATORIES, ALBUQUERQUE					
	OTHER TREATMENT	M121-M129	4	0	4	
	METALS RECOVERY (FOR REUSE)	M011-M019	1	0	1	
9	NM4213720101 US ARMY AIR DEF.ARTIL.CNTR & FORT BLISS, FORT BLISS					
	OTHER TREATMENT	M121-M129	3	0	3	
10	NM5572124456 MELROSE AIR FORCE RANGE 27 CSG/CC, MELROSE					
	OTHER TREATMENT	M121-M129	0	0	0	

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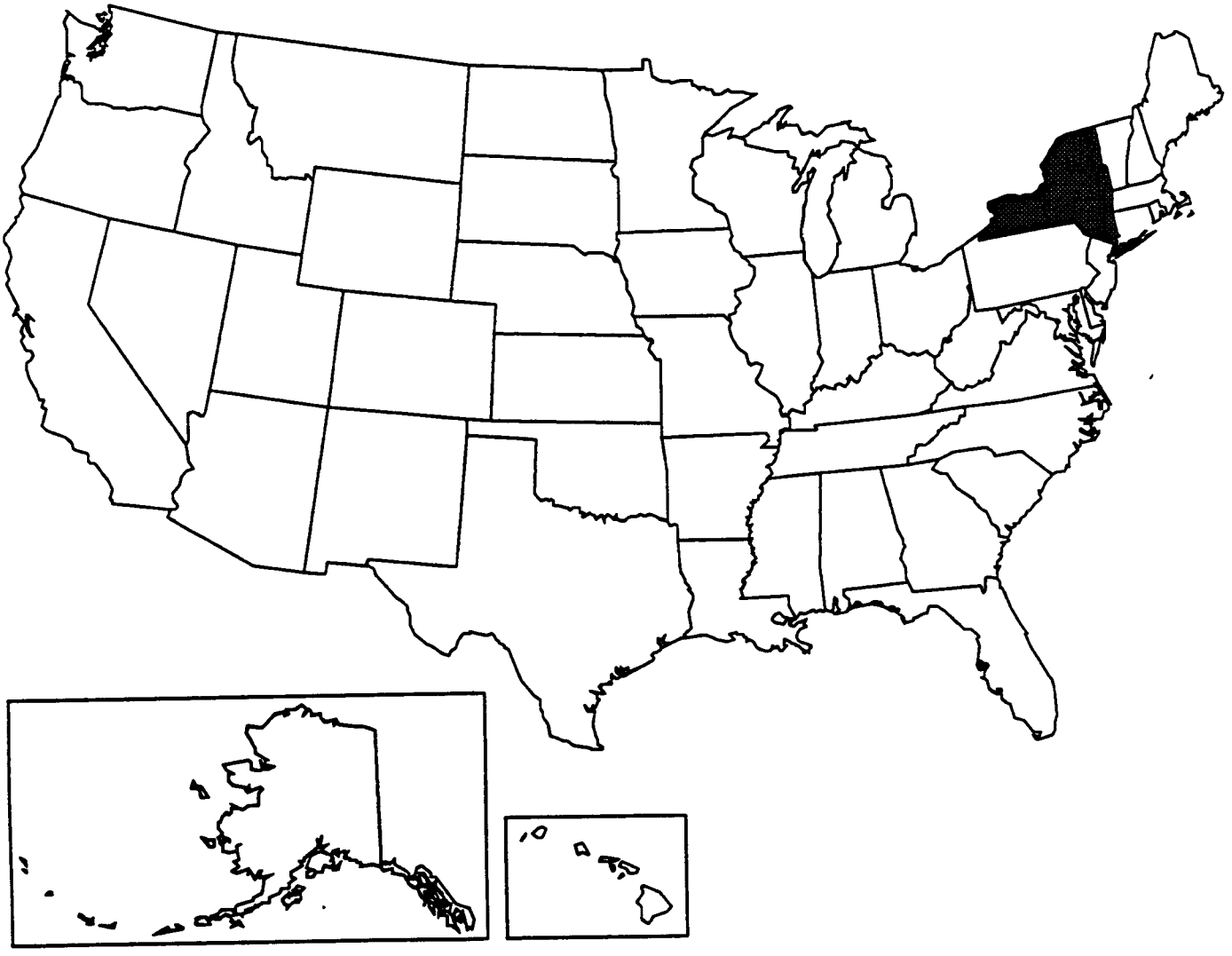
1 *Excluding quantity managed by storage only.*

New York

Region II



NEW YORK

EPA Region Address:	U.S. EPA Region II Hazardous Waste Program Branch 26 Federal Plaza, Room 1105 New York, NY 10278
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Regional Permit Section Bureau of Hazardous Waste Facility Compliance Department of Environmental Conservation 50 Wolf Road Albany, NY 12233-7252
Contact Name:	Mr. Norm Aaronson Soild Waste Specialist 3
Phone:	(518) 457-3273

Notes: No special notes for New York.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW YORK

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	848
Total Quantity of Regulated Waste Generated:	406,910 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	7
Facilities managing only waste generated off site	5
Facilities managing waste generated both on and off site	8
Total RCRA TSD Facilities (excluding storage-only facilities):	20
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	419,838 tons
Total RCRA TSD Facilities:	73

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
OTHER RECOVERY	M031-M039	5	14,751	0	14,751	3.5
INCINERATION	M041-M049	10	42,178	1,738	43,916	10.5
OTHER TREATMENT	M121-M129	12	15,933	58,262	74,195	17.7
LAND TREATMENT	M131	2	9,799	0	9,799	2.3
LANDFILL	M132	2	0	277,156	277,156	66.0
OTHER DISPOSAL	M137	1	0	21	21	.0
TOTAL		20	82,661	337,177	419,838	100.0
PERCENTAGE		-	19.7 %	80.3 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW YORK

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	1
AR	1
AZ	2
CA	19
CO	408
CT	14,284
DC	1
DE	4,023
FC	1,966
FL	6
GA	4
IA	0
IL	471
IN	0
KS	1
KY	1
LA	1
MA	29,635
MD	598
ME	68
MI	304
MN	3,873
MO	1
NC	30
NH	157
NJ	32,526
NM	2
OH	10,081
PA	24,489
PR	0
RI	5,634
SC	9
TN	4
TX	8
VA	3,678
VT	64
WI	4
WV	9,132
TOTAL	141,488

Exports

State	Tons Shipped
AL	879
AR	2,314
AZ	36
CT	6,584
DE	8
FC	14,524
FL	12
GA	303
IL	3,051
IN	2,901
KS	9,461
KY	9,738
LA	2,160
MA	1,212
MD	149
MI	23,254
MN	135
MO	391
NC	374
NJ	26,279
OH	24,298
OR	15
PA	19,530
RI	248
SC	594
TN	19
TX	1,326
VA	142
WV	2
TOTAL	149,938

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW YORK

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F002	77,187	19.0
2	F003	45,158	11.1
3	D002	37,479	9.2
4	F001	37,276	9.2
5	D001	30,865	7.6
6	F005	29,800	7.3
7	F020	24,662	6.1
8	U188	19,956	4.9
9	D008	13,483	3.3
10	F006	12,622	3.1
11	D005	10,023	2.5
12	K062	9,409	2.3
13	D006	8,473	2.1
14	F019	7,386	1.8
15	D003	7,097	1.7
16	K061	7,034	1.7
17	K071	5,237	1.3
18	D007	4,861	1.2
19	D004	4,054	1.0
20	F007	3,552	.9
21	D009	2,440	.6
22	D011	1,176	.3
23	U129	1,002	.2
24	U228	730	.2
25	K106	632	.2
26	K002	566	.1
27	K069	495	.1
28	U044	460	.1
29	U122	448	.1
30	F004	420	.1
31	U045	369	.1
32	F009	350	.1
33	U159	330	.1
34	U019	292	.1
35	U036	283	.1
36	U154	227	.1
37	F027	177	.0
38	U052	118	.0
39	U079	102	.0
40	F008	100	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW YORK

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
OTHER RECOVERY	M031-M039	F002	14,700
		F003	32
		F001	19
INCINERATION	M041-M049	F005	19,820
		D001	9,790
		F003	7,326
		F002	4,205
OTHER TREATMENT	M121-M129	D002	30,901
		D001	10,058
		U188	9,419
		D005	3,277
LAND TREATMENT	M131	F001	8,914
		D004	876
		D005	6
		D002	3
LANDFILL	M132	D008	54,441
		F006	33,287
		D006	26,560
		D005	23,947
OTHER DISPOSAL	M137	F001	21
TOTAL			419,838

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW YORK

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	NYD980592497	EASTMAN KODAK COMPANY KODAK PARK	ROCHESTER	37,843
02	NYD982743023	OCCIDENTAL CHEMICAL CORPORATION	NIAGARA FALLS	36,836
03	NYD043815703	FRONTIER CHEMICAL WASTE	NIAGARA FALLS	25,971
04	NYD000767657	NEW YORK STATE DEPT OF ENVIRONMENTAL	NIAGARA FALLS	21,006
05	NYD000707901	INTERNATIONAL BUSINESS MACHINES CORP.	EAST FISHKILL	20,028
06	NYD002080034	GENERAL ELECTRIC COMPANY	WATERFORD	17,431
07	NYD002233039	INTERNATIONAL BUSINESS MACHINES	ENDICOTT	11,347
08	NYD000831644	OCCIDENTAL CHEMICAL CORPORATION	NIAGARA FALLS	11,079
09	NYD080336241	CECOS INTERNATIONAL INC.	NIAGARA FALLS	10,206
10	NYD982739963	GOLDEN EAGLE ARCHERY	FARMINGTON	9,976
11	NYD002070118	SCHENECTADY CHEMICALS INC	ROTTERDAM JUNCTION	9,620
12	NYD981085582	CHAMPLAIN VALLEY PHYSICIANS HOSPITAL	PLATTSBURGH	9,265
13	NYD030215529	AL TECH SPECIALTY STEEL CORPORATION	DUNKIRK	9,062
14	NYD002069748	CIBA GEIGY CORPORATION	GLENS FALLS	8,292
15	NYD980535181	NEW YORK STATE DEPT OF ENVIRONEMNTAL	RESTORATION SITE	8,145
16	NYD066785650	AUBURN STEEL COMPANY INC	AUBURN	5,824
17	NYD002123461	OLIN CHEMICALS GRP-NIAGARA FALLS PLT	NIAGARA FALLS	5,428
18	NYD049836679	CWM CHEMICAL SERVICES INC.	MODEL CITY	5,167
19	NYD002218436	ATOCHEM NORTH AMERICA	PIFFARD	5,158
20	NYD000824482	OCCIDENTAL CHEM. CORP.	NIAGARA FALLS	4,848
21	NYD980592901	HARRISON RADIATOR-GENERAL MOTORS CORP.	LOCKPORT	4,324
22	NYD003917960	CONSOLIDATED EDISON COMPANY OF NEW YORK	QUEENS	4,064
23	NYD981080856	HANKS CLEANRS	BROOKLYN	3,595
24	NYD981484785	TOSHIBA AMERICA ELECTRONIC COMPONENTS	HORSEHEADS	3,387
25	NYD982725418	NEW YORK STATE DEPT OF ENVIRONMENTAL	CREEK	3,357
26	NYD002047967	GRUMMAN AEROSPACE CORPORATION	BETHPAGE	3,237
27	NYD002211324	XEROX CORPORATION WILSON CENTER	WEBSTER	3,225
28	NYD061348058	LUPOSELLOS GARAGE	CROTON ON HUDSON	2,532
29	NYD000824425	CORNING INCORPORATED	CORNING	2,473
30	NYP000891929	NIGHTINGALE BANFORD SCHOOL	NEW YORK CITY	2,403
31	NYD002126852	HARRISON RADIATOR DIVISION	LOCKPORT	2,313
32	NYD096920483	PHOTOCIRCUITS DIVOF PC ACQUISITION CORP	GLEN COVE	2,166
33	NYD002123503	E I DUPONT DE NEMOURS & COMMPANY	NIAGARA FALLS	2,066
34	NYD002241982	HADCO PRINTED CIRCUITS INC.	OWEGO,	2,022
35	NYD072367980	NORTHVILLE INDUSTRIES CORP.	RIVERHEAD	1,949
36	NYD002239440	GENERAL MOTORS CORP INLAND FISHER GUIDE	SYRACUSE,	1,776
37	NYD002232304	ALUMINUM CO OF AMERICA INC	MASSENA,	1,715
38	NYD982790255	OLIN CORPORATION	NIAGARA FALLS	1,698
39	NYD057770109	NORTHEAST ENVIRONMENTAL SERVICES, INC.	WAMPSVILLE	1,640
40	NYD080480734	INTERNATIONAL BUSINESS MACHINES	POUGHKEEPSIE	1,609

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NEW YORK

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID	Site Name, City / Management Method		On Site	Off Site	Method Total	To Mana
1	NYD049836679	CWM CHEMICAL SERVICES INC., MODEL CITY					304
		LANDFILL	M132	0	277,136	277,136	
		OTHER TREATMENT	M121-M129	0	26,840	26,840	
		LAND TREATMENT	M131	885	0	885	
2	NYD980592497	EASTMAN KODAK COMPANY KODAK PARK, ROCHESTER					27
		INCINERATION	M041-M049	25,990	1,430	27,420	
3	NYD002080034	GENERAL ELECTRIC COMPANY, WATERFORD					17
		LAND TREATMENT	M131	8,914	0	8,914	
		INCINERATION	M041-M049	8,217	0	8,217	
		OTHER RECOVERY	M031-M039	300	0	300	
4	NYD080336241	CECOS INTERNATIONAL INC., NIAGARA FALLS					15
		OTHER TREATMENT	M121-M129	8,571	6,917	15,488	
		LANDFILL	M132	0	20	20	
5	NYD080469935	NORLITE CORPORATION, COHOES					15
		OTHER TREATMENT	M121-M129	0	15,285	15,285	
6	NYD000707901	INTERNATIONAL BUSINESS MACHINES CORP., EAST FISHKILL					14
		OTHER RECOVERY	M031-M039	14,400	0	14,400	
7	NYD002070118	SCHENECTADY CHEMICALS INC., ROTTERDAM JUNCTION					9
		OTHER TREATMENT	M121-M129	5,000	0	5,000	
		INCINERATION	M041-M049	3,960	129	4,089	
8	NYD043815703	FRONTIER CHEMICAL WASTE, NIAGARA FALLS					5
		OTHER TREATMENT	M121-M129	0	5,412	5,412	
9	NYD000824482	OCCIDENTAL CHEM. CORP., NIAGARA FALLS					5
		INCINERATION	M041-M049	3,350	0	3,350	
		OTHER TREATMENT	M121-M129	0	1,924	1,924	
10	NYD002218436	ATOCHEM NORTH AMERICA, PIFFARD					2
		OTHER TREATMENT	M121-M129	2,356	0	2,356	
		INCINERATION	M041-M049	275	0	275	
11	NYD057770109	NORTHEAST ENVIRONMENTAL SERVICES, INC., WAMPSVILLE					1
		OTHER TREATMENT	M121-M129	0	1,039	1,039	
		INCINERATION	M041-M049	3	0	3	
12	NYD057722258	PRIDE SOLVENTS & CHEMICAL CO.,INC., WEST BABYLON					
		OTHER TREATMENT	M121-M129	0	677	677	
		OTHER DISPOSAL	M137	0	21	21	
		OTHER RECOVERY	M031-M039	19	0	19	
13	NYD002014595	NEPERA INCORPORATED, HARRIMAN					
		INCINERATION	M041-M049	341	0	341	
14	NYD000632372	B D T INC., CLARENCE					
		OTHER TREATMENT	M121-M129	0	162	162	
		INCINERATION	M041-M049	0	22	22	
15	NY7890008975	BROOKHAVEN NATIONAL LABORATORY, UPTON					
		INCINERATION	M041-M049	0	157	157	
16	NYD002103216	OCCIDENTAL CHEMICAL CORPORATION, NIAGARA FALLS					
		INCINERATION	M041-M049	43	0	43	
17	NYD074037193	ATTICA CORRECTIONAL FACILITY IND, ATTICA					
		OTHER RECOVERY	M031-M039	18	0	18	
18	NYD052783396	PRECO/FOSROC INCORPORATED, PLAINVIEW					
		OTHER RECOVERY	M031-M039	14	0	14	
19	NYD000631994	UNIVERSITY OF ROCHESTER -MEDICAL CENTER, ROCHESTER					
		OTHER TREATMENT	M121-M129	6	2	9	
20	NYD093256063	GENERAL ELECTRIC COMPANY, FORT EDWARD					
		OTHER TREATMENT	M121-M129	0	3	3	

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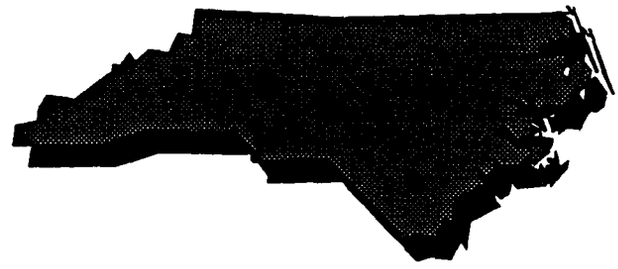
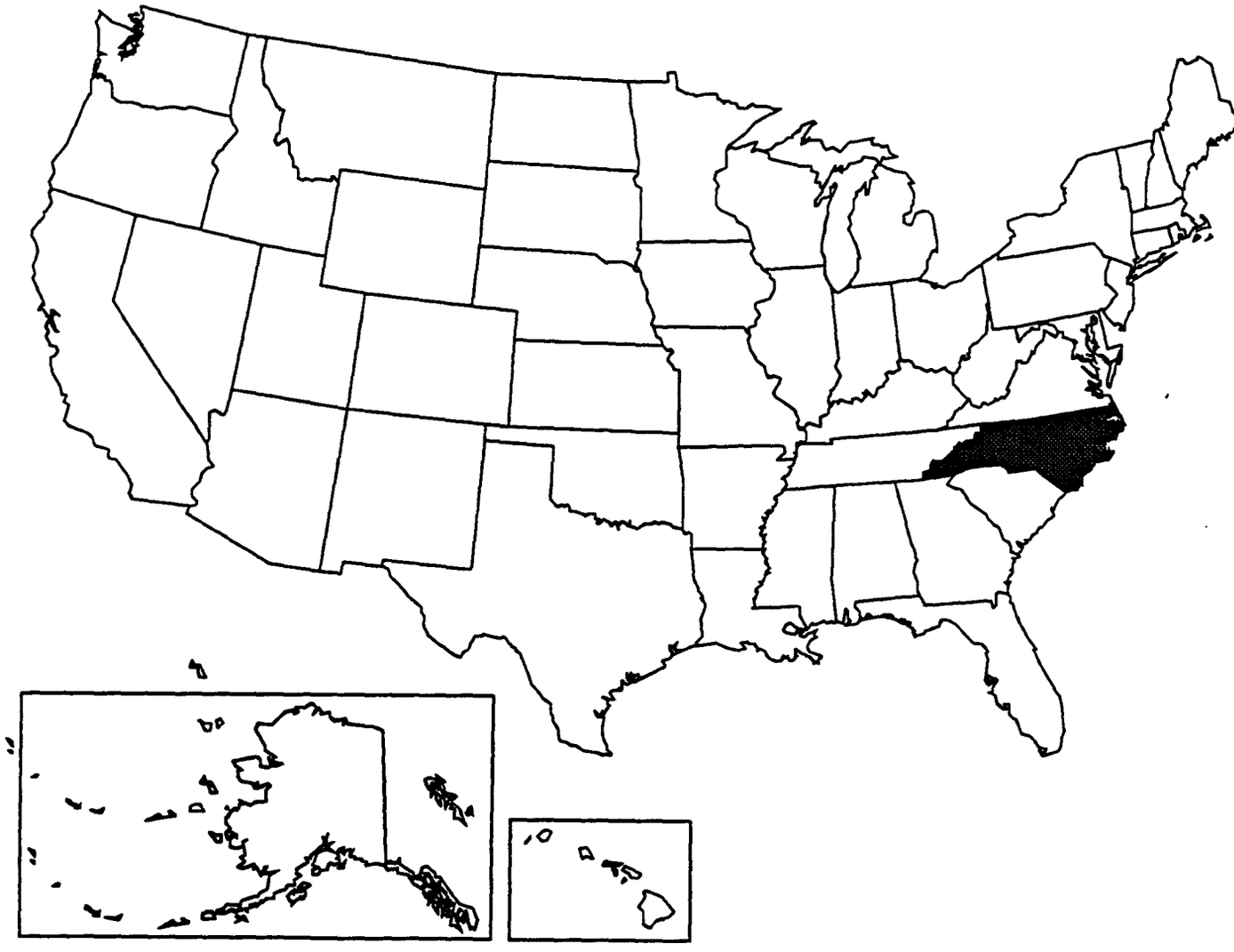
1 Excluding quantity managed by storage only.

North Carolina

Region IV





NORTH CAROLINA

EPA Region Address:	U.S. EPA Region IV Waste Division, Waste Programs Branch State Programs Section 345 Courtland Street Atlanta, GA 30365
Biennial Report Data Collection Instrument:	State-specific annual report
Address of Participating State Environmental Authority	Solid Waste Management Division Hazardous Waste Section Environmental Health and Natural Resources Post Office Box 27687 Raleigh, NC 27611-7687
Contact Name:	Mr. David Mason Computer Analyst
Phone:	(919) 733-2178

Notes: No special notes for North Carolina.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH CAROLINA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	684
Total Quantity of Regulated Waste Generated:	586,338 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	3
Facilities managing only waste generated off site	7
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	10
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	565,799 tons
Total RCRA TSD Facilities:	28

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
OTHER TREATMENT	M121-M129	10	522,318	43,482	565,799	100.0
TOTAL		10	522,318	43,482	565,799	100.0
PERCENTAGE		-	92.3 %	7.7 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH CAROLINA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	16,837
CA	128
CO	5
CT	1,390
DE	7
FC	7
FL	462
GA	2,648
IL	34
IN	17
KY	1
LA	2
MA	154
MD	427
ME	149
MN	0
MO	12
ND	0
NH	70
NJ	1,542
NV	1
NY	322
OH	1,571
OK	51
PA	4,859
RI	53
SC	2,704
TN	493
VA	1,766
VT	24
WI	5
WV	427
WY	0
TOTAL	36,168

Exports

State	Tons shipped
	0
AL	8,749
AR	514
AZ	48
CT	28
DE	5
FC	55
FL	533
GA	1,627
IL	487
IN	1,371
KY	789
LA	1,935
MA	10
MD	153
MI	354
MS	455
NJ	2,397
NY	35
OH	471
OK	92
PA	5,095
RI	8
SC	14,580
TN	826
TX	30
VA	2,881
WI	2
TOTAL	43,530

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH CAROLINA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D007	415,178	70.8
2	D002	119,026	20.3
3	D001	8,205	1.4
4	F0MX*	6,420	1.1
5	D008	5,827	1.0
6	F003	4,989	.9
7	F005	3,904	.7
8	K088	2,888	.5
9	D0MX*	2,652	.5
10	F006	2,301	.4
11	K061	2,078	.4
12	K083	2,068	.4
13	F001	1,573	.3
14	F002	1,543	.3
15	U210	1,360	.2
16	M0MX*	1,090	.2
17	U0MX*	889	.2
18	U220	792	.1
19	D006	637	.1
20	F019	484	.1
21	K086	451	.1
22	K001	382	.1
23	U043	329	.1
24	D009	314	.1
25	D004	312	.1
26	D005	255	.0
27	K102	77	.0
28	D003	64	.0
29	K062	51	.0
30	F007	24	.0
31	K101	20	.0
32	U028	18	.0
33	F004	14	.0
34	K106	13	.0
35	LABP	13	.0
36	P120	13	.0
37	U188	12	.0
38	U239	11	.0
39	U226	10	.0
40	F011	7	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

NORTH CAROLINA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
OTHER TREATMENT	M121-M129	D007	413,273
		D002	109,522
		MOMX*	20,254
		FOMX*	12,188
TOTAL			565,799

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

NORTH CAROLINA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	NCD057454670	OCCIDENTAL CHEM. CORP.-CASTLE HAYNE PLT	Castle Hayne	413,230
02	NCD980848709	Goodyear Tire & Rubber Company	RANDLEMAN	109,120
03	NCD108706029	Duke Power McGuire Nuclear Station	Cornelius	5,449
04	NCD003162542	ALUMINUM CO. OF AMERICA (BADIN)	Badin	2,945
05	NCD042091975	Mallinckrodt S.C.C.Raleigh Plt	Raleigh	2,225
06	NCD093340487	FLORIDA STEEL CORP. CHARLOTTE MILL DIV.	Charlotte	2,078
07	NCD109025932	Resinall Crop.	Severn	2,036
08	NCD097363527	Watts Regulator Co./Regtrol-Enecsco	Spindale	1,935
09	NCD048467427	Mineral Research & Development Corp.,	Harrisburg	1,703
10	NCD085074821	Hoechst Celanese Sou-Tex Plant	Mount Holly	1,133
11	NCD044438406	LITTON SYS. INC. CLIFTON PRECISION DIV.	MURPHY	1,129
12	NCT003158979	AERONCA, INC. [CERCLA HAS MANIFEST]	CHARLOTTE	988
13	NCD067441394	R.J. Reynolds Tobacco Co Pkg Div #604	Winston Salem	909
14	NCD006390561	RELIANCE UNIVERSAL, INC.	High Point	885
15	NCD003232030	Lilly Company Inc	High Point	867
16	NCD980799142	CALDWELL INDUSTRIAL SERVICES, INC.	HUDSON	865
17	NCT003233756	N.S. FARRINGTON	UNKNOWN	864
18	NCD050409150	General Electric Co Inc	Wilmington	776
19	NCD047372503	Southchem Inc	Durham	688
20	NCD085083004	Easco Hand Tools, Inc.	Gastonia	658
21	NCD049997786	BASF CORPORATION	Morganton	588
22	NC1170027261	USMC AIR STATION - CHERRY POINT	Cherry Point	561
23	NCD000623116	NATIONAL STARCH & CHEMICAL CO.	Salisbury	549
24	NCD091245498	FREIGHTLINER CORPORATION	MT. HOLLY	548
25	NCD024462327	Academy Steel Drum	Matthews	505
26	NCD986171270	Hesta Properties-Carillon Proj	Charlotte	491
27	NCD990868168	BASF CORP-COATINGS AND COLORANTS	Charlotte	459
28	NCD048181218	Carolina Galvanizing Corp	Aberdeen	450
29	NCD062567623	Henkel Corporation	Charlotte	448
30	NCD980247316	Charlotte Pipe & Foundry Co.	Charlotte	430
31	NCD086330412	Data General Corp	Clayton	404
32	NCD047368642	Dupont EI De Nemours & Co. Inc.	FAYETTEVILLE	401
33	NCD060295417	Burlington Industries, Inc.	Lexington	400
34	NCD086872082	Technographics Printworld, Inc.	Monroe	398
35	NCD057038168	COLONIAL PIPELINE CO - GREENSBORO JCT	Greensboro	390
36	NCD093137636	General Wood Preserving Company, Inc.	Leland	378
37	NCD003907508	Morganite Incorporated	Dunn	374
38	NCD083673616	REEVES BROTHERS INC. GRACE PLANT	Rutherfordton	374
39	NCD041415019	The Valspar Corporation	High Point	371
40	NCD024468597	Charlotte Steel Drum	Charlotte	368

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH CAROLINA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City	Management Method		On Site	Off Site	Method Total	To Mana
1	NCD057454670 OCCIDENTAL CHEM. CORP.-CASTLE HAYNE PLT, Castle Hayne						413
		OTHER TREATMENT	M121-M129	413,171	0	413,171	
2	NCD980848709 Goodyear Tire & Rubber Company, RANDLEMAN						109
		OTHER TREATMENT	M121-M129	109,102	0	109,102	
3	NCD000773655 Oldover Corporation, Norwood						33
		OTHER TREATMENT	M121-M129	0	33,497	33,497	
4	NCD000648451 GSX SERVICES, INC., Reidsville						8
		OTHER TREATMENT	M121-M129	0	8,836	8,836	
5	NCD000776740 Safety-Kleen 3-171-01, Raleigh						
		OTHER TREATMENT	M121-M129	0	878	878	
6	NCD000604322 Singer Furniture Co. PLT 33 & 4, Lenoir						
		OTHER TREATMENT	M121-M129	0	160	160	
7	NCD000771964 FMC CORPORATION, LITHIUM DIV., Bessemer City						
		OTHER TREATMENT	M121-M129	0	81	81	
8	NCD003213907 AT&T Technologies, Inc -Dept 12WL337320, Winston Salem						
		OTHER TREATMENT	M121-M129	44	0	44	
9	NC6170022580 US Marine Corps Base - Build 1103, Camp LeJeune						
		OTHER TREATMENT	M121-M129	0	15	15	
10	NC8210020121 US Army Ft. Bragg Airbrone Corps, Fort Bragg						
		OTHER TREATMENT	M121-M129	0	15	15	

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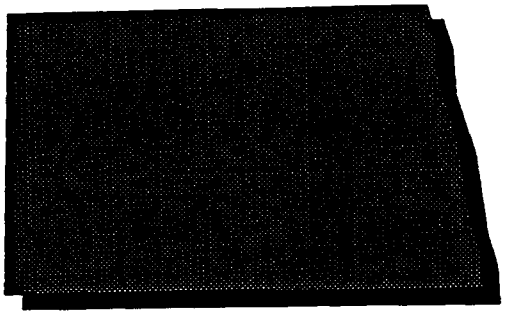
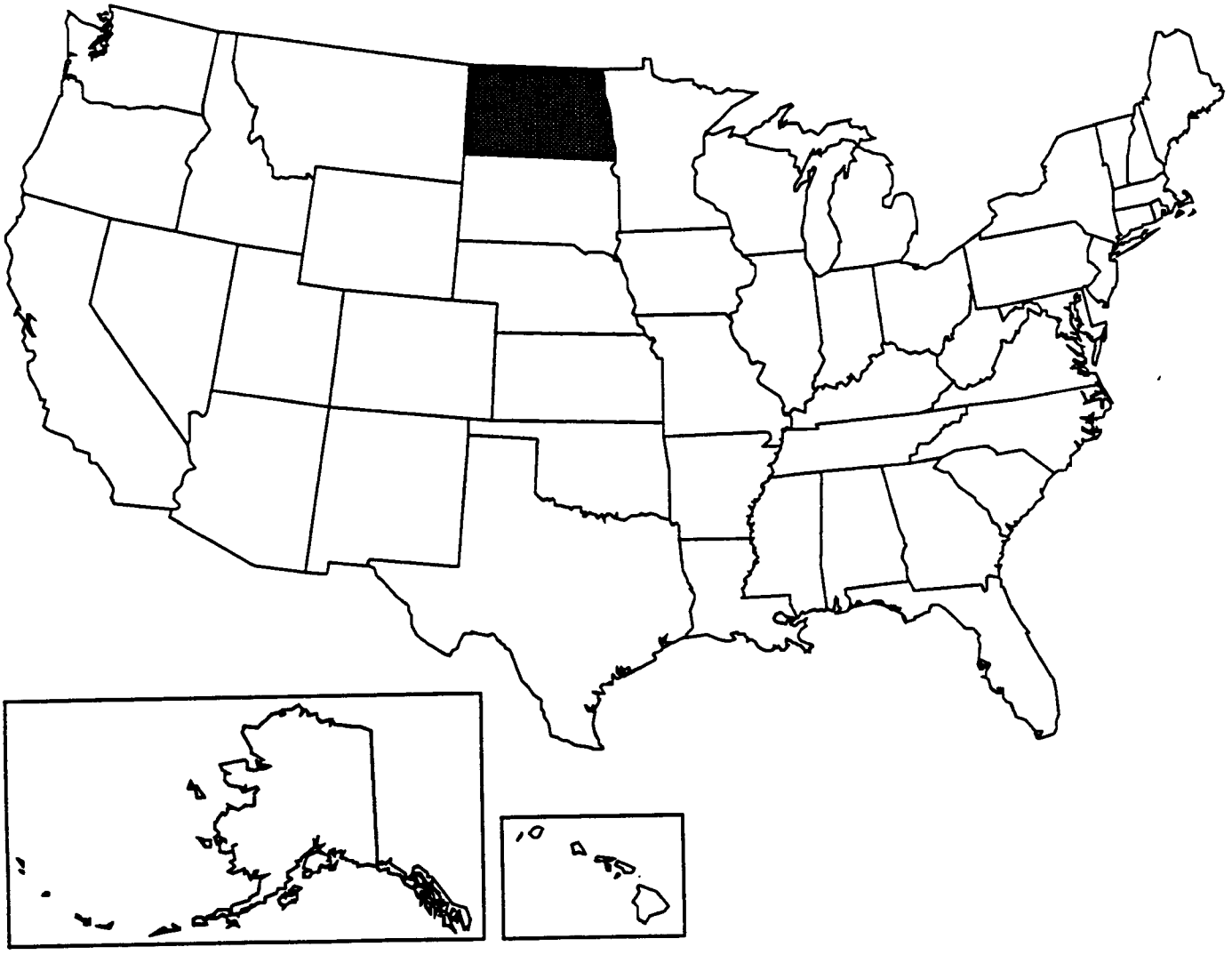
1 Quantity managed by storage only is not included.

North Dakota

Region VIII





NORTH DAKOTA

EPA Region Address:	U.S. EPA Region VIII Hazardous Waste Management Division Mail Stop HWM-RI 999 18th Street, Suite 500 Denver, CO 80202
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Program Department of Health and Consolidated Laboratories 1200 Missouri Avenue, Room 302 Post Office Box 5520 Bismarck, ND 58502-5520
Contact Name:	Ms. Christine Roob Environmental Scientist
Phone:	(701) 221-5166

Notes: No special notes for North Dakota.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH DAKOTA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	17
Total Quantity of Regulated Waste Generated:	28,840 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	1
Facilities managing only waste generated off site	1
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	2
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	25,451 tons
Total RCRA TSD Facilities:	6

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
INCINERATION	M041-M049	1	441	0	441	1.7
OTHER TREATMENT	M121-M129	1	25,003	0	25,003	98.2
LANDFILL	M132	1	0	7	7	.0
TOTAL		2	25,444	7	25,451	100.0
PERCENTAGE		-	100.0 %	.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH DAKOTA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
MN	651
MT	8
SD	1
TOTAL	660

Exports

State	Tons shipped
AL	6
AR	3
ID	2,349
IL	272
KS	151
KY	31
LA	1
MN	54
TN	11
TX	643
UT	48
WA	61
WI	22
TOTAL	3,651

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH DAKOTA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	K0MX*	25,022	86.8
2	U0MX*	2,343	8.1
3	M0MX*	623	2.2
4	D0MX*	621	2.2
5	F0MX*	74	.3
6	D007	34	.1
7	D001	33	.1
8	K050	23	.1
9	F005	18	.1
10	F001	14	.0
11	F002	13	.0
12	D008	9	.0
13	K051	8	.0
14	K052	4	.0
15	D011	0	.0
16	D002	0	.0
17	D009	0	.0
18	F004	0	.0
19	D006	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH DAKOTA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
INCINERATION	M041-M049	M0MX*	380
		D0MX*	61
OTHER TREATMENT	M121-M129	K0MX*	25,000
		K050	3
LANDFILL	M132	D008	7
TOTAL			25,451

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH DAKOTA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	NDD006175467	AMOCO OIL COMPANY REFINERY	MANDAN	26,120
02	NDD116215633	SUM CHEMICAL COMPANY	GRAND FORKS	2,343
03	NDD982587339	AMERTEC ENVIRONMENTAL SERVICE	BISMARCK	74
04	NDD982596819	ARCUS ENVIROMENTAL, INC.	MANDAN	48
05	NDD053426565	LUCAS WESTERN INC FLIGHT STRUCTURES DIV.	JAMESTOWN	47
06	NDD031875719	HUTCHINSON WIL-RICH MFG. CO.	WAHPETON	40
07	ND3571924759	GRAND FORKS AIR FORCE BASE	GRAND FORKS AIR FORCE BAS	32
08	NDD990872590	STEIGER TRACTOR INC	FARGO	23
09	ND4571924758	MINOT AIR FORCE BASE	MINOT AFB	23
10	NDD000322164	MELROE COMPANY	BISMARCK	19
11	NDD031852478	FARSTAD OIL INC	MINOT	18
12	NDD084497775	3M DATA STORAGE PRODUCTS	WAHPETON	16
13	NDD051439743	INDUSTRIAL PLATING CORP.	WAHPETON	16
14	NDD980806806	WEDGCOR STEEL BLDG. SYSTEMS INC.	JAMESTOWN	10
15	NDD000690594	DAKOTA GASIFICATION COMPANY	BEULAH	6
16	NDT390010049	FLYING J, INC. (WILLISTON REFINERY)	WILLISTON	6
17	NDD980957070	SAFETY-KLEEN CORP	BISMARCK	0

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

NORTH DAKOTA

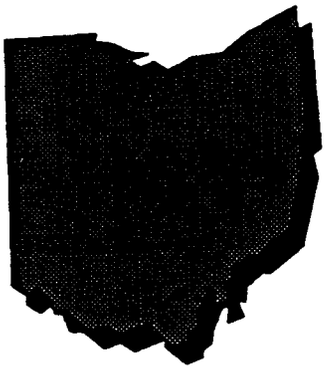
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

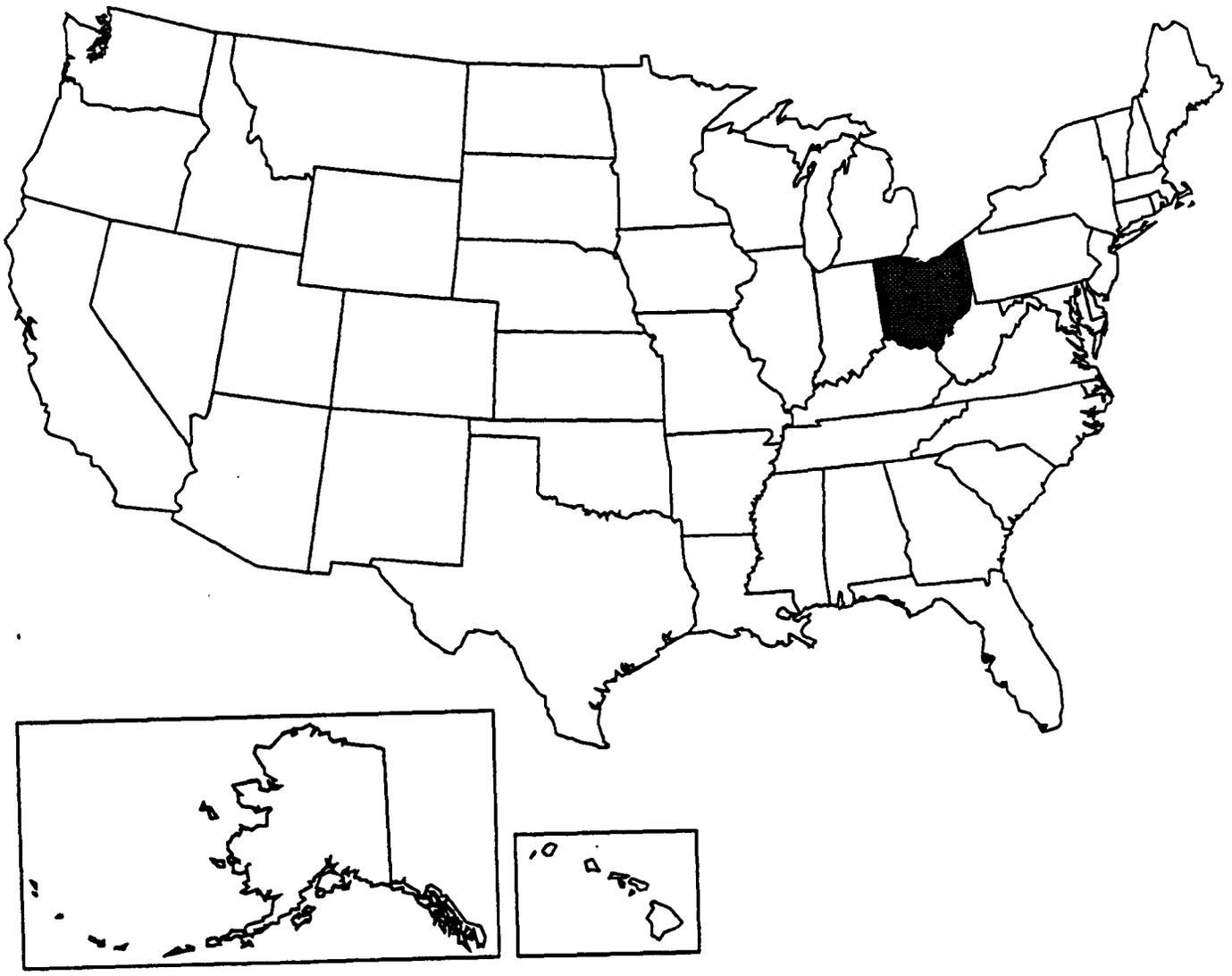
Rank	EPA ID	Site Name, City				Tot Manag
	Management Method		On Site	Off Site	Method Total	
1	ND0006175467	AMOCO OIL COMPANY REFINERY, MANDAN				25,
	OTHER TREATMENT		M121-M129	25,003	0	25,003
	INCINERATION		M041-M049	441	0	441
2	ND3571924759	GRAND FORKS AIR FORCE BASE, GRAND FORKS AIR FORCE BAS				
	LANDFILL		M132	0	7	7

1 Quantity managed by storage only is not included.

Ohio

Region V





OHIO

EPA Region Address:	U.S. EPA Region V Waste Management Division 230 S. Dearborn Street Mail Stop 5HR13 Chicago, IL 60604
Biennial Report Data Collection Instrument:	State-specific annual report and Customized EPA Waste Minimization Report
Address of Participating State Environmental Authority	Data Management Section Division of Hazardous Waste Management Ohio Environmental Protection Agency 1800 Watermark Drive Post Office Box 1049 Columbus, OH 43266-0149
Contact Name:	Ms. Paula Canter Annual Report Coordinator
Phone:	(614) 644-2923

Notes: CBI data have been included in Tables 1, 2, and 3; CBI data are not included in Table 4; CBI data are excluded from Tables 5 and 6 to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OHIO

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	1,176
Total Quantity of Regulated Waste Generated:	2,727,383 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	25
Facilities managing only waste generated off site	22
Facilities managing waste generated both on and off site	6
Total RCRA TSD Facilities (excluding storage-only facilities):	53
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	2,710,118 tons
Total RCRA TSD Facilities:	161

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	10	0	117,847	117,847	4.3
INCINERATION	M041-M049	20	42,058	134,752	176,810	6.5
AQUEOUS INORGANIC TREATMENT	M071-M079	6	2,448	64,268	66,716	2.5
AQUEOUS ORGANIC TREATMENT	M081-M089	1	0	1	1	.0
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	3	2	63,992	63,994	2.4
STABILIZATION	M111-M119	5	407,000	9,832	416,832	15.4
OTHER TREATMENT	M121-M129	15	178,579	209,288	387,867	14.3
LAND TREATMENT	M131	2	1,484	0	1,484	.1
LANDFILL	M132	3	3,643	137,224	140,867	5.2
SURFACE IMPOUNDMENT	M133	2	7,013	0	7,013	.3
UNDERGROUND INJECTION	M134	4	1,227,437	103,251	1,330,688	49.1
TOTAL		53	1,869,665	413,540	2,710,118	100.0
PERCENTAGE		-	69.0 %	31.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OHIO

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	634
AR	52
AZ	2
CA	368
CO	249
CT	3,900
DC	12
DE	484
FC	4,928
FL	1,797
GA	1,183
IA	335
IL	14,827
IN	32,518
KS	1,720
KY	9,730
LA	89
MA	9,533
MD	6,166
ME	325
MI	69,360
MN	218
MO	265
MS	36
NC	2,127
NH	28
NJ	26,422
NY	29,689
OK	47
OR	23
PA	137,137
PR	4
RI	1,015
SC	6,191
SD	48
TN	1,191
TX	218
VA	2,203
VT	322
WA	1
WI	9,666
WV	26,999
TOTAL	402,061

Exports

State	Tons Shipped
AL	11,148
AR	3,581
CT	46
FC	509
FL	53
GA	824
IL	9,741
IN	57,938
KY	34,186
LA	14,719
MA	148
MD	62
MI	74,956
MN	49
MO	2,745
NC	1,966
NJ	683
NV	5
NY	2,403
OK	80
PA	71,287
RI	14
SC	21,578
TN	1,346
TX	1,700
VA	1,265
WI	633
WV	12,655
WY	16
TOTAL	326,339

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OHIO

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	K013	450,083	16.5
2	K062	421,079	15.4
3	D008	417,936	15.3
4	K011	370,761	13.6
5	MOMX*	276,429	10.1
6	D002	221,458	8.1
7	DOMX*	134,139	4.9
8	FOMX*	104,476	3.8
9	K061	73,995	2.7
10	KOMX*	51,459	1.9
11	D001	44,412	1.6
12	F006	32,749	1.2
13	U188	20,963	0.8
14	F001	16,265	0.6
15	F003	14,485	0.5
16	F002	11,460	0.4
17	D007	8,206	0.3
18	F005	7,998	0.3
19	K088	7,449	0.3
20	F007	6,436	0.2
21	D004	5,466	0.2
22	K014	5,221	0.2
23	UOMX*	5,207	0.2
24	K001	3,172	0.1
25	F019	2,650	0.1
26	D006	2,059	0.1
27	K049	1,991	0.1
28	K052	1,798	0.1
29	U226	1,255	<0.05
30	D003	1,113	<0.05
31	D000	968	<0.05
32	U051	751	<0.05
33	U210	615	<0.05
34	D005	416	<0.05
35	D016	375	<0.05
36	U154	260	<0.05
37	U239	244	<0.05
38	K087	225	<0.05
39	U057	209	<0.05
40	F008	205	<0.05

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OHIO

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F0MX*	9,004
		F003	6,695
		F002	6,569
		F001	3,643
INCINERATION	M041-M049	K0MX*	27,431
		M0MX*	18,005
		D0MX*	15,536
		F0MX*	6,519
AQUEOUS INORGANIC TREATMENT	M071-M079	F001	13,643
		M0MX*	7,250
		F0MX*	5,147
		F007	2,442
AQUEOUS ORGANIC TREATMENT	M081-M089	F001	1
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	D0MX*	38,513
		M0MX*	13,105
		F0MX*	5,636
		D007	5,267
STABILIZATION	M111-M119	D008	408,316
		D0MX*	674
		F006	415
		D002	66
OTHER TREATMENT	M121-M129	K062	161,308
		D002	128,914
		D0MX*	12,631
		M0MX*	5,043
LAND TREATMENT	M131	K0MX*	1,477
		D003	7
LANDFILL	M132	K0MX*	3,639
		F006	4
SURFACE IMPOUNDMENT	M133	D0MX*	6,340
		K062	673
UNDERGROUND INJECTION	M134	K013	450,083
		K011	370,761
		M0MX*	225,039
		K062	156,895
TOTAL			2,283,205

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

Note: CBI data are not included in this table.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OHIO

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	OHD042157644	BP CHEMICALS INC	LIMA	831,625
02	OHD005050273	CENTRAL FOUNDRY DIV GMC	DEFIANCE	407,011
03	OHD005108477	ARISTECH CHEMICAL CORPORATION	HAVERHILL	304,820
04	OHD000821348	TELEDYNE MONARCH RUBBER PLANT 2 & 5	HARTVILLE	119,360
05	OHD004234480	ARMCO STEEL COMPANY LP	MIDDLETOWN	86,923
06	OHD004157418	EMPIRE DETROIT STEEL DIVISION	MANSFIELD	61,345
07	OHD020273819	CHEMICAL WASTE MANAGEMENT INC	VICKERY	59,840
08	OHD004465100	TIMKEN COMPANY	CANTON	42,590
09	OHD046203774	LTV STEEL, CLEVELAND WORKS (WEST)	CLEVELAND	38,214
10	OHD087433744	CECOS INTERNATIONAL INC	WILLIAMSBURG	36,290
11	OHD004218673	LTV STEEL, CLEVELAND WORKS (EAST)	CLEVELAND	35,622
12	OHD004228003	REPUBLIC ENGINEERED STEELS, INC. CANTO	CANTON	30,842
13	OHD990834129	MERCURY STAINLESS INC	MASSILLON	27,717
14	OHD000724088	BY-PRODUCTS MANAGEMENT OF OHIO INC	CLEVELAND	25,848
15	OHD004227708	REPUBLIC ENGINEERED STEELS, INC. MASSI	MASSILLON	25,767
16	OHD005057542	BP OIL COMPANY TOLEDO REFINERY	OREGON	16,666
17	OHD004281598	ARMCO ADVANCED MATERIALS CORPORATION	ZANESVILLE	16,366
18	OHD004465167	TIMKEN COMPANY - WOOSTER STEEL PLT	WOOSTER	14,447
19	OHD000821421	EVEREADY BATTERY COMPANY INC	CLEVELAND	14,400
20	OHD980569438	GSX CHEMICAL SERVICES OF OHIO INC	CLEVELAND	13,263
21	OHD032271975	MARION STEEL COMPANY	MARION	11,709
22	OHD004304689	PPG INDUSTRIES INC	CIRCLEVILLE	9,298
23	OHD000810382	WHEELING-PITTSBURGH STEEL CORP	STEUBENVILLE	8,652
24	OHD001926740	HUKILL CHEMICAL CORPORATION	BEDFORD	7,935
25	OHD004460143	PPG INDUSTRIES	CLEVELAND	7,796
26	OHD004520250	METAL PROCESSING CORPORATION	MAPLE HEIGHTS	7,591
27	OHD004198917	PPG INDUSTRIES INC	BARBERTON	7,575
28	OHD082964313	WHEELING-PITTSBURGH STEEL CORP	YORKVILLE	7,566
29	OHD004379970	ORMET CORPORATION	HANNIBAL	7,507
30	OHD980897656	CHEMICAL SOLVENTS INC	CLEVELAND	7,466
31	OHD005051826	BP OIL COMPANY	LIMA	7,285
32	OHD004347308	PPG INDUSTRIES INC	DELAWARE	6,634
33	OHD004294849	CLOW WATER SYSTEMS COMPANY	COSHOCTON	6,607
34	OHD098435134	TIMET	TORONTO	6,341
35	OHD002834919	MANFREDI MOTOR TRANSIT	NEWBURY	6,335
36	OHD004201091	GMC INLAND FISHER GUIDE ELYRIA SITE	ELYRIA	5,903
37	OHD004291100	EBCO MANUFACTURING COMPANY	COLUMBUS	5,376
38	OHD981528524	BALLONOFF HOME PROD CO	WARREN	4,817
39	OHD061731857	COPPERWELD STEEL COMPANY	WARREN	4,799
40	OHD016077802	NORTH STAR STEEL OHIO	YOUNGSTOWN	4,770

Note: CBI data are not included in this table to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OHIO

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	OHD042157644 BP CHEMICALS INC., LIMA					830,
	UNDERGROUND INJECTION	M134	828,894	0	828,894	
	OTHER TREATMENT	M121-M129	1,261	0	1,261	
	INCINERATION	M041-M049	761	0	761	
2	OHD005050273 CENTRAL FOUNDRY DIV GMC, DEFIANCE					407,
	STABILIZATION	M111-M119	407,000	0	407,000	
3	OHD005108477 ARISTECH CHEMICAL CORPORATION, HAVERHILL					300,
	UNDERGROUND INJECTION	M134	271,323	0	271,323	
	INCINERATION	M041-M049	28,707	0	28,707	
4	OHD020273819 CHEMICAL WASTE MANAGEMENT INC., VICKERY					162,
	UNDERGROUND INJECTION	M134	58,652	103,251	161,903	
	SURFACE IMPOUNDMENT	M133	673	0	673	
5	OHD000821348 TELEDYNE MONARCH RUBBER PLANT 2 & 5, HARTVILLE					120,
	OTHER TREATMENT	M121-M129	119,264	984	120,248	
6	OHD000724088 BY-PRODUCTS MANAGEMENT OF OHIO INC., CLEVELAND					86,
	OTHER TREATMENT	M121-M129	0	86,309	86,309	
7	OHD004234480 ARMCO STEEL COMPANY LP, MIDDLETOWN					68,
	UNDERGROUND INJECTION	M134	68,568	0	68,568	
8	OHD980569438 GSX CHEMICAL SERVICES OF OHIO INC., CLEVELAND					64,
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	36,315	36,315	
	OTHER TREATMENT	M121-M129	0	26,269	26,269	
	STABILIZATION	M111-M119	0	2,259	2,259	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	35	35	
9	OHD004465100 TIMKEN COMPANY, CANTON					44,
	OTHER TREATMENT	M121-M129	29,837	14,252	44,089	
10	OHD004178612 RESEARCH OIL COMPANY, CLEVELAND					42
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	33,231	33,231	
	OTHER TREATMENT	M121-M129	0	8,090	8,090	
	SOLVENTS RECOVERY	M021-M029	0	1,212	1,212	
11	OHD000816629 CECOS INTERNATIONAL PROCESSING CENTER, CINCINNATI					27
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	27,677	27,677	
	STABILIZATION	M111-M119	0	314	314	
	OTHER TREATMENT	M121-M129	0	1	1	
12	OHD990834129 MERCURY STAINLESS INC., MASSILLON					27
	OTHER TREATMENT	M121-M129	27,002	0	27,002	
13	OHD004304689 PPG INDUSTRIES INC., CIRCLEVILLE					24
	INCINERATION	M041-M049	3,855	20,944	24,799	
14	OHD981195779 SOUTHWESTERN PORTLAND CEMENT COMPANY, BATH TOWNSHIP					17
	INCINERATION	M041-M049	305	16,932	17,237	
15	OHD001926740 HUKILL CHEMICAL CORPORATION, BEDFORD					15
	SOLVENTS RECOVERY	M021-M029	0	15,068	15,068	
16	OHD980897656 CHEMICAL SOLVENTS INC., CLEVELAND					13
	SOLVENTS RECOVERY	M021-M029	0	13,099	13,099	
17	OHD004294849 CLOW WATER SYSTEMS COMPANY, COSHOCTON					6
	SURFACE IMPOUNDMENT	M133	6,340	0	6,340	
18	OHD097613871 MASTER METALS, CLEVELAND					5
	INCINERATION	M041-M049	0	5,159	5,159	
19	OHD004172623 LUBRIZOL CORPORATION, PAINESVILLE					4
	INCINERATION	M041-M049	4,529	0	4,529	

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1 Quantity managed by storage only is not included.

Note: CBI data are not included in this table to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OHIO

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

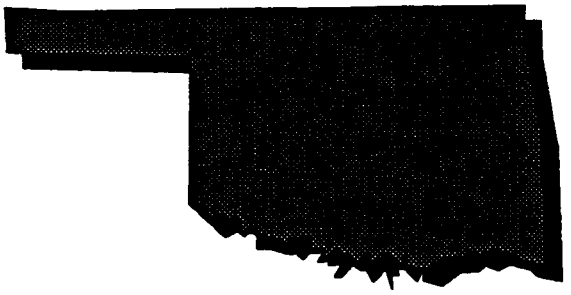
Rank	EPA ID / Site Name, City	Management Method		On Site	Off Site	Method Total	Total Managed 1
20	OHD005051826 BP OIL COMPANY, LIMA						3,639
		LANDFILL	M132	3,639	0	3,639	
21	OHD039461314 COLD METAL PRODUCTS COMPANY INC., YOUNGSTOWN						2,442
		AQUEOUS INORGANIC TREATMENT	M071-M079	2,442	0	2,442	
22	OHD004233003 MONSANTO CHEMICAL COMPANY, ADDYSTON						1,888
		INCINERATION	M041-M049	1,888	0	1,888	
23	OHD005057542 BP OIL COMPANY TOLEDO REFINERY, OREGON						1,477
		LAND TREATMENT	M131	1,477	0	1,477	
24	OHD981529688 AMOCO PERFORMANCE PRODUCTS INC., (NEAR) MARIETTA						1,443
		INCINERATION	M041-M049	1,443	0	1,443	
25	OHD052859170 DAYTON WALTHER PORTSMOUTH DIVISION, PORTSMOUTH						1,200
		OTHER TREATMENT	M121-M129	1,200	0	1,200	
26	OHD066060609 CHEMTRON CORP., AVON						1,114
		SOLVENTS RECOVERY	M021-M029	0	1,114	1,114	
27	OHD980821862 KLOR KLEEN INC., CINCINNATI						555
		SOLVENTS RECOVERY	M021-M029	0	517	517	
		INCINERATION	M041-M049	0	38	38	
28	OHD052324548 LIBERTY SOLVENTS & CHEMICAL CO INC., TWINSBURG						455
		SOLVENTS RECOVERY	M021-M029	0	454	454	
		AQUEOUS ORGANIC TREATMENT	M081-M089	0	1	1	
29	OHD000608646 CHEVRON CHEMICAL COMPANY, MARIETTA						448
		INCINERATION	M041-M049	448	0	448	
30	OHD004293775 AUSTIN POWDER COMPANY, MCARTHUR						56
		INCINERATION	M041-M049	56	0	56	
31	OH5210020736 RAVENNA ARMY AMMUNITION PLANT, RAVENNA						51
		INCINERATION	M041-M049	51	0	51	
32	OHD004260709 GREEN INDUSTRIES CORP., CINCINNATI						19
		OTHER TREATMENT	M121-M129	13	0	13	
		AQUEOUS INORGANIC TREATMENT	M071-M079	6	0	6	
33	OHD004460143 PPG INDUSTRIES, CLEVELAND						10
		SOLVENTS RECOVERY	M021-M029	0	10	10	
34	OHD005037809 ST MARYS FOUNDRY INC., ST MARYS						7
		LAND TREATMENT	M131	7	0	7	
35	OHD004229639 PROTOTYPE DEVELOPMENT INC., CLEVELAND						6
		INCINERATION	M041-M049	6	0	6	
36	OHD000810242 RMI COMPANY SODIUM PLANT, ASHTABULA						6
		INCINERATION	M041-M049	6	0	6	
37	OHD180018038 ANOTECH CORP., MANSFIELD						5
		OTHER TREATMENT	M121-M129	0	5	5	
38	OHD087433744 CECOS INTERNATIONAL INC., WILLIAMSBURG						4
		LANDFILL	M132	4	0	4	
39	OHD010835619 BP AMERICA RESEARCH CENTER, WARRENSVILLE HEIGHTS						4
		INCINERATION	M041-M049	4	0	4	
40	OHD980793384 RESERVE ENVIRONMENTAL SERVICES INC., ASHTABULA						2
		AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	2	0	2	
	OHD982218489 MORITZ INC., MANSFIELD						2
		OTHER TREATMENT	M121-M129	2	0	2	

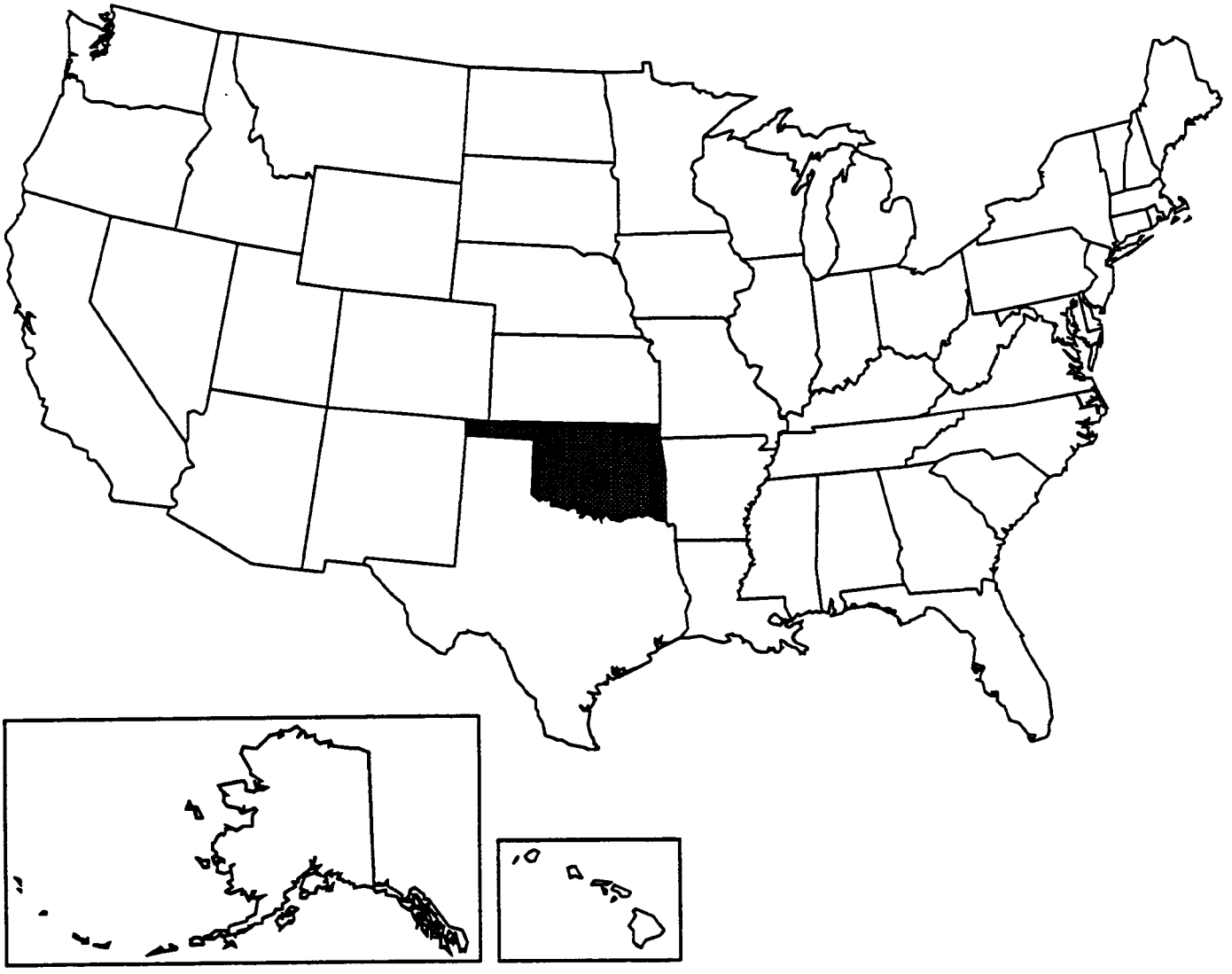
Quantity managed by storage only is not included.

Note: CBI data are not included in this table to preserve confidentiality.

Oklahoma

Region VI





OKLAHOMA

EPA Region Address:	U.S. EPA Region VI RCRA Programs Branch Mail Stop 6H-H 1445 Ross Avenue Dallas, TX 75202
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Management Service -0205 Oklahoma State Department of Health 1000 Northeast Tenth Street Oklahoma City, OK 73117-1299
Contact Name:	Ms. Vicki Wimer
Phone:	(405) 271-7060

Notes: No special notes for Oklahoma.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OKLAHOMA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	140
Total Quantity of Regulated Waste Generated:	205,382 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	13
Facilities managing only waste generated off site	5
Facilities managing waste generated both on and off site	4
Total RCRA TSD Facilities (excluding storage-only facilities):	22
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	228,363 tons
Total RCRA TSD Facilities:	48

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	4	22	1,704	1,726	.8
OTHER RECOVERY	M031-M039	1	3,089	0	3,089	1.4
INCINERATION	M041-M049	4	889	10	898	.4
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	1	0	1	.0
FUEL BLENDING	M061	3	149	2,098	2,248	1.0
AQUEOUS INORGANIC TREATMENT	M071-M079	4	33,028	261	33,289	14.6
AQUEOUS ORGANIC TREATMENT	M081-M089	3	3,936	11	3,946	1.7
STABILIZATION	M111-M119	1	244	24,836	25,079	11.0
OTHER TREATMENT	M121-M129	5	3,851	5,184	9,035	4.0
LAND TREATMENT	M131	6	18,693	2,440	21,133	9.3
LANDFILL	M132	2	14	63,191	63,206	27.7
UNDERGROUND INJECTION	M134	1	0	64,703	64,703	28.3
OTHER DISPOSAL	M137	2	0	0	0	.0
INVALID SYSTEM TYPE		2	0	11	11	.0
TOTAL		22	63,915	164,448	228,363	100.0
PERCENTAGE		-	28.0 %	72.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OKLAHOMA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	528
AR	16,091
AZ	528
CA	1,822
CO	1,784
GA	118
IA	436
IL	18,566
KS	25,926
LA	315
MI	159
MN	6,194
MO	12,109
MS	306
NC	70
ND	1
NE	2,426
NH	1
NJ	17,288
NM	14
OH	118
OR	14
PA	6
SD	70
TN	89
TX	8,220
UT	156
VA	226
WA	1
WI	185
WY	15
TOTAL	113,781

Exports

State	Tons shipped
AL	47
AR	498
CA	2
CT	6
DE	7
FC	8,016
FL	1
IL	143
KS	10,315
LA	5,362
MI	64
MN	223
MO	45
NC	15
NY	0
OH	27
TN	792
TX	22,151
TOTAL	47,713

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OKLAHOMA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D001	69,079	33.6
2	D0MX*	40,700	19.8
3	D002	23,444	11.4
4	F0MX*	22,607	11.0
5	M0MX*	17,593	8.6
6	K051	6,930	3.4
7	K061	6,467	3.1
8	K0MX*	4,328	2.1
9	D007	2,835	1.4
10	K062	2,557	1.2
11	D003	1,796	.9
12	F002	1,467	.7
13	F006	1,181	.6
14	D008	940	.5
15	F005	784	.4
16	K049	774	.4
17	F003	641	.3
18	F019	636	.3
19	F001	415	.2
20	F007	135	.1
21	K052	33	.0
22	F008	12	.0
23	K048	7	.0
24	U0MX*	6	.0
25	D010	5	.0
26	P0MX*	4	.0
27	D006	3	.0
28	D011	2	.0
29	P015	1	.0
30	F027	0	.0
31	D014	0	.0
32	P064	0	.0
32	P075	0	.0
33	U036	0	.0
34	D013	0	.0
35	D009	0	.0
36	P012	0	.0
37	D004	0	.0
37	D005	0	.0
37	D012	0	.0
37	K001	0	.0
37	U112	0	.0
37	U122	0	.0
37	U188	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OKLAHOMA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F002	929
		D001	224
		FOMX*	192
		MOMX*	144
OTHER RECOVERY	M031-M039	D001	1,958
		MOMX*	1,131
INCINERATION	M041-M049	MOMX*	840
		D003	42
		DOMX*	5
		D001	5
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	F002	1
FUEL BLENDING	M061	D001	1,443
		F005	332
		MOMX*	198
		FOMX*	166
AQUEOUS INORGANIC TREATMENT	M071-M079	DOMX*	32,245
		D007	790
		F007	111
		F009	104
AQUEOUS ORGANIC TREATMENT	M081-M089	DOMX*	3,290
		D002	646
		D001	11
STABILIZATION	M111-M119	K061	12,381
		F006	3,848
		FOMX*	3,709
		D008	770
OTHER TREATMENT	M121-M129	DOMX*	2,369
		D002	2,223
		FOMX*	2,147
		D003	1,667
LAND TREATMENT	M131	K051	6,930
		D001	4,413
		KOMX*	4,323
		MOMX*	2,357
LANDFILL	M132	DOMX*	22,846
		K001	18,501
		D007	4,546
		D008	3,123
UNDERGROUND INJECTION	M134	D002	19,827
		DOMX*	17,565
		FOMX*	14,645
		D001	9,186

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OKLAHOMA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989
(continued)

Management Method	Code	Waste Type	Quantity Managed in State (tons)
OTHER DISPOSAL	M137	D0MX*	0
		M0MX*	0
INVALID SYSTEM TYPE		D001	4
		F002	3
		M0MX*	2
		F003	1
TOTAL			228,363

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OKLAHOMA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	OKD079986568	XEROX CORP. OKC PLANT	OKLAHOMA CITY	54,579
02	OKD007220262	ROCKWELL INTERNATIONAL	TULSA	31,438
03	OKD007233836	CONOCO INC. PONCA CITY REFINERY	PONCA CITY	28,271
04	OKD065438376	U.S. POLLUTION CONTROL, INC.	WAYNOKA	11,028
05	OKD000632737	HYDROCARBON RECYCLERS, INC.	TULSA	9,756
06	OKD089761290	CHIEF SUPPLY, INC.	HASKELL	7,892
07	OKD074274333	MOORE BUSINESS FORMS & SYSTEMS DIV.	STILLWATER	7,597
08	OKD007219181	SHEFFIELD STEEL CORPORATION	SAND SPRINGS	6,526
09	OK1571724391	U.S. AIR FORCE	TINKER AFB	6,409
10	OKD072424104	CHEMLINK, INC.	SAND SPRINGS	6,384
11	OKD041501347	MCDONNELL DOUGLAS - TULSA	TULSA	5,134
12	OKD058078775	SUN REFINING AND MARKETING CO.-TULSA REF	TULSA	4,512
13	OKD007158454	EAGLE-PICHER IND., INC.	QUAPAW	2,090
14	OKD074294612	BRUNSWICK-MERCURY MARINE	STILLWATER	2,068
15	OKD057705972	TOTAL PETROLEUM, INC.	ARDMORE	1,773
16	OKD053959326	WEBCO INDUSTRIES - SOUTHWEST TUBE DIV.	SAND SPRINGS	1,750
17	OK6213822798	MCALESTER ARMY AMMUNITION PLANT	MCALESTER	1,550
18	OKD065436180	NATIONAL-STANDARD CO.	STILLWATER	1,318
19	OKD000396549	KERR-MCGEE REFINING CORPORATION	WYNNEWOOD	1,255
20	OKD032963530	MADEWELL AND MADEWELL, INC.	JONES	963
21	OKD082565714	CPC GROUP, GENERAL MOTORS CORPORATION	OKLAHOMA CITY	938
22	OKD000803601	PHILLIPS RESEARCH CENTER	BARTLESVILLE, OK	884
23	OKD982293128	PRECISION TUBULARS	TULSA	788
24	OKD053958765	METAL PROCESSING CO., INC.	TULSA	745
25	OKD064551880	INTERPLASTIC CORPORAITON	PRYOR	686
26	OKD085953107	ALLIED SIGNAL AUTOMOTIVE CATALYST CO.	CATOOSA	625
27	OKD062267448	3M WEATHERFORD	WEATHERFORD	570
28	OKD072401045	FORD MOTOR COMPANY - TULSA GLASS PLANT	TULSA	544
29	OKD007218167	ROGERS GLAVANIZING CO., INC.	TULSA	526
30	OKD990696890	J. P. EMCO, INC.	ADA	406
31	OKD007219165	UNION METAL CORPORATION	MUSKOGEE	339
32	OKD000803205	BRIDGESTONE/FIRESTONE, INC.	OKLAHOMA CITY	300
33	OKD020721098	DELTA FAUCET COMPANY	CHICKASHA	279
34	OKT410010821	GULFSTREAM AEROSPACE TECHNOLOGIES	OKLAHOMA CITY	266
35	OKD007218340	SOUTHWEST UNITED INDUSTRIES	TULSA	252
36	OKD000803213	NORRIS/O'BANNON DOVER RESOURCES, INC.	TULSA	245
37	OKD094772357	YORK INTERNATIONAL CORPORATION	NORMAN	224
38	OKD000758557	CHROMALLOY DIVISION OKLAHOMA	MIDWEST CITY	186
39	OKD001824564	AMERICAN AIRLINES, INC.	TULSA	182
40	OKD000815001	ROGERS GALVANIZING CO., INC.	TULSA	176

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OKLAHOMA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
1	OKD065438376 U.S. POLLUTION CONTROL, INC., WAYNOKA					98,440
	LANDFILL	M132	14	63,166	63,181	
	STABILIZATION	M111-M119	244	24,836	25,079	
	OTHER TREATMENT	M121-M129	2,145	5,184	7,329	
	LAND TREATMENT	M131	0	2,440	2,440	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	261	261	
	FUEL BLENDING	M061	149	0	149	
2	OKD000402396 CHEMICAL RESOURCES, INC., TULSA					64,742
	UNDERGROUND INJECTION	M134	0	64,703	64,703	
	OTHER TREATMENT	M121-M129	39	0	39	
3	OKD007220262 ROCKWELL INTERNATIONAL, TULSA					31,302
	AQUEOUS INORGANIC TREATMENT	M071-M079	31,275	0	31,275	
	LANDFILL	M132	0	25	25	
	FUEL BLENDING	M061	0	2	2	
	INCINERATION	M041-M049	0	0	0	
4	OKD007233836 CONOCO INC. PONCA CITY REFINERY, PONCA CITY					17,517
	LAND TREATMENT	M131	11,138	0	11,138	
	AQUEOUS ORGANIC TREATMENT	M081-M089	3,290	0	3,290	
	OTHER RECOVERY	M031-M039	3,089	0	3,089	
	OTHER DISPOSAL	M137	0	0	0	
5	OKD058078775 SUN REFINING AND MARKETING CO.-TULSA REF, TULSA					4,512
	LAND TREATMENT	M131	4,512	0	4,512	
6	OKD089761290 CHIEF SUPPLY, INC., HASKELL					3,794
	FUEL BLENDING	M061	0	2,097	2,097	
	SOLVENTS RECOVERY	M021-M029	0	1,698	1,698	
7	OKD057705972 TOTAL PETROLEUM, INC., ARDMORE					1,773
	LAND TREATMENT	M131	1,773	0	1,773	
8	OK6213822798 MCALESTER ARMY AMMUNITION PLANT, MCALESTER					1,493
	OTHER TREATMENT	M121-M129	1,493	0	1,493	
9	OKD000396549 KERR-MCGEE REFINING CORPORATION, WYNNEWOOD					1,222
	LAND TREATMENT	M131	1,222	0	1,222	
10	OKD032963530 MADEWELL AND MADEWELL, INC., JONES					963
	AQUEOUS INORGANIC TREATMENT	M071-M079	963	0	963	
11	OKD000803601 PHILLIPS RESEARCH CENTER, BARTLESVILLE, OK					859
	INCINERATION	M041-M049	855	4	859	
	OTHER TREATMENT	M121-M129	0	0	0	
	OTHER DISPOSAL	M137	0	0	0	
12	OKD074294612 BRUNSWICK-MERCURY MARINE, STILLWATER					790
	AQUEOUS INORGANIC TREATMENT	M071-M079	790	0	790	
13	OKD074274333 MOORE BUSINESS FORMS & SYSTEMS DIV., STILLWATER					646
	AQUEOUS ORGANIC TREATMENT	M081-M089	646	0	646	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	0	1	
14	OK4213720846 U S ARMY FIELD ARTILLERY CTR AND FT SILL, FORT SILL					174
	OTHER TREATMENT	M121-M129	174	0	174	
15	OKD990750960 SINCLAIR OIL CORP., TULSA					47
	LAND TREATMENT	M131	47	0	47	
16	OKD980623045 HALLIBURTON SERVICES - OSAGE RD FACILITY, DUNCAN					34
	INCINERATION	M041-M049	34	0	34	

Quantity managed by storage only is not included.

OKLAHOMA

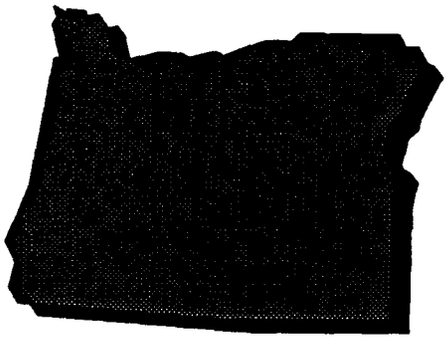
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

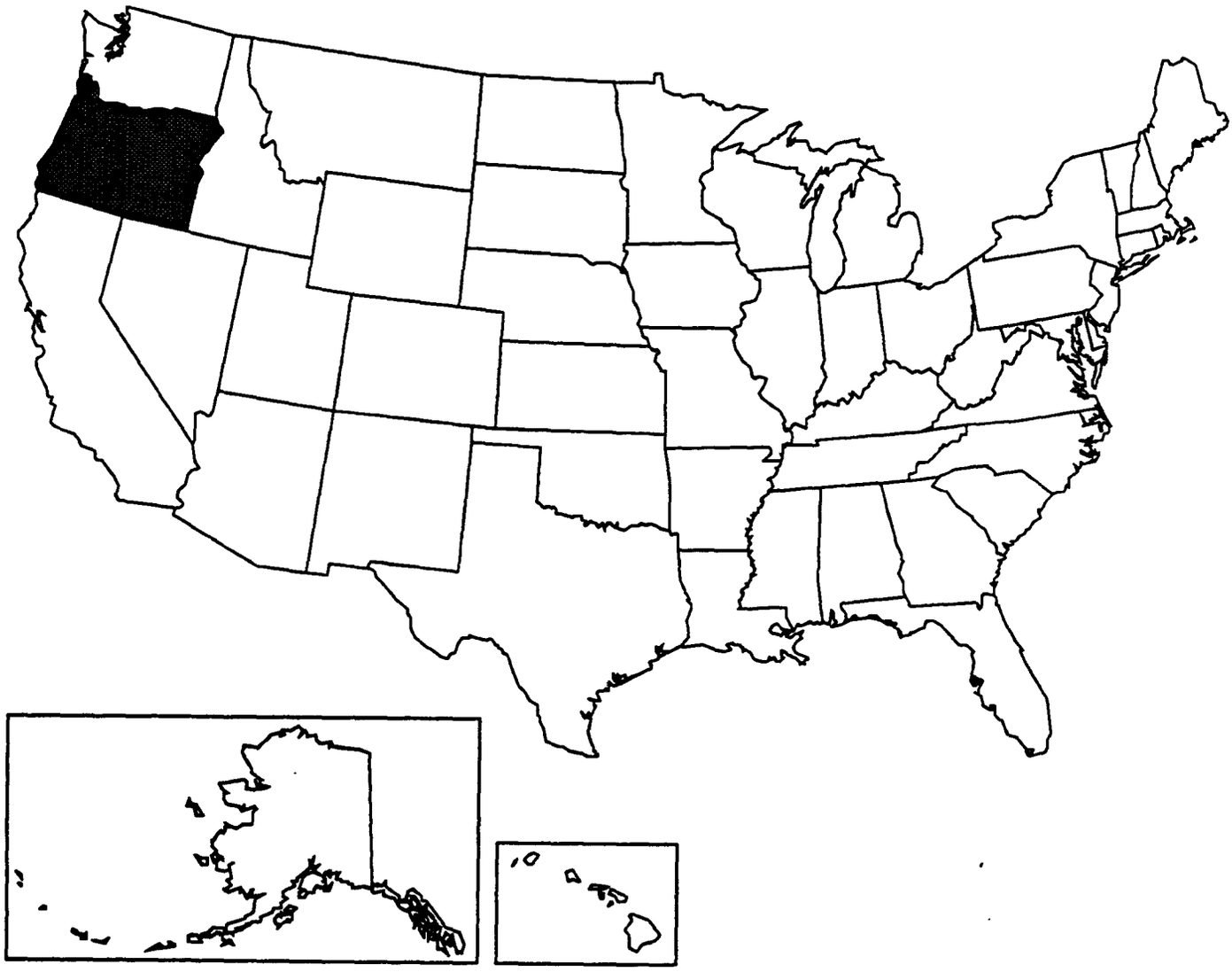
Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
17	OKD000632737 HYDROCARBON RECYCLERS, INC., TULSA					
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	11	11	
	INVALID SYSTEM TYPE		0	9	9	
18	OKD980623037 EAGLE-PICHER IND., INC., QUAPAW					
	SOLVENTS RECOVERY	M021-M029	17	0	17	
19	OKD001824564 AMERICAN AIRLINES, INC., TULSA					
	SOLVENTS RECOVERY	M021-M029	0	6	6	
20	OKD055940647 JOHN ZINK COMPANY, TULSA					
	INCINERATION	M041-M049	0	5	5	
21	OKD007158454 EAGLE-PICHER IND., INC., QUAPAW					
	SOLVENTS RECOVERY	M021-M029	5	0	5	
22	OKD000763821 SAFETY-KLEEN CORP., TULSA					
	INVALID SYSTEM TYPE		0	1	1	

1 Quantity managed by storage only is not included.

Oregon

Region X





OREGON

EPA Region Address:	U.S. EPA Region X Waste Management Branch Mail Stop HW-112 1200 6th Avenue Seattle, WA 98101
Biennial Report Data Collection Instrument:	Customized EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Policy and Program Development Department of Environmental Quality 811 Southwest Sixth Avenue Portland, OR 97204-1390
Contact Name:	Mr. Norman Read Information Coordinator
Phone:	(503) 229-6783

Notes: CBI data have been included in Tables 1, 2, and 3; CBI data are not included in Table 4; CBI data are excluded from Tables 5 and 6 to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

OREGON

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	77
Total Quantity of Regulated Waste Generated:	27,954 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	1
Facilities managing only waste generated off site	2
Facilities managing waste generated both on and off site	2
Total RCRA TSD Facilities (excluding storage-only facilities):	5
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	65,285 tons
Total RCRA TSD Facilities:	13

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	2	0	554	554	.8
INCINERATION	M041-M049	1	0	26	26	.0
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	0	1	1	.0
FUEL BLENDING	M061	1	0	178	178	.3
AQUEOUS INORGANIC TREATMENT	M071-M079	3	2	2	3	.0
SLUDGE TREATMENT	M101-M109	1	0	1	1	.0
STABILIZATION	M111-M119	1	0	7,329	7,329	11.2
OTHER TREATMENT	M121-M129	3	86	1,960	2,046	3.1
LANDFILL	M132	2	43	55,070	55,113	84.4
INVALID SYSTEM TYPE		2	0	33	33	.1
TOTAL		5	131	65,155	65,285	100.0
PERCENTAGE		-	.2 %	99.8 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OREGON

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AK	342
CA	60
FC	405
HI	8
ID	88
MT	1,400
WA	55,027
TOTAL	57,330

Exports

State	Tons shipped
AL	4
AR	1,585
AZ	233
CA	5,154
CO	68
FC	1,964
FL	4
ID	34
IL	267
KS	99
LA	7
MN	345
MO	0
NM	354
OK	105
PA	357
TX	11
UT	196
WA	8,031
TOTAL	18,817

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OREGON

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	K061	8,767	31.4
2	K088	8,534	30.5
3	D002	3,822	13.7
4	MOMX*	1,733	6.2
5	FOMX*	1,564	5.6
6	D008	692	2.5
7	DOMX*	552	2.0
8	F006	457	1.6
9	D001	381	1.4
10	D007	361	1.3
11	D008	286	1.0
12	F001	195	0.7
13	F002	129	0.5
14	F003	124	0.4
15	F005	112	0.4
16	F019	69	0.2
17	UOMX*	50	0.2
18	K001	37	0.1
19	F009	20	0.1
20	D004	15	0.1
20	LABP	15	0.1
22	U051	14	0.1
23	D006	7	<0.05
24	D016	5	<0.05
25	F007	4	<0.05
26	D003	2	<0.05
26	U228	2	<0.05
26	D010	2	<0.05
26	U122	2	<0.05
30	D009	1	<0.05
31	D011	0	0.0
31	U061	0	0.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OREGON

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F001	519
		MOMX*	18
		F002	8
		F003	5
INCINERATION	M041-M049	MOMX*	8
		F002	4
		FOMX*	4
		F005	3
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	D001	0
		D003	0
		U122	0
		U144	0
FUEL BLENDING	M061	MOMX*	87
		FOMX*	50
		D001	26
		F003	12
AQUEOUS INORGANIC TREATMENT	M071-M079	DOMX*	2
		F007	1
		D007	0
SLUDGE TREATMENT	M101-M109	DOMX*	1
OTHER TREATMENT	M121-M129	D002	10
		D001	1
		DOMX*	0
		LABP	0
LANDFILL	M132	DOMX*	15
		D001	5
		D008	2
		D002	1
INVALID SYSTEM TYPE		MOMX*	8
		F002	4
		DOMX*	4
		D001	1
TOTAL			819

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

Note: CBI data are not included in this table.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

OREGON

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	ORD009412677	EARL W. ANDERSON REYNOLDS ALUMINUM	TROUTDALE	4,542
02	ORD045776432	CASCADE STEEL ROLLING MILLS, INC.	MCMINNVILLE	4,456
03	ORD009106055	JERRY O. RICHARTZ OREGON STEEL MILLS	PORTLAND	4,323
04	ORD981764707	NORTHWEST ALUMINUM CO. INC.	THE DALLES	4,005
05	ORD980725592	TEKTRONIX, INC.	FOREST GROVE	3,991
06	ORD000602110	FREIGHTLINER CORPORATION	PORTLAND	857
07	ORD054964481	THE BOEING COMPANY BOEING PORTLAND	PORTLAND	720
08	ORD050955848	TELEDYNE WAH CHANG ALBANY	ALBANY	656
09	ORD041265372	LOWELL MILLER STOLTE MINNESOTA MINING &	WHITE CITY	451
10	ORD981773377	AEROSCIENTIFIC CORP.	BEAVERTON	417
11	ORD980980353	WESTAK OF OREGON	FOREST GROVE	305
12	ORD009020231	TEKTRONIX, INC.	BEAVERTON	297
13	ORD049376189	PRAEGITZER INDUSTRIES, INC.	DALLAS	292
14	ORD991281619	MYERS CONTAINER CORPORATION	PORTLAND	215
15	ORD009027970	PRECISION CASTPARTS CORP. TBO/LSBO	PORTLAND	167
16	ORD010736262	BLOUNT, INC.	MILWAUKIE	153
17	ORD009049107	EAST SIDE PLATING	PORTLAND	112
18	ORD980837199	EAST SIDE PLATING	PORTLAND	104
19	ORD061483384	BARON AND BLAKESLEE	PORTLAND	92
20	ORD009412602	AKZO COATINGS INC	SALEM	89
21	ORD009035684	GNB INCORPORATED	SALEM	88
22	ORD047632823	MERCER INDUSTRIES, INC.	BEAVERTON	84
23	ORD009042854	BILL MONTERO JAMES RIVER II	PORTLAND	77
24	ORD980738306	CONTINENTAL BRASS CO	PORTLAND	76
25	ORD060591963	JOHN HARLAND INTEL CORPORATION, ALOHA CA	ALOHA	61
26	ORD096253737	WACKER SILTRONIC CORPORATION	PORTLAND	60
27	ORD009227398	VAN WATERS & ROGERS INC.	PORTLAND	59
28	ORD003992518	ELECTRONIC CONTROLS DESIGN INC.	MULINO	57
29	ORD058131178	CHEMAX	PORTLAND	55
30	ORD980665483	TRI-MET	PORTLAND	54
31	ORD045776796	LEUPOLD & STEVENS, INC.	BEAVERTON	51
32	ORD002277085	MCWHORTER INC	PORTLAND	50
33	ORD000773937	PRECISION CASTPARTS CORP. SMALL STRUCTUR	CLACKAMAS	48
34	ORD081182180	HEWLETT PACKARD, CORVALLIS DIVISION	CORVALLIS	44
35	ORD010746402	JOHNSON CONTROLS INC PORTLAND PLANT	CANBY	44
36	ORD000403485	KORPINE DIVISION WILLAMETTE INDUSTRIES I	BEND	40
37	ORD980833891	EAST SIDE PLATING	PORTLAND	37
38	ORD065281784	DONALD SCHRAM FLIGHTCRAFT INC	PORTLAND	34
39	ORD980980452	NEC AMERICA, INC.	HILLSBORO	34
40	ORD009024613	CONTINENTAL FOOD PACKAGING PLANT 87 PORT	PORTLAND	33

Note: CBI data are not included in this table to preserve confidentiality.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

OREGON

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

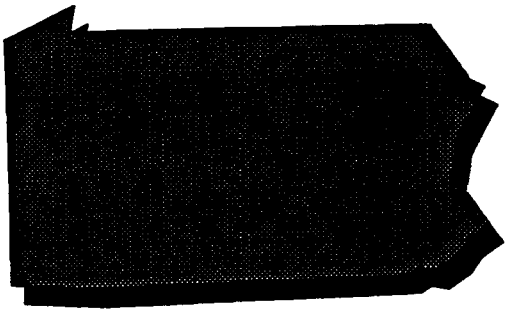
Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	ORD061483384 BARON AND BLAKESLEE, PORTLAND					
	SOLVENTS RECOVERY	M021-M029	0	519	519	
2	ORD980981682 WESTERN COMPLIANCE SERVICES INC., SHERWOOD					
	FUEL BLENDING	M061	0	178	178	
	SOLVENTS RECOVERY	M021-M029	0	36	36	
	INCINERATION	M041-M049	0	26	26	
	LANDFILL	M132	0	25	25	
	INVALID SYSTEM TYPE		0	14	14	
	OTHER TREATMENT	M121-M129	0	12	12	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	2	2	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	1	1	
3	ORD009020231 TEKTRONIX, INC., BEAVERTON					
	INVALID SYSTEM TYPE		0	4	4	
	AQUEOUS INORGANIC TREATMENT	M071-M079	1	0	1	
	SLUDGE TREATMENT	M101-M109	0	1	1	
	OTHER TREATMENT	M121-M129	0	0	0	
4	ORD045776796 LEUPOLD & STEVENS, INC., BEAVERTON					
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	

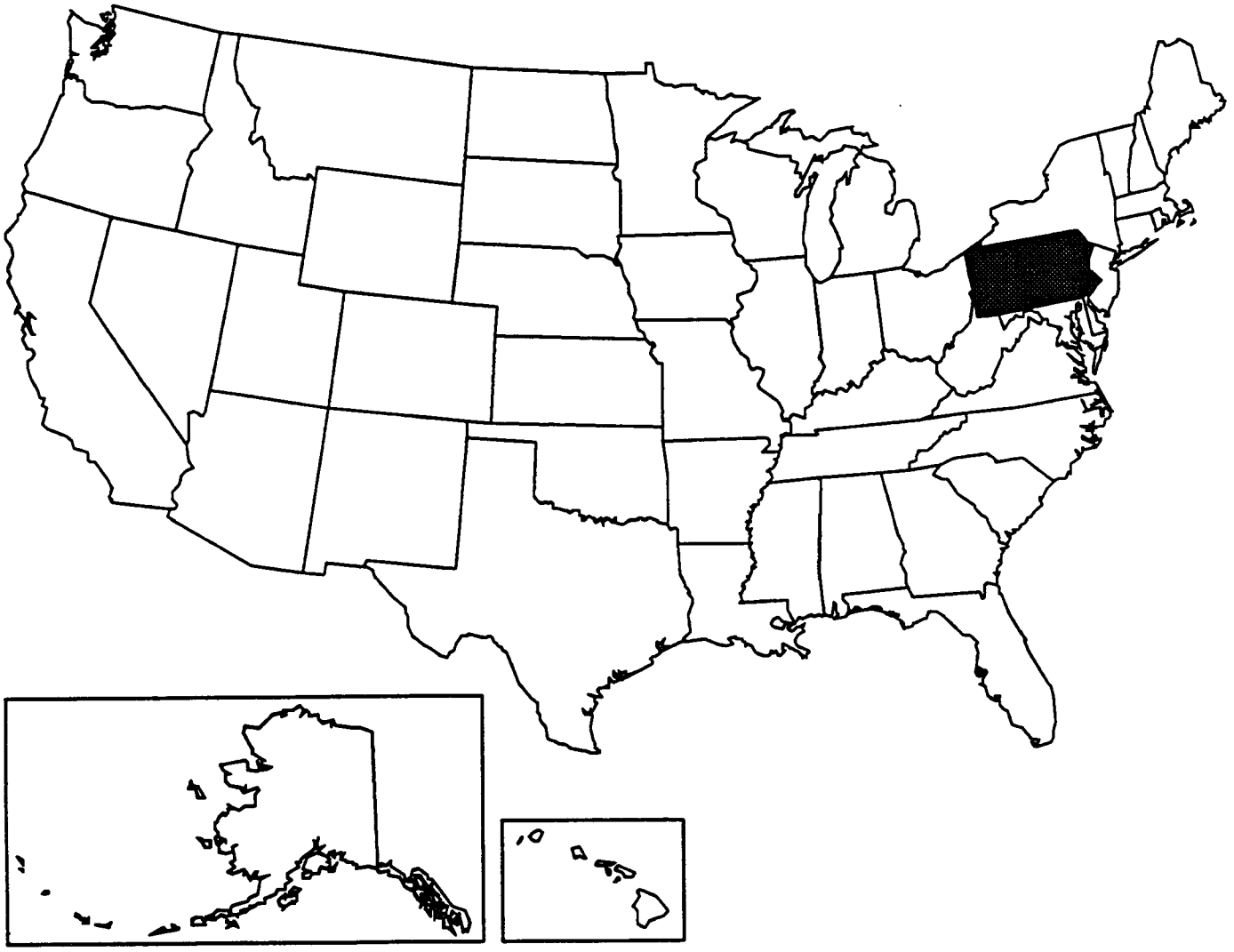
1 Quantity managed by storage only is not included.

Note: CBI data are not included in this table to preserve confidentiality.

Pennsylvania

Region III





PENNSYLVANIA

EPA Region Address:	U.S. EPA Region III Waste Management Branch Mail Stop 3HW53 841 Chestnut Street Philadelphia, PA 19107
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Bureau of Waste Management Department of Environmental Resources Post Office Box 8550 Third and Locust Streets Harrisburg, PA 17105-8550
Contact Name:	Mr. Robert J. Finkel Solid Waste Program Specialist
Phone:	(717) 783-9183

Notes: Zinc Corporation of America (PAD002395887) received large quantities of K061 from off site for metals recovery. The waste and its management is regulated according to Pennsylvania state regulations. Since the waste is recycled and hence exempt under federal regulations, not all out-of-state generators reported this waste as being shipped. However, the State data includes all the K061 waste received by Zinc Corporation. This may lead to inconsistencies when inter-state import and export quantities are compared.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

PENNSYLVANIA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	1,004
Total Quantity of Regulated Waste Generated:	1,246,706 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	11
Facilities managing only waste generated off site	9
Facilities managing waste generated both on and off site	8
Total RCRA TSD Facilities (excluding storage-only facilities):	28
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	1,139,446 tons
Total RCRA TSD Facilities:	157

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	5	8	312,215	312,223	27.4
SOLVENTS RECOVERY	M021-M029	4	91	2,493	2,584	.2
INCINERATION	M041-M049	5	7,787	1,094	8,881	.8
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2	26	59,893	59,918	5.3
FUEL BLENDING	M061	2	757	14,003	14,759	1.3
AQUEOUS INORGANIC TREATMENT	M071-M079	6	433,830	189,951	623,781	54.7
AQUEOUS ORGANIC TREATMENT	M081-M089	1	0	78	78	.0
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	35,911	0	35,911	3.2
SLUDGE TREATMENT	M101-M109	3	0	1,146	1,146	.1
STABILIZATION	M111-M119	2	0	43,014	43,014	3.8
OTHER TREATMENT	M121-M129	7	25,343	11,803	37,146	3.3
INVALID SYSTEM TYPE		2	0	5	5	.0
TOTAL		28	503,752	635,693	1,139,446	100.0
PERCENTAGE		-	44.2 %	55.8 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PENNSYLVANIA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AK	0
AL	3,379
CA	62
CO	9,924
CT	11,278
DC	77
DE	3,418
FC	394
FL	9,193
GA	8,986
IL	22
IN	1,420
KY	7,200
LA	11,142
MA	3,283
MD	24,136
ME	10
MI	10,393
MN	32
MO	25,071
NC	4,336
NE	20
NH	429
NJ	72,111
NY	20,926
OH	76,235
RI	1,766
SC	10,461
TN	7,850
TX	11,765
VA	9,666
VT	10
WA	4,610
WV	7,097
TOTAL	356,702

Exports

State	Tons shipped
AL	12,821
AR	1,075
CA	212
CO	2
CT	595
DC	2
DE	2
FC	3,214
FL	5
GA	546
IL	3,479
IN	25,107
KS	25
KY	6,176
LA	7,107
MA	271
MD	3,201
MI	32,466
MN	515
MO	123
NC	14,719
NJ	137,140
NV	8
NY	7,309
OH	146,870
RI	119
SC	7,558
TN	206
TX	5,422
VA	9,359
WA	12
WV	445
WY	2
TOTAL	426,113

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PENNSYLVANIA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	M0MX*	259,662	20.8
2	F0MX*	194,502	15.6
3	D0MX*	185,032	14.8
4	K062	173,756	13.9
5	D002	124,747	10.0
6	K061	93,351	7.5
7	F006	66,485	5.3
8	D008	58,861	4.7
9	D001	27,635	2.2
10	D007	13,723	1.1
11	F002	13,280	1.1
12	F005	6,808	.5
13	K0MX*	4,219	.3
14	F003	4,003	.3
15	K069	3,127	.3
16	F001	3,043	.2
17	U0MX*	2,790	.2
18	D003	1,505	.1
19	F019	1,369	.1
20	K049	1,304	.1
21	U165	1,069	.1
22	K087	944	.1
23	D009	838	.1
24	K051	750	.1
25	D006	712	.1
26	F007	499	.0
27	F008	375	.0
28	F009	365	.0
29	D005	316	.0
30	U188	238	.0
31	K006	225	.0
32	K052	209	.0
33	U044	204	.0
34	K086	124	.0
35	D004	103	.0
36	U002	88	.0
37	U051	60	.0
38	U228	59	.0
39	U239	42	.0
40	F011	41	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PENNSYLVANIA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	K061	289,272
		D008	17,049
		D007	5,345
		DOMX*	178
SOLVENTS RECOVERY	M021-M029	MOMX*	1,260
		D001	658
		FOMX*	426
		F001	130
INCINERATION	M041-M049	DOMX*	5,210
		MOMX*	2,375
		D001	901
		K051	382
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	FOMX*	52,376
		K083	2,111
		F001	1,331
		D001	1,192
FUEL BLENDING	M061	D001	5,038
		FOMX*	4,544
		MOMX*	2,247
		F005	1,189
AQUEOUS INORGANIC TREATMENT	M071-M079	MOMX*	181,497
		FOMX*	151,099
		DOMX*	135,545
		K062	120,278
AQUEOUS ORGANIC TREATMENT	M081-M089	U188	78
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	F006	35,911
SLUDGE TREATMENT	M101-M109	MOMX*	621
		D007	326
		K062	198
		F002	0
STABILIZATION	M111-M119	F006	17,715
		DOMX*	9,291
		D008	7,394
		D007	3,646
OTHER TREATMENT	M121-M129	D002	24,533
		DOMX*	9,794
		FOMX*	1,475
		D003	873
INVALID SYSTEM TYPE		DOMX*	4
		D001	0
		U002	0
		MOMX*	0
TOTAL			1,139,446

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

PENNSYLVANIA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	PAD059087072	MILL SERVICE, INC. - BULGER PLANT	BULGER	180,086
02	PAD004835146	MILL SERVICE, INC. - YUKON PLANT	YUKON	151,342
03	PAD990753089	GENERAL BATTERY CORPORATION	READING	138,037
04	PAD000429589	GEOLOGICAL RECLAMATION OPRS.& WASTE SYS.	MORRISVILLE	41,830
05	PAD049791098	CHEVRON, USA, INC.	PHILADELPHIA	37,261
06	PAD002375376	USS DIVISION OF USX	FAIRLESS HILLS	34,770
07	PAD002326908	LUKENS STEEL CO.	COATESVILLE	33,183
08	PAD004336145	WHEELING PITTSBURGH STEEL CORP.	ALLENPORT	30,654
09	PAD004335154	ALLEGHENY LUDLUM STEEL	BRACKENRIDGE	29,268
10	PAD000736934	ARMCO ADVANCED MATERIALS CORP.	BUTLER	25,402
11	PAD980831333	BETHLEHEM STEEL CORP./JOHNSTOWN PLANT	JOHNSTOWN	24,443
12	PAD085690592	WASTE CONVERSION INC	HATFIELD	20,431
13	PAD000436261	RUETGERS-NEASE CHEMICAL CO.	STATE COLLEGE	20,081
14	PAD004340444	J&L SPECIALTY PRODUCTS CORPORATION	MIDLAND	19,883
15	PAD042259374	ARCO CHEMICAL CO./ ATLANTIC RICHFIELD	WEST CHESTER	19,765
16	PAD004322913	MINE SAFETY APPLIANCES	EVANS CITY	13,910
17	PAD980830897	HUNTERSTOWN RD CERCLA SITE	STRABAN TSP	13,786
18	PAD064375470	DELAWARE CONTAINER CO., INC.	COATESVILLE	12,971
19	PAD004325254	ARMCO ADVANCED MATERIALS CORP.	LYNDORA	12,686
20	PAD014167589	EXIDE CORPORATION/GENERAL BATTERY CORP	HAMBURG	12,565
21	PAD002330165	EAST PENN MFG. CO.	LYON STATION	12,534
22	PAD002344315	CARPENTER TECHNOLOGY CORP.	READING	11,471
23	PAD086727435	ASHLAND METAL COMPANY	ASHLAND	11,146
24	PAD003038056	E.I. DU PONT DE NEMOURS & CO.	TOWANDA	11,016
25	PAD030069140	QUALITY CHEMICALS, INC.	TYRONE	10,487
26	PAD003037504	HEICO CHEMICAL, INC.	DELAWARE WATER GAP	10,071
27	PAD004338091	WHEATLAND TUBE COMPANY	WHEATLAND	8,894
28	PAD003026531	BETHLEHEM STEEL CORPORATION	STEELTON	8,475
29	PAD048203822	LORD CORPORATION CHEMICAL PRODUCTS DIV	SAEGERTOWN	8,220
30	PAD980550412	SMITHKLINE BEECHAM CHEMICALS	UPPER MERION	8,054
31	PAD004322509	WASHINGTON STEEL CORP.	WASHINGTON	6,880
32	PAD000647735	KEYSTONE CHEMICAL COMPANY	GIRARDVILLE	6,651
33	PAD069778967	AIR PRODUCTS & CHEMICALS, INC./TAMAQUA	HOMETOWN	6,589
34	PAD982567364	LTV STEEL CO INC - MIDLAND COKE PLANT	MIDLAND	6,219
35	PAD004391421	REPUBLIC ENGINEERED STEELS BEAVER FALLS	BEAVER FALLS	6,051
36	PAD002292068	ROHM & HAAS DELAWARE VALLEY INC/BRISTOL	BRISTOL	5,982
37	PAD003043353	MERCK & CO. INC.- CHEROKEE PLANT	RIVERSIDE	5,464
38	PAD004322863	SHARON TUBE COMPANY	SHARON	4,864
39	PAD002327708	AT&T MICROELECTONICS	READING	4,597
40	PAD001933175	SHARON STEEL CORPORATION	FARRELL	4,214

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PENNSYLVANIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	PAD002395887 ZINC CORP. OF AMERICA, PALMERTON					272,
	METALS RECOVERY (FOR REUSE)	M011-M019	0	272,129	272,129	
2	PAD004835146 MILL SERVICE, INC. - YUKON PLANT, YUKON					261,
	AQUEOUS INORGANIC TREATMENT	M071-M079	150,648	109,917	260,565	
	SLUDGE TREATMENT	M101-M109	0	524	524	
3	PAD059087072 MILL SERVICE, INC. - BULGER PLANT, BULGER					180,
	AQUEOUS INORGANIC TREATMENT	M071-M079	179,468	0	179,468	
	SLUDGE TREATMENT	M101-M109	0	621	621	
4	PAD990753089 GENERAL BATTERY CORPORATION, READING					118,
	AQUEOUS INORGANIC TREATMENT	M071-M079	101,614	39	101,653	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	17,047	17,047	
5	PAD010154045 ENVIRITE CORPORATION, YORK					75,
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	45,943	45,943	
	STABILIZATION	M111-M119	0	29,864	29,864	
6	PAD085690592 WASTE CONVERSION INC., HATFIELD					59,
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	34,052	34,052	
	STABILIZATION	M111-M119	0	13,150	13,150	
	OTHER TREATMENT	M121-M129	0	11,803	11,803	
	INVALID SYSTEM TYPE		0	4	4	
7	PAD002389559 KEYSTONE CEMENT COMPANY, BATH					51,
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	26	51,418	51,444	
8	PAD000429589 GEOLOGICAL RECLAMATION OPRS.& WASTE SYS., MORRISVILLE					35,
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	35,911	0	35,911	
9	PAD087561015 INMETCO INC., ELLWOOD CITY					24,
	METALS RECOVERY (FOR REUSE)	M011-M019	0	22,632	22,632	
	AQUEOUS INORGANIC TREATMENT	M071-M079	2,100	0	2,100	
10	PAD004322913 MINE SAFETY APPLIANCES, EVANS CITY					13,
	OTHER TREATMENT	M121-M129	13,829	0	13,829	
11	PAD064375470 DELAWARE CONTAINER CO., INC., COATESVILLE					13,
	FUEL BLENDING	M061	0	13,483	13,483	
	SLUDGE TREATMENT	M101-M109	0	0	0	
	INVALID SYSTEM TYPE		0	0	0	
12	PAD042259374 ARCO CHEMICAL CO./ ATLANTIC RICHFIELD, WEST CHESTER					9,
	OTHER TREATMENT	M121-M129	9,785	0	9,785	
13	PAD980550412 SMITHKLINE BEECHAM CHEMICALS, UPPER MERION					9,
	INCINERATION	M041-M049	6,496	1,089	7,585	
	OTHER TREATMENT	M121-M129	1,475	0	1,475	
14	PAD083965897 MEDUSA CEMENT CO., WAMPUM					8,
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	8,474	8,474	
15	PAD003003894 BERKLEY PRODUCTS COMPANY, AKRON					3,
	SOLVENTS RECOVERY	M021-M029	0	1,829	1,829	
	FUEL BLENDING	M061	757	519	1,276	
16	PAD003043353 MERCK & CO. INC.- CHEROKEE PLANT, RIVERSIDE					
	INCINERATION	M041-M049	901	0	901	
17	PAD980537609 CAPITAL LUBRICANTS CO., LEWISBERRY					
	SOLVENTS RECOVERY	M021-M029	0	657	657	
18	PAD981110570 HORSEHEAD RESOURCE, MONACA					
	METALS RECOVERY (FOR REUSE)	M011-M019	0	407	407	

1 Quantity managed by storage only is not included.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PENNSYLVANIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City	Management Method	On Site	Off Site	Method Total	Total Managed 1
19	PAD049791098 CHEVRON, USA, INC., PHILADELPHIA					382
	INCINERATION	M041-M049	382	0	382	
20	PAD071203046 ATLAS POWDER CO., WALKER AND WEST PENN					185
	OTHER TREATMENT	M121-M129	185	0	185	
21	PAD000796334 E.I. DU PONT DE NEMOURS & CO. INC., EMIGSVILLE					97
	SOLVENTS RECOVERY	M021-M029	90	6	97	
22	PAD002312791 ALLIED-SIGNAL INC., PHILADELPHIA					78
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	78	78	
23	PAD002389104 HI-PURE CHEMICALS, INC.-NAZARETH PLANT, NAZARETH					69
	OTHER TREATMENT	M121-M129	69	0	69	
24	PAD002344315 CARPENTER TECHNOLOGY CORP., READING					8
	METALS RECOVERY (FOR REUSE)	M011-M019	8	0	8	
25	PAD002387926 MERCK & CO., INC., WEST POINT					8
	INCINERATION	M041-M049	8	0	8	
26	PAD069006419 T-THERMAL, INC., CONSHOHOCKEN					5
	INCINERATION	M041-M049	0	5	5	
27	PAD004321527 FISHER SCIENTIFIC CO., INDIANA					1
	SOLVENTS RECOVERY	M021-M029	1	0	1	
28	PAD990825887 IRECO INCORPORATED SUSCON PLANT, PITTSTON					1
	OTHER TREATMENT	M121-M129	1	0	1	

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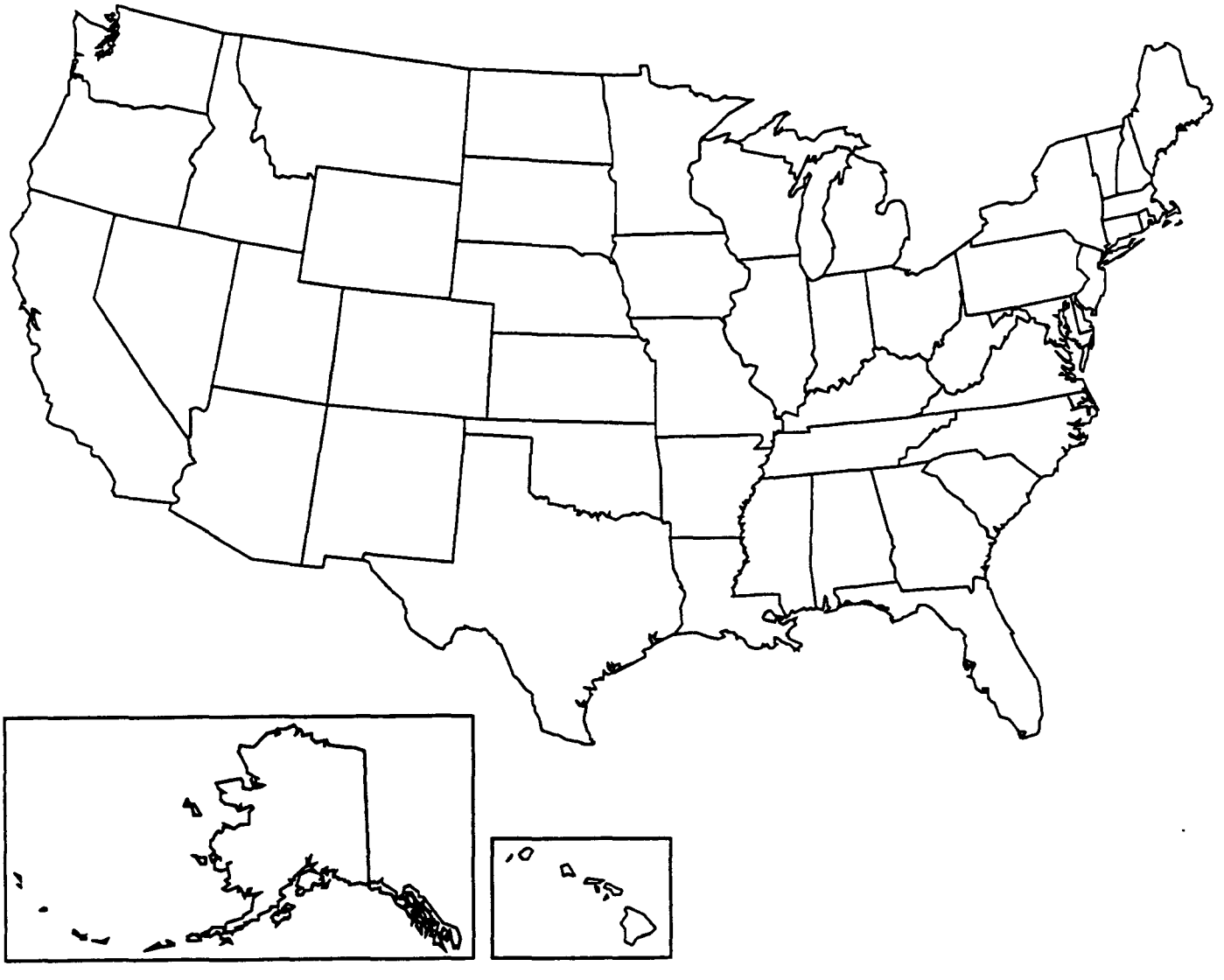
uantity managed by storage only is not included.

Puerto Rico

Region II



PUERTO RICO

EPA Region Address:	U.S. EPA Region II Hazardous Waste Program Branch 26 Federal Plaza, Room 1105 New York, NY 10278
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Waste Division Environmental Quality Board Post Office Box 11488 Santurce, PR 00910
Contact Name:	Mrs. Flor L. Del Valle Director
Phone:	(809) 722-5453

Notes: No special notes for Puerto Rico.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

PUERTO RICO

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	76
Total Quantity of Regulated Waste Generated:	246,161 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	8
Facilities managing only waste generated off site	2
Facilities managing waste generated both on and off site	2
Total RCRA TSD Facilities (excluding storage-only facilities):	12
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	243,417 tons
Total RCRA TSD Facilities:	38

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	5	27,838	3,166	31,004	12.7
OTHER RECOVERY	M031-M039	1	0	1	1	.0
INCINERATION	M041-M049	5	38,162	0	38,162	15.7
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	0	13,968	13,968	5.7
FUEL BLENDING	M061	1	8,622	0	8,622	3.5
AQUEOUS INORGANIC TREATMENT	M071-M079	1	6	0	6	.0
AQUEOUS ORGANIC TREATMENT	M081-M089	2	125	1	126	.1
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	33,042	0	33,042	13.6
OTHER TREATMENT	M121-M129	5	118,461	25	118,486	48.7
TOTAL		12	226,256	17,161	243,417	100.0
PERCENTAGE		-	93.0 %	7.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PUERTO RICO

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
GA	0
VI	6
TOTAL	6

Exports

State	Tons shipped
AL	35
AR	34
AZ	182
CT	49
FL	77
GA	52
LA	522
MI	10
MN	30
NC	0
NJ	22
NY	0
OH	31
PA	89
SC	6,861
TN	4
TX	638
UT	0
TOTAL	8,636

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PUERTO RICO

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F0MX*	144,004	58.5
2	D002	33,256	13.5
3	M0MX*	29,507	12.0
4	F005	25,278	10.3
5	F003	5,369	2.2
6	P029	2,600	1.1
7	D001	2,407	1.0
8	F002	1,116	.5
9	D007	1,026	.4
10	F006	848	.3
11	D0MX*	479	.2
12	F001	97	.0
13	D008	63	.0
14	F019	33	.0
15	K050	26	.0
16	D003	22	.0
17	D009	19	.0
18	P048	5	.0
19	D004	3	.0
20	D011	1	.0
21	D005	1	.0
22	U044	1	.0
23	F007	0	.0
24	P015	0	.0
25	U151	0	.0
26	U0MX*	0	.0
27	D016	0	.0
28	P098	0	.0
29	P030	0	.0
29	U067	0	.0
29	U188	0	.0
30	P021	0	.0
30	U122	0	.0
31	U102	0	.0
32	D010	0	.0
32	P0MX*	0	.0
32	P003	0	.0
32	P004	0	.0
32	P076	0	.0
32	P105	0	.0
32	P106	0	.0
32	U004	0	.0
32	U006	0	.0
32	U091	0	.0
32	U142	0	.0
32	U204	0	.0
32	U223	0	.0
32	U226	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PUERTO RICO

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F005	12,392
		MOMX*	7,609
		FOMX*	6,299
		F003	2,560
OTHER RECOVERY	M031-M039	DOMX*	1
INCINERATION	M041-M049	FOMX*	23,971
		MOMX*	13,609
		D001	526
		F002	35
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	MOMX*	10,435
		F003	1,612
		F002	714
		FOMX*	686
FUEL BLENDING	M061	FOMX*	8,622
AQUEOUS INORGANIC TREATMENT	M071-M079	D001	6
AQUEOUS ORGANIC TREATMENT	M081-M089	MOMX*	126
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	D002	33,042
OTHER TREATMENT	M121-M129	FOMX*	104,183
		F005	12,852
		D007	1,023
		DOMX*	408
TOTAL			243,417

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PUERTO RICO

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	PRD090028101	MERCK SHARP & DOHME QUIMICA	BARCELONETA	166,444
02	PRD090021056	SQUIBB MANUFACTURING, INC.	HUMACAO	34,043
03	PRD090399718	SAFETY KLEEN ENVIRONSYSTEMS CO.	MANATI	10,388
04	PRD981130131	DUPONT AGRICHEMICALS CARIBE, INC.	MANATI	9,437
05	PRD090613357	SK&F LAB CO- CHEMICAL DIVISION	GUAYAMA	8,553
06	PRD091024786	ELI LILLY INDUSTRIES, INC.	MAYAGUEZ	4,625
07	PRD090398074	THE UPJOHN MANUFACTURING	BARCELONETA	3,836
08	PRD090031410	CARIBE GE PROD., INC	VEGA ALTA	2,651
09	PRD991291949	STERLING PHARMACEUTICALS INC.	BARCELONETA	1,276
10	PRD091049262	THERMO KING CARIBBEAN	CIALES	1,227
11	PRD991291857	DIGITAL EQUIPMENT CORPORATION	SAN GERMAN	778
12	PRD980526552	WESTERN FHER LABORATORIES INC.	PONCE	427
13	PRD090497959	THERMO KING DE PUERTO RICO	ARECIBO	324
14	PRD980768410	SCHERING PLOUGH PRODUCTS INC.	LAS PIEDRAS	270
15	PRD049532807	SARTORIUS INC.	YAUCO	194
16	PRD091065102	CYANAMID AGRICULTURAL DE P.R., INC.	MANATI	158
17	PRD090036021	BRISTOL MYERS BARCELONETA	BARCELONETA	129
18	PRD000706432	SYLTRON, INC. LIGHTING PRODUCTS	LUQUILLO	114
19	PRD090584152	ROCHE PRODUCTS INC.	MANATI	109
20	PRD091063743	PRODUCTOS CIRCUITOS DE PUERTO RICO	JUANA DIAZ	108
21	PRD090506239	LOCTITE PUERTO RICO, INC.	SABANA GRANDE	101
22	PRD091200477	DAVIS+GECK, INC	MANATI	101
23	PRD000708305	WESTINGHOUSE TOA BAJA COMPLEX	TOA BAJA	82
24	PR2170027203	NAVAL STATION ROOSEVELT ROADS	CEIBA	67
25	PRD987366168	FLOR-QUIN, INC.	PATILLAS	67
26	PRD090378225	SEARLE & CO.	CAGUAS	65
27	PRD981182421	SAFETY KLEEN ENVIRONSYSTEMS (DORADO)	DORADO	63
28	PRD000691048	CROWN CORK DE PUERTO RICO	CAROLINA	44
29	PRD980759443	DUPONT ELECTRONIC MATERIALS, INC.	MANATI	43
30	PRD980644397	STAR KIST CARIBE, INC.	MAYAGUEZ	43
31	PRD000706465	BAXTER HEALTHCARE CORP. OF P.R.	AIBONITO	34
32	PRD091198366	MILLIPORE CORPORATION	CIDRA	31
33	PRD991291972	PHILLIPS PUERTO RICO CORE INC.	GUAYAMA	26
34	PRD000692699	MEDTRONIC P.R. INC.	VILLALBA	25
35	PRD980764401	ORTHO PHARMACEUTICALS, INC.	MANATI	22
36	PRD090193277	CARIBE GENERAL ELECTRIC PRODS., INC.	VEGA ALTA	20
37	PRD000691014	BECKMAN INSTRUMENTS (CARIBE) INC.	NAGUABO	18
38	PRD090111311	ALLERGAN AMERICA	HORMIGUEROS	18
39	PRD091150060	MOTOROLA PUERTO RICO OPERATIONS	VEGA BAJA	14
40	PRD105748842	PRODUCTOS WESTINGHOUSE (ABB P.R T&D COM)	MAYAGUEZ	12

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

PUERTO RICO

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	PRD090028101 MERCK SHARP & DOHME QUIMICA, BARCELONETA					164,
	OTHER TREATMENT	M121-M129	117,035	0	117,035	
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	33,042	0	33,042	
	SOLVENTS RECOVERY	M021-M029	14,044	0	14,044	
	INCINERATION	M041-M049	696	0	696	
	AQUEOUS INORGANIC TREATMENT	M071-M079	6	0	6	
2	PRD090021056 SQUIBB MANUFACTURING, INC., HUMACAO					38,
	INCINERATION	M041-M049	26,275	0	26,275	
	SOLVENTS RECOVERY	M021-M029	12,260	0	12,260	
3	PRD090399718 SAFETY KLEEN ENVIRONSYSTEMS CO., MANATI					27,
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	13,968	13,968	
	FUEL BLENDING	M061	8,622	0	8,622	
	SOLVENTS RECOVERY	M021-M029	1,522	3,086	4,608	
4	PRD090613357 SK&F LAB CO- CHEMICAL DIVISION, GUAYAMA					8,
	INCINERATION	M041-M049	8,495	0	8,495	
5	PRD091024786 ELI LILLY INDUSTRIES, INC., MAYAGUEZ					2,
	INCINERATION	M041-M049	2,685	0	2,685	
	SOLVENTS RECOVERY	M021-M029	0	80	80	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	1	1	
	OTHER RECOVERY	M031-M039	0	1	1	
6	PRD091049262 THERMO KING CARIBBEAN, CIALES					1,
	OTHER TREATMENT	M121-M129	1,201	0	1,201	
7	PRD090497959 THERMO KING DE PUERTO RICO, ARECIBO					
	OTHER TREATMENT	M121-M129	225	0	225	
8	PRD980594618 UNION CARBIDE CARIBE INC., PENUELAS					
	AQUEOUS ORGANIC TREATMENT	M081-M089	125	0	125	
9	PRD091018622 PRETECCION TEDNICA ECOLOGICA, CORP., PENUELAS					
	OTHER TREATMENT	M121-M129	0	23	23	
10	PRD090137910 HARRIS & DEVOE PAINTS, BAYAMON					
	SOLVENTS RECOVERY	M021-M029	12	0	12	
11	PRD090378225 SEARLE & CO., CAGUAS					
	INCINERATION	M041-M049	11	0	11	
12	PRD980536221 ATLANTIC FLEET WEAPON TRAINING, VIEQUES					
	OTHER TREATMENT	M121-M129	0	2	2	

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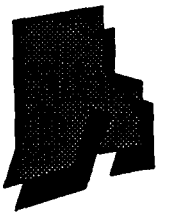
1 Quantity managed by storage only is not included.

Rhode Island

Region I



RHODE ISLAND

EPA Region Address:	U.S. EPA Region I RCRA Support Section Mail Stop HRW-CAN-3 JFK Federal Building Boston, MA 02203
Biennial Report Data Collection Instrument:	State-specific annual report
Address of Participating State Environmental Authority	Division of Air and Hazardous Materials Department of Environmental Management 291 Promenade Street Providence, RI 02908-5767
Contact Name:	Ms. Patrice Porras Engineering Aide
Phone:	(401) 277-2797

Notes: No special notes for Rhode Island.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

RHODE ISLAND

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	191
Total Quantity of Regulated Waste Generated:	5,565 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	3
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	3
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	12,897 tons
Total RCRA TSD Facilities:	4

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	1	0	259	259	2.0
AQUEOUS INORGANIC TREATMENT	M071-M079	2	0	10,159	10,159	78.8
OTHER TREATMENT	M121-M129	2	0	2,478	2,478	19.2
TOTAL		3	0	12,897	12,897	100.0
PERCENTAGE		-	.0 %	100.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

RHODE ISLAND

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
CT	2,123
FC	626
MA	2,390
ME	482
MS	3
NC	28
NH	32
NJ	6,318
NY	559
OH	63
PA	39
SC	210
VT	833
TOTAL	13,707

Exports

State	Tons shipped
AL	24
AR	0
CA	2
CT	464
FC	11
IL	19
IN	147
LA	29
MA	1,055
MD	171
MI	49
NC	14
NJ	355
NY	591
OH	924
PA	1,228
SC	20
TX	98
TOTAL	5,201

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

RHODE ISLAND

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D008	1,280	23.0
2	D002	1,269	22.8
3	D001	1,224	22.0
4	K061	1,022	18.4
5	D007	311	5.6
6	D004	200	3.6
7	D003	155	2.8
8	D011	48	.9
9	U188	15	.3
10	D005	7	.1
11	U122	6	.1
12	UN10	5	.1
13	U228	5	.1
14	U226	5	.1
15	D006	3	.1
16	D009	3	.1
17	D00\	2	.0
18	D010	2	.0
19	U154	1	.0
20	U210	1	.0
21	K086	1	.0
21	U080	1	.0
22	U220	0	.0
23	P056	0	.0
24	U028	0	.0
24	U088	0	.0
24	U165	0	.0
25	P030	0	.0
26	P106	0	.0
27	U012	0	.0
27	U159	0	.0
28	U218	0	.0
29	U115	0	.0
29	U141	0	.0
30	P029	0	.0
30	P048	0	.0
30	U133	0	.0
31	U117	0	.0
32	P105	0	.0
33	P012	0	.0
33	U219	0	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

RHODE ISLAND

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	D001	259
AQUEOUS INORGANIC TREATMENT	M071-M079	D002	9,190
		D003	742
		D007	87
		D006	75
OTHER TREATMENT	M121-M129	D002	2,011
		D001	260
		D003	185
		D007	13
TOTAL			12,897

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

RHODE ISLAND

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	RID001546811	OCEAN STATE STEEL INC	EAST PROVIDENCE	1,022
02	RID001202050	MOBIL PIPE LINE CO/EP TERMINAL	DALLAS	917
03	RID000791434	CHEMART COMPANY	LINCOLN	442
04	RID040098352	STABLEX	PROVIDENCE	356
05	RID000841411	NARR ELECTRIC	PROVIDENCE	291
06	RID001198605	GTE PRODUCTS CORP/SYLVANIA	CENTRAL FALLS	229
07	RID052632106	UNION OIL CO OF CA UNION CHEMICAL	EAST PROVIDENCE	207
08	RID095976544	OLIN HUNT SPECIALTY PROD INC	LINCOLN	158
09	RID987467248	INTERNATIONAL ETCHING	PROVIDENCE	147
10	RID075728030	OLIN HUNT SPECIALTY PROD INC	E PROV	115
11	RI8170024790	NAVAL UNDERWATER SYSTEMS CTR	NEWPORT	107
12	RID001805670	HOECHST CELANESE CORP	COVENTRY	102
13	RID001201508	AT CROSS COMPANY	LINCOLN	88
14	RID001469840	ROYAL ELECTRIC INC	PAWTUCKET	86
15	RID051507044	STANLEY-BOSTITCH INC	EAST GREENWICH	83
16	RID001786516	GEORGE MANN & CO INC	PROVIDENCE	61
17	RID063890214	BOLIDEN METECH INC	MAPLEVILLE	58
18	RID001189273	MAXWELL GRAPHICS PROVIDENCE	PROVIDENCE	54
19	RID063900690	ELEC BOAT	NO KINGSTOWN	54
20	RID075710996	RHODE ISLAND HOSPITAL	PROVIDENCE	47
21	RID093214641	PROVIDENCE CHEMICALS	EAST PROVIDENCE	46
22	RID062310230	TRIMONT CHEMICAL	CUMBERLAND	45
23	RID046609327	RAU FASTENER	PROVIDENCE	44
24	RID099422305	FERNANDO ORIGINALS LTD	N PROV	40
25	RID089359624	A & Z HAYWARD CO	EAST PROVIDENCE	37
26	RID001200252	TECHNIC INC	CRANSTON	31
27	RID981894785	AMI TRUCKLEASE	WORCESTER	29
28	RID001195387	US RING TRAVELER CO/INDUPLATE	NORTH PROVIDENCE	26
29	RID001199728	COOLEY INC	PAWTUCKET	24
30	RID075704999	UNION IND	PROVIDENCE	24
31	RID001202589	OLIN HUNT SPECIALTY PROD INC	LINCOLN	24
32	RID106179088	RI TECHNICAL PLATERS INC	CRANSTON	21
33	RID001198514	KENYON INDUSTRIES INC	KINYON	21
34	RID002094282	ENG YARNS	PROV	21
35	RID059735761	ADVANCED CHEMICAL CO	WARWICK	20
36	RID980913941	HASBRO INC	PAWTUCKET	19
37	RID000001701	ELECTRO-FILMS INC	WARWICK	19
38	RID001962190	TH BAYLIS CO INC	WOODBRIDGE	17
39	RID001784016	ELECTRONIC PRECISION CIRCUITRY	PROVIDENCE	16
40	RID054036199	P&C QUALITY SCREW PRODUCTS	ESMOND	16

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

RHODE ISLAND

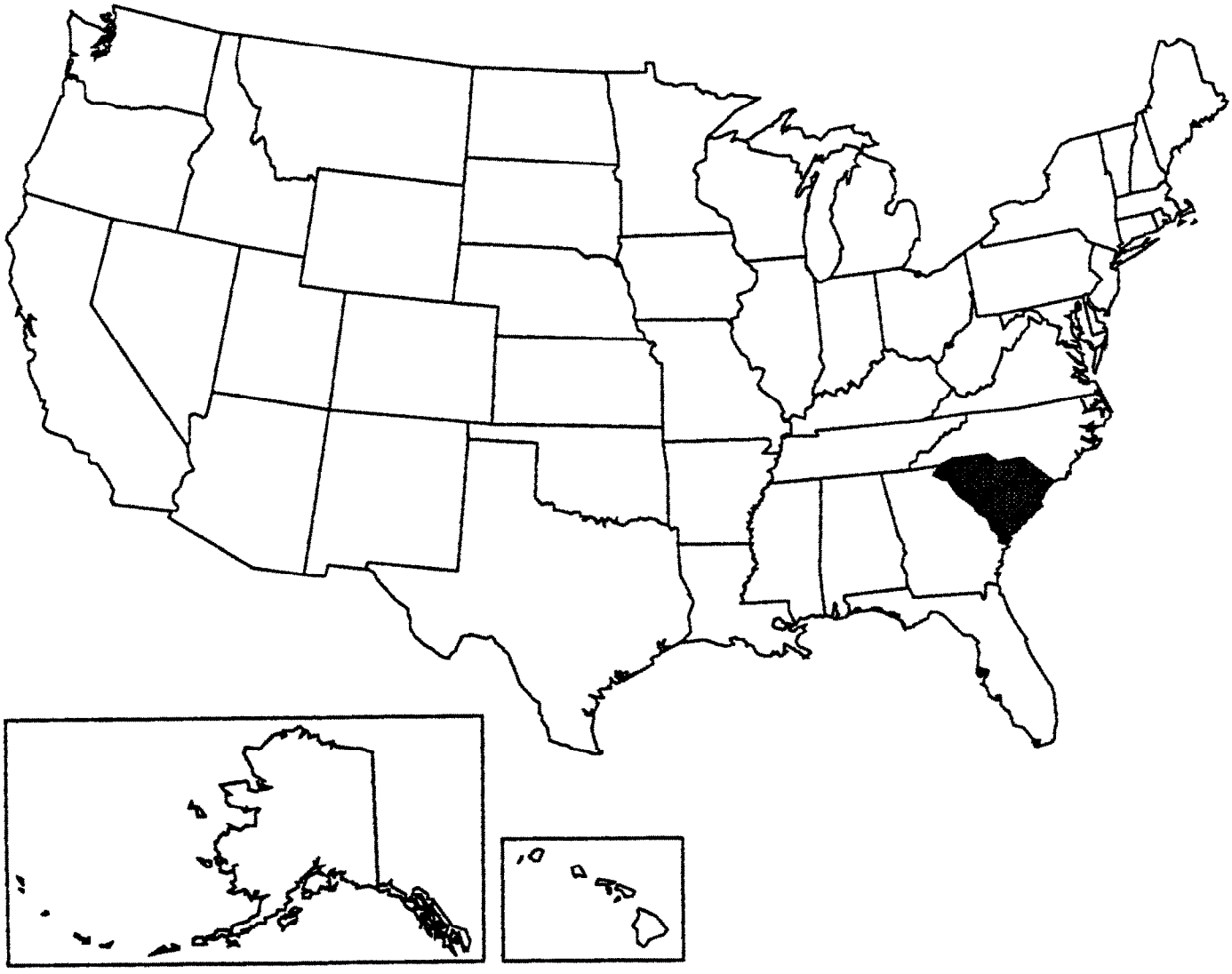
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City	Management Method	On Site	Off Site	Method Total	Tot Manag
1	RID980906986 ETICAM, WARWICK					11,(
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	9,389	9,389	
	OTHER TREATMENT	M121-M129	0	2,217	2,217	
2	RID040098352 STABLEX, PROVIDENCE					
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	771	771	
3	RID084802842 CHEM PAK CORP., WARWICK					
	OTHER TREATMENT	M121-M129	0	260	260	
	SOLVENTS RECOVERY	M021-M029	0	259	259	

1 Quantity managed by storage only is not included.

South Carolina

Region IV



SOUTH CAROLINA

EPA Region Address:	U.S. EPA Region IV Waste Division, Waste Programs Branch State Programs Section 345 Courtland Street Atlanta, GA 30365
Biennial Report Data Collection Instrument:	State-specific report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Solid and Hazardous Waste Management Department of Health and Environmental Control 2600 Bull Street Columbia, SC 29201
Contact Name:	Mr. Allan Tinsley Manager, Compliance Monitoring
Phone:	(803) 734-5200

Notes: No special notes for South Carolina.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

SOUTH CAROLINA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	394
Total Quantity of Regulated Waste Generated:	106,224 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	4
Facilities managing only waste generated off site	5
Facilities managing waste generated both on and off site	3
Total RCRA TSD Facilities (excluding storage-only facilities):	12
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	175,807 tons
Total RCRA TSD Facilities:	34

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	1	0	0	0	.0
SOLVENTS RECOVERY	M021-M029	3	669	32,087	32,757	18.6
OTHER RECOVERY	M031-M039	3	336	5,551	5,886	3.3
INCINERATION	M041-M049	4	3,192	32,575	35,767	20.3
AQUEOUS INORGANIC TREATMENT	M071-M079	3	15,166	21	15,188	8.6
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	0	98	98	.1
SLUDGE TREATMENT	M101-M109	2	48	14	62	.0
STABILIZATION	M111-M119	1	0	10	10	.0
OTHER TREATMENT	M121-M129	2	70	91	161	.1
LANDFILL	M132	1	0	85,878	85,878	48.8
TOTAL		12	19,482	156,325	175,807	100.0
PERCENTAGE		-	11.1 %	88.9 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

SOUTH CAROLINA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	3,979
AR	61
CA	21
CO	0
CT	1,102
DC	448
DE	296
FL	15,494
GA	13,617
IA	0
IL	664
IN	184
KS	1
KY	3,083
LA	110
MA	4,528
MD	2,714
ME	19
MI	371
MN	25
MO	362
MS	44
NC	42,099
NH	432
NJ	16,008
NV	5
NY	897
OH	20,590
PA	9,518
RI	143
SD	7
TN	3,942
TX	60
VA	6,646
WA	0
WI	73
WV	4,106
WY	0
TOTAL	151,652

Exports

State	Tons shipped
AL	4,300
AR	46
FL	356
GA	2,246
IL	91
IN	1,000
KY	5,402
LA	681
MA	35
MD	58
MI	1,562
MN	14
MO	8
NC	2,681
NJ	989
NV	0
NY	476
OH	5,971
PA	7,838
RI	36
SD	1
TN	4,527
TX	217
TOTAL	38,535

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

SOUTH CAROLINA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F003	21,917	20.6
2	FOMX*	19,174	18.1
3	MOMX*	16,905	15.9
4	D001	15,028	14.1
5	F005	7,869	7.4
6	K061	5,926	5.6
7	D002	5,218	4.9
8	DOMX*	3,015	2.8
9	F002	2,873	2.7
10	F006	2,011	1.9
11	K001	1,352	1.3
12	D005	846	.8
13	D007	795	.7
14	F001	585	.6
15	D008	482	.5
16	F009	412	.4
17	D003	337	.3
18	F019	321	.3
19	D009	300	.3
20	UOMX*	124	.1
21	K086	114	.1
22	U122	114	.1
23	F007	88	.1
24	D006	66	.1
25	K087	49	.0
26	U161	39	.0
27	U226	33	.0
28	U108	32	.0
29	K051	30	.0
30	U154	27	.0
31	F008	19	.0
32	U239	19	.0
33	U151	13	.0
34	D011	12	.0
35	U220	12	.0
36	D004	10	.0
37	K049	10	.0
38	K052	6	.0
39	U088	5	.0
40	U043	5	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

SOUTH CAROLINA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D009	0
SOLVENTS RECOVERY	M021-M029	D001	20,465
		MONX*	4,146
		F005	3,459
		FONX*	1,967
OTHER RECOVERY	M031-M039	K061	5,440
		D001	357
		D008	63
		F002	19
INCINERATION	M041-M049	MONX*	8,455
		D001	7,330
		FONX*	5,861
		DONX*	5,531
AQUEOUS INORGANIC TREATMENT	M071-M079	MONX*	9,375
		FONX*	5,797
		DONX*	11
		D003	3
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	DONX*	77
		MONX*	11
		D001	3
		D002	3
SLUDGE TREATMENT	M101-M109	MONX*	36
		U239	13
		D001	9
		UONX*	5
STABILIZATION	M111-M119	D001	8
		DONX*	1
		D004	0
OTHER TREATMENT	M121-M129	FONX*	68
		D002	52
		DONX*	27
		D001	6
LANDFILL	M132	DONX*	22,633
		D008	14,360
		MONX*	12,310
		FONX*	7,111
TOTAL			175,807

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

SOUTH CAROLINA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY		TOTAL GENERATED (U.S. TONS)
01	SCD991278128	HOECHST CELANESE-LEEDS PLANT	CHESTER		21,050
02	SCD078065117	SIEMENS ENERGY & AUTOMATION INC.	ROEBUCK		17,523
03	SCD003345683	TORRINGTON COMPANY	CLINTON		11,559
04	SCD036275626	SOUTHEASTERN CHEMICALS & SOLVENTS CO	SUMTER	*	7,236
05	SCD077995488	SAFETY-KLEEN CORP - LEXINGTON PLANT	LEXINGTON	*	6,315
06	SCD991277716	GEORGETOWN STEEL CORPORATION	GEORGETOWN		5,926
07	SCD082228347	SANDOZ MARTIN WORKS	MARTIN		4,187
08	SCD043384072	ETHYL CORPORATION - ORANGEBURG PLANT	ORANGEBURG		3,505
09	SCD981031040	SAFETY-KLEEN CORPORATION 3-066-01(GREER)	GREER		3,268
10	SCD003353760	OWEN ELECTRIC STEEL COMPANY	CAYCE		1,722
11	SCD981467616	LAIDLAW ENVIRONMENTAL SERVICES (TOC) INC	ROEBUCK		1,486
12	SCD049690001	SOUTHERN WOOD PIEDMONT COMPANY	SPARTANBURG		1,352
13	SCD050187434	SOUTHERN COATINGS INC	SUMTER		1,351
14	SCD044442333	THERMALKEM INC.	ROCK HILL		1,036
15	SCD042627448	HARDWICKE CHEMICAL COMPANY	ELGIN		801
16	SCD084707298	C R BARD INCORPORATED	MONCKS CORNER		709
17	SCD047554753	W R GRACE & COMPANY - CRYOVAC DIVISION	SIMPSONVILLE		694
18	SCD982106932	SOUTH CAROLINA GALVANIZING	TRAVELERS REST		685
19	SCD980709299	SAFETY-KLEEN CORP 3-179-21 (SMVL)	SUMMERVILLE		601
20	SCD062690557	AVX CORPORATION	MYRTLE BEACH		568
21	SCD052075116	TECHNOGRAPHICS DECOTONE, U.S. INC.	LEXINGTON		561
22	SCD980842785	SAFETY-KLEEN CORP 3-043-21 (FLORENCE)	FLORENCE		511
23	SCD055207617	LOBECO PRODUCTS INC	LOBECO		510
24	SCD980848717	CARPENTER TECHNOLOGY CORPORATION	ORANGEBURG		440
25	SCD000648493	DURACELL USA	LANCASTER		420
26	SCD980841944	KEMET ELECTRONICS CORP - FOUNTAIN INN	FOUNTAIN INN,		363
27	SCD987566023	ALSIMAG TECHNICAL CERAMICS INC	LAURENS		321
28	SCD003351814	WESTINGHOUSE ELECTRIC CORPORATION	HAMPTON		319
29	SCD039286315	CRANDALL CORPORATION	LEXINGTON		290
30	SCD000770263	DIGITAL EQUIPMENT CORPORATION	GREENVILLE		280
31	SCD067002147	GENERAL ELECTRIC COMPANY-FLORENCE	FLORENCE		269
32	SCD042633859	EXIDE BATTERY CORP	GREER		254
33	SC8170022620	USN-CHARLESTON NAVAL WEAPONS STATION	CHARLESTON		254
34	SCD002267490	STEEL HEDDLE MFG CO	GREENVILLE		241
35	SC1890008989	DOE/WSRC SAVANNAH RIVER SITE	AIKEN		231
36	SCD003344959	CROWN CORK & SEAL CO INC	SPARTANBURG		227
37	SCD991279399	FN MFG INC	COLUMBIA		224
38	SCD061520557	AMERICAN YARD PRODUCTS	ORANGEBURG		214
39	SCD048373468	MOBAY CORP-BUSHY PARK PLANT	BERKELEY COUNTY		212
40	SCD073716516	MICHELIN TIRE CORP MFG DIV	SANDY SPRINGS		204

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

SOUTH CAROLINA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	SCD070375985 GSX SERVICES OF SOUTH CAROLINA INC., PINEWOOD			*		85,
	LANDFILL	M132	0	85,878	85,878	
2	SCD077995488 SAFETY-KLEEN CORP - LEXINGTON PLANT, LEXINGTON			*		23,
	SOLVENTS RECOVERY	M021-M029	669	22,718	23,387	
	OTHER TREATMENT	M121-M129	66	0	66	
3	SCD981467616 LAIDLAW ENVIRONMENTAL SERVICES (TOC) INC., ROEBUCK					22,
	INCINERATION	M041-M049	0	22,044	22,044	
4	SCD044442333 THERMALKEM INC., ROCK HILL					10,
	INCINERATION	M041-M049	0	10,515	10,515	
5	SCD003345683 TORRINGTON COMPANY, CLINTON					9,
	AQUEOUS INORGANIC TREATMENT	M071-M079	9,369	[illegible]	9,369	
6	SCD036275626 SOUTHEASTERN CHEMICALS & SOLVENTS CO., SUMTER			*		9,
	SOLVENTS RECOVERY	M021-M029	0	9,355	9,355	
7	SCD078065117 SIEMENS ENERGY & AUTOMATION INC., ROEBUCK					5,
	AQUEOUS INORGANIC TREATMENT	M071-M079	5,797	0	5,797	
8	SCD046503132 STOLLER MII-DIV.OF STOLLER CHEMICAL CO., JERICHO			*		5,
	OTHER RECOVERY	M031-M039	0	5,502	5,502	
9	SCD043384072 ETHYL CORPORATION - ORANGEBURG PLANT, ORANGEBURG					3
	INCINERATION	M041-M049	3,192	0	3,192	
10	SCD069314045 MILLIKEN CHEMICAL-DEWEY PLANT, INMAN					
	OTHER RECOVERY	M031-M039	336	0	336	
11	SCD058754789 AQUA-TECH/GROCE LABORATORIES, INC., GREER					
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	98	98	
	OTHER TREATMENT	M121-M129	4	91	95	
	OTHER RECOVERY	M031-M039	0	49	49	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	21	21	
	INCINERATION	M041-M049	0	16	16	
	SOLVENTS RECOVERY	M021-M029	0	15	15	
	STABILIZATION	M111-M119	0	10	10	
	SLUDGE TREATMENT	M101-M109	0	0	0	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	0	0	
12	SCD003339207 SIEBE NORTH INC.-CHARLESTON PLANT, CHARLESTON					
	SLUDGE TREATMENT	M101-M109	48	13	62	

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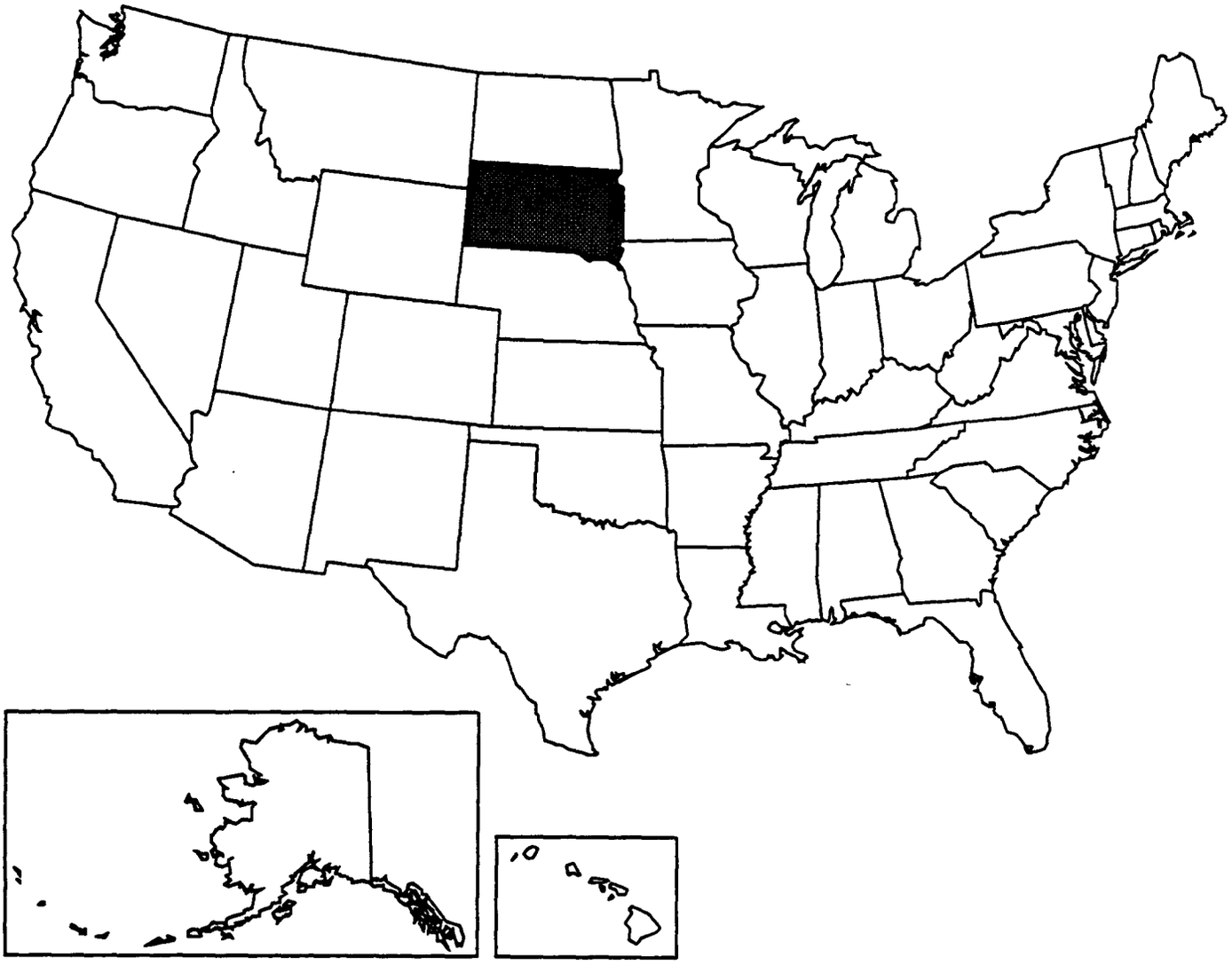
1 Quantity managed by storage only is not included.

South Dakota

Region VIII



SOUTH DAKOTA

EPA Region Address:	U.S. EPA Region VIII Hazardous Waste Management Division Mail Stop HWM-RI 999 18th Street, Suite 500 Denver, CO 80202
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Office of Waste Management Division of Environmental Regulation Department of Environment and Natural Resources 319 South Coteau c/o 500 East Capitol Avenue Pierre, SD 57501
Contact Name:	Ms. Carrie Jacobson Natural Resources Scientist
Phone:	(605) 773-3153

Notes: South Dakota does not have any TSD facilities, therefore waste management could not be calculated.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

SOUTH DAKOTA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	12
Total Quantity of Regulated Waste Generated:	1,088 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	0
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	0 tons
Total RCRA TSD Facilities:	2

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

SOUTH DAKOTA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
IA	52
MN	69
ND	0
NE	1
TOTAL	122

Exports

State	Tons shipped
ID	8
IL	331
IN	105
LA	43
MN	319
MO	23
NE	56
OH	44
OK	233
TN	11
WA	2
WI	198
TOTAL	1,372

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

SOUTH DAKOTA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F003	353	32.5
2	D001	350	32.2
3	D002	142	13.0
4	F005	70	6.5
5	MOMX*	50	4.6
6	F019	43	4.0
7	F002	22	2.0
8	F001	21	2.0
9	FOMX*	21	2.0
10	F006	8	.7
11	D008	7	.6
12	D009	0	.0
13	U111	0	.0
14	DOMX*	0	.0
14	D007	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

SOUTH DAKOTA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

This table is not applicable because the State did not manage any hazardous waste during 1989.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

SOUTH DAKOTA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	SDD099561474	SYNCOM DIVISION OF SCHWANS SALES ENTER	MITCHELL	415
02	SDD078668696	3M BROOKINGS MEDICAL PRODUCTS DIVISION	BROOKINGS	294
03	SDD020193561	MCCORD HEAT TRANSFER CORP.	CANTON	143
04	SDD096407838	ALUMAX EXTRUSIONS INC	YANKTON	75
05	SDD007262215	DALE ELECTRONICS, INC.	YANKTON	39
06	SDD078013760	C R INDUSTRIES INC	SPRINGFIELD	38
07	SDD981545577	STAR CIRCUITS INC.	BROOKINGS	23
08	SDD000003855	CCL LABEL / MODERN PRESS INC	SIOUX FALLS	22
09	SDD068642222	SCI MANUFACTURING INC (FORMERLY MAGNETIC	RAPID CITY	22
10	SDD049521511	DAKTRONICS, INC.	BROOKINGS	13
11	SD2571924644	ELLSWORTH AIR FORCE BASE	ELLSWORTH AIR FORCE BASE	6
12	SDD000716696	SAFETY-KLEEN CORP 1-183-05	SIOUX FALLS	0

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

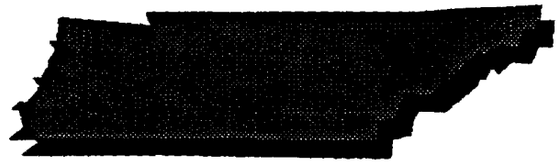
SOUTH DAKOTA

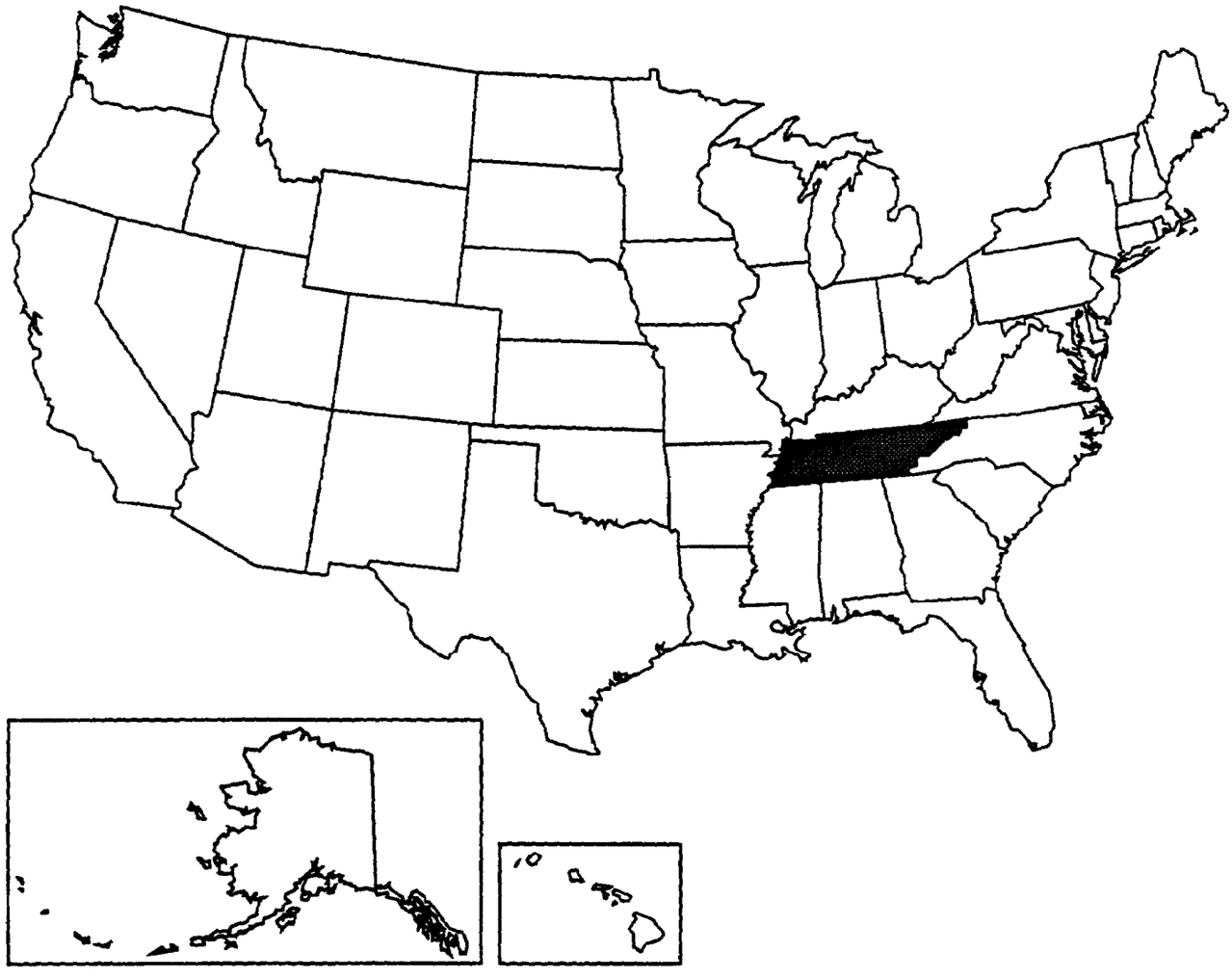
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

This table is not applicable because the State did not manage any hazardous waste during 1989.

Tennessee

Region IV





TENNESSEE

EPA Region Address:	U.S. EPA Region IV Waste Division, Waste Programs Branch State Programs Section 345 Courtland Street Atlanta, GA 30365
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Division of Solid Waste Management Department of Health and Environment Customs House, Fourth Floor 701 Broadway Nashville, TN 37243-1535
Contact Name: Phone:	Mr. Henry Bentrup, Jr. (615) 741-3424

Notes: No special notes for Tennessee.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TENNESSEE

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	446
Total Quantity of Regulated Waste Generated:	34,363,940 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	31
Facilities managing only waste generated off site	11
Facilities managing waste generated both on and off site	24
Total RCRA TSD Facilities (excluding storage-only facilities):	66
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	34,533,270 tons
Total RCRA TSD Facilities:	67

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
AQUEOUS ORGANIC TREATMENT	M081-M089	1	32,558,746	21,806	32,580,552	94.3
OTHER TREATMENT	M121-M129	55	224,120	95,680	319,800	.9
UNDERGROUND INJECTION	M134	1	1,583,784	0	1,583,784	4.6
INVALID SYSTEM TYPE		23	43,337	5,796	49,133	.1
TOTAL		66	34,409,988	123,282	34,533,270	100.0
PERCENTAGE		-	99.6 %	.4 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TENNESSEE

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
AL	38,738
AR	3,018
FC	58
FL	35
GA	5,378
IL	11
IN	232
KY	309
LA	51
MI	35
MO	2
MS	3,936
NC	17
NJ	14
OK	3,802
PA	3,871
SC	4,430
TX	3,602
VA	1
WA	3
TOTAL	67,543

Exports

State	Tons shipped
AL	24,860
AR	418
CA	1
FL	82
GA	2,165
IL	1,256
IN	486
KY	1,050
LA	2,702
MD	1
MI	912
MO	2,972
MS	307
NC	1,279
NJ	452
NY	12
OH	1,549
OK	4
OR	2
PA	599
SC	86
VA	103
WI	37
TOTAL	41,335

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TENNESSEE

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F0MX*	32,536,940	94.7
2	D0MX*	1,583,789	4.6
3	D002	61,768	.2
4	D001	51,143	.1
5	D007	37,599	.1
6	F009	25,121	.1
7	F002	22,501	.1
8	K047	11,296	.0
9	F019	7,260	.0
10	D006	6,069	.0
11	F005	3,758	.0
12	D008	3,700	.0
13	F003	3,244	.0
14	F001	2,240	.0
15	D011	1,529	.0
16	F006	1,457	.0
17	U125	1,119	.0
18	F008	848	.0
19	K001	821	.0
20	M0MX*	482	.0
21	F007	281	.0
22	D003	261	.0
23	U036	258	.0
24	D005	147	.0
25	U002	117	.0
26	D004	54	.0
27	U007	47	.0
28	P037	32	.0
29	K086	17	.0
30	F012	16	.0
31	D009	12	.0
32	U211	9	.0
33	U133	5	.0
34	U044	2	.0
35	K061	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TENNESSEE

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
AQUEOUS ORGANIC TREATMENT	M081-M089	F0MX*	32,558,746
		D004	21,806
OTHER TREATMENT	M121-M129	D002	81,900
		F009	62,413
		D001	46,117
		F006	45,784
UNDERGROUND INJECTION	M134	D0MX*	1,583,784
INVALID SYSTEM TYPE		D007	30,942
		K047	11,296
		D008	3,935
		U125	1,122
TOTAL			34,533,270

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

TENNESSEE

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	TND003376928	TENN EASTMAN CO, DIV OF EASTMAN KODAK	KINGSPORT	32,536,940
02	TND004044491	EI DUPONT DE NEMOURS & CO	NEW JOHNSONVILLE	1,583,784
03	TND981747116	CAVALIER METAL CORPORATION	MCKENZIE	30,929
04	TN3890090001	U.S. DOE Y-12 PLANT	OAK RIDGE	29,617
05	TND980515779	OSCO TREATMENT SYSTEMS	COLUMBIA	28,177
06	TND095050019	YALE SECURITY INC.	LENOIR CITY	24,881
07	TND067690040	REFINED METALS CORPORATION	MEMPHIS	21,781
08	TN0890090004	UNITED STATES DEPT OF ENERGY K-25 SITE	OAK RIDGE	21,573
09	TN0210020582	MILAN ARMY AMMUNITION PLANT	MILAN	11,296
10	TND101768182	CALSONIC MANUFACTURING CORP.	SHELBYVILLE	7,228
11	TND003336013	CHATTEM CHEMICALS	CHATTANOOGA	6,187
12	TND003332012	WHELAND FOUNDRY,DIV OF N AMERICAN ROYALT	CHATTANOOGA	4,740
13	TND982132995	JARL EXTRUSIONS/DIV. OF ALCAN ALUM.	ELIZABETHTOWN	4,365
14	TND041150533	FLORIDA STEEL CORP., KNOXVILLE STEEL MIL	KNOXVILLE	2,968
15	TND096070396	ROSS METALS, INC.	ROSSVILLE	2,871
16	TND007024664	VELSICOL CHEMICAL	MEMPHIS	2,347
17	TND982078529	EKCO/GLACO INCORPORATED	HUMBOLDT	2,054
18	TND045499035	AMANA REFRIGERATION, INC.	FAYETTEVILLE	1,688
19	TND061314803	VELSICOL CHEMICAL CORP	CHATTANOOGA	1,390
20	TND066723263	DAVIS PIPE AND METAL FABRICATORS, INC.	BLOUNTVILLE	1,251
21	TND000614321	TRICIL ENVIRONMENTAL MANAGEMENT INC	MILLINGTON	1,237
22	TND003337292	OLIN CORPORATION - CHARLESTON PLANT	CHARLESTON	1,153
23	TND120603170	QO CHEMICALS INC	MEMPHIS	1,119
24	TND003374790	BRISTOL METALS, INC.	BRISTOL	1,090
25	TND980840524	GREAT LAKES CHEMICAL CORPORATION	NEWPORT	978
26	TND004044780	MURRAY OHIO MANUFACTURING CO.	LAWRENCEBURG	927
27	TND003329083	BROWN GALVANIZING CORPORATION	CHATTANOOGA	901
28	TND991279480	AMERICAN RESOURCE RECOVERY CORPORATION	MEMPHIS	863
29	TND007022072	HARMAN AUTOMOTIVE, INC	BOLIVAR	848
30	TND003327400	SOUTHERN WOOD PIEDMONT COMPANY	CHATTANOOGA	821
31	TND004048690	GENERAL SMELTING & REFINING, INC.	COLLEGE GROVE	706
32	TND981023674	TENNESSEE VALLEY PERFORMANCE PRODUCTS IN	DAYTON	687
33	TND008041717	BOYLES GALVANIZING CO	NASHVILLE	685
34	TND054481205	NISSAN MOTOR MANUFACTURING CORPORATION,	SMYRA	672
35	TN3640031156	TVA HARTSVILLE DISTRIBUTION CENTER	HARTSVILLE	635
36	TND002958817	MODINE MANUFACTURING COMPANY	CLINTON	623
37	TND175237536	CALSONIC YOROZU CORPORATION	MORRISON	620
38	TND074893777	U.S. PIPE & FOUNDRY CO-SOIL PIPE PLANT	CHATTANOOGA	610
39	TND004042057	TEXTRON AEROSTRUCTURES	NASHVILLE	590
40	TND073544314	JEHL COOPERAGE CO., INC.	MEMPHIS	523

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TENNESSEE

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	TND003376928 TENN EASTMAN CO, DIV OF EASTMAN KODAK, KINGSPORT					32,580,
	AQUEOUS ORGANIC TREATMENT	M081-M089	32,558,746	21,806	32,580,552	
	INVALID SYSTEM TYPE		0	60	60	
2	TND004044491 EI DUPONT DE NEMOURS & CO., NEW JOHNSONVILLE					1,583,
	UNDERGROUND INJECTION	M134	1,583,784	0	1,583,784	
3	TND095050019 YALE SECURITY INC., LENOIR CITY					99,
	OTHER TREATMENT	M121-M129	62,413	37,532	99,945	
4	TND980515779 OSCO TREATMENT SYSTEMS, COLUMBIA					70,
	OTHER TREATMENT	M121-M129	49,368	21,191	70,559	
5	TND981747116 CAVALIER METAL CORPORATION, MCKENZIE					30
	INVALID SYSTEM TYPE		30,922	58	30,980	
6	TN3890090001 U.S. DOE Y-12 PLANT, OAK RIDGE					29
	OTHER TREATMENT	M121-M129	29,614	0	29,614	
7	TND067690040 REFINED METALS CORPORATION, MEMPHIS					21
	OTHER TREATMENT	M121-M129	21,781	0	21,781	
8	TN0890090004 UNITED STATES DEPT OF ENERGY K-25 SITE, OAK RIDGE					21
	OTHER TREATMENT	M121-M129	21,573	0	21,573	
	INVALID SYSTEM TYPE		0	9	9	
9	TND004048690 GENERAL SMELTING & REFINING, INC., COLLEGE GROVE					16
	OTHER TREATMENT	M121-M129	8,354	7,649	16,003	
10	TND991279480 AMERICAN RESOURCE RECOVERY CORPORATION, MEMPHIS					14
	OTHER TREATMENT	M121-M129	7,666	6,803	14,469	
11	TND000614321 TRICIL ENVIRONMENTAL MANAGEMENT INC., MILLINGTON					1
	OTHER TREATMENT	M121-M129	6,610	5,372	11,982	
12	TN0210020582 MILAN ARMY AMMUNITION PLANT, MILAN					11
	INVALID SYSTEM TYPE		11,296	0	11,296	
13	TND034547141 LAIDLAW ENVIRONMENTAL SERVICES (GS), INC., ATHENS					8
	OTHER TREATMENT	M121-M129	4,362	3,890	8,252	
14	TND981920119 ALLWORTH, INC., COLUMBIA					
	OTHER TREATMENT	M121-M129	4,074	3,602	7,676	
15	TND000645770 GSX SERVICES INC., TENNESSEE					
	OTHER TREATMENT	M121-M129	0	4,415	4,415	
16	TND002992287 FLORIDA STEEL CORP (WEST TN PLANT), JACKSON					3
	INVALID SYSTEM TYPE		0	3,871	3,871	
17	TND980847024 WALL CHEMICAL INC., TENNESSEE					
	OTHER TREATMENT	M121-M129	0	3,157	3,157	
18	TND007024664 VELSICOL CHEMICAL, MEMPHIS					2
	OTHER TREATMENT	M121-M129	2,347	0	2,347	
19	TND061314803 VELSICOL CHEMICAL CORP., CHATTANOOGA					
	OTHER TREATMENT	M121-M129	1,389	0	1,389	
20	TND003337292 OLIN CORPORATION - CHARLESTON PLANT, CHARLESTON					
	OTHER TREATMENT	M121-M129	1,153	0	1,153	
	INVALID SYSTEM TYPE		0	4	4	
21	TND120603170 QO CHEMICALS INC., MEMPHIS					
	INVALID SYSTEM TYPE		1,119	3	1,122	
22	TND981474125 SAFETY-KLEEN CORP., NASHVILLE					
	OTHER TREATMENT	M121-M129	0	771	771	
23	TND079025698 SAFETY-KLEEN CORP., KNOXVILLE					
	OTHER TREATMENT	M121-M129	0	676	676	

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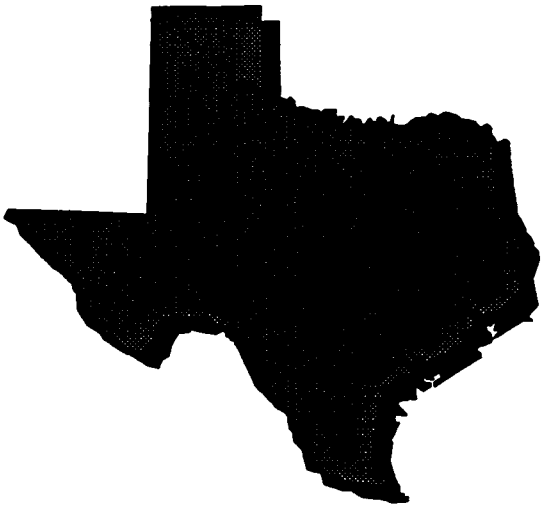
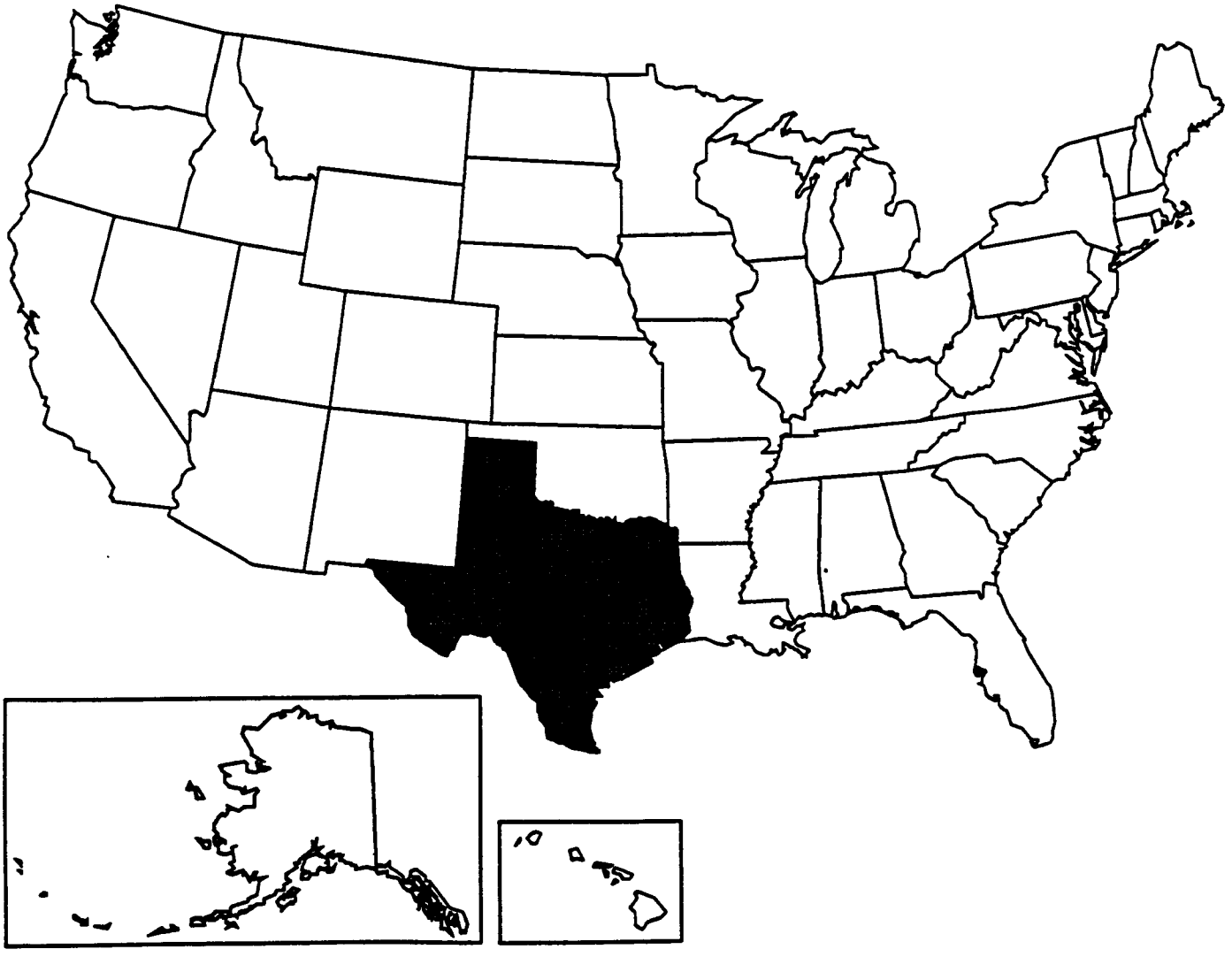
1 Quantity managed by storage only is not included.

Texas

Region VI





TEXAS

EPA Region Address:	U.S. EPA Region VI RCRA Programs Branch Mail Stop 6H-H 1445 Ross Avenue Dallas, TX 75202
Biennial Report Data Collection Instrument:	State-specific annual report and Cusotmized EPA Waste Minimization Report
Address of Participating State Environmental Authority	Reports Management Team Waste Evaluation Section Industrial and Hazardous Waste Division Texas Water Commission Post Office Box 13087 Capitol Station Austin, TX 78711-3087
Contact Name:	Ms. Patricia A. Peterson Research Specialist
Phone:	(512) 371-6385

Notes: No special notes for Texas.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

TENNESSEE

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
24	TND096070396 ROSS METALS, INC., ROSSVILLE					609
	OTHER TREATMENT	M121-M129	607	0	607	
	INVALID SYSTEM TYPE		0	1	1	
25	TND003381225 HURD LOCK & MFG COMPANY, GREENVILLE					543
	OTHER TREATMENT	M121-M129	511	0	511	
	INVALID SYSTEM TYPE		0	33	33	
26	TND981027410 SAFETY-KLEEN CORP., DYERSBURG					490
	OTHER TREATMENT	M121-M129	0	490	490	
27	TND034818732 PAULO PRODUCTS COMPANY, MURFREESBORO					454
	INVALID SYSTEM TYPE		0	454	454	
28	TND095686473 HOEGANAES CORPORATION, GALLATIN PLANT, GALLATIN					427
	OTHER TREATMENT	M121-M129	427	0	427	
29	TND980600480 HOLLEY REPLACEMENT PARTS DIVISION, SPRINGFIELD					378
	INVALID SYSTEM TYPE		0	215	215	
	OTHER TREATMENT	M121-M129	164	0	164	
30	TND000648527 DURACELL U.S.A., CLEVELAND					332
	INVALID SYSTEM TYPE		0	331	331	
	OTHER TREATMENT	M121-M129	1	0	1	
31	TND007024672 E I DUPONT DE NEMOURS & CO INC., MEMPHIS					285
	OTHER TREATMENT	M121-M129	258	23	282	
	INVALID SYSTEM TYPE		0	4	4	
32	TND044204568 MARLOCK INC., MAYNARDVILLE					273
	OTHER TREATMENT	M121-M129	273	0	273	
33	TN5210020421 HOLSTON ARMY AMMUNITION PLANT, KINGSPORT					263
	OTHER TREATMENT	M121-M129	263	0	263	
34	TND004047049 HEIL-QUAKER CORPORATION, LEWISBURG					242
	INVALID SYSTEM TYPE		0	242	242	
35	TN8570024044 ARNOLD ENGINEERING DEVELOPMENT CENTER, ARNOLD AIR FORCE STATION					163
	OTHER TREATMENT	M121-M129	163	0	163	
36	TND048319644 ASHLAND CHEMICAL, INC., MEMPHIS					154
	OTHER TREATMENT	M121-M129	94	58	153	
	INVALID SYSTEM TYPE		0	2	2	
37	TND101768182 CALSONIC MANUFACTURING CORP., SHELBYVILLE					145
	INVALID SYSTEM TYPE		0	145	145	
38	TND093153450 WHIRLPOOL CORPORATION, LA VERGNE					122
	INVALID SYSTEM TYPE		0	121	121	
	OTHER TREATMENT	M121-M129	1	0	1	
39	TND991279233 INTERNATIONAL LABEL CO., CLARKSVILLE					121
	OTHER TREATMENT	M121-M129	121	0	121	
40	TND003375748 ARCATA GRAPHICS/KINGSPORT, KINGSPORT					116
	INVALID SYSTEM TYPE		0	61	61	
	OTHER TREATMENT	M121-M129	55	0	55	

Quantity managed by storage only is not included.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TEXAS

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	1,575
Total Quantity of Regulated Waste Generated:	28,171,860 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	91
Facilities managing only waste generated off site	20
Facilities managing waste generated both on and off site	17
Total RCRA TSD Facilities (excluding storage-only facilities):	128
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	27,788,963 tons
Total RCRA TSD Facilities:	304

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	4	611,520	781	612,301	2.2
SOLVENTS RECOVERY	M021-M029	20	29,101	39,412	68,513	.2
INCINERATION	M041-M049	24	458,759	63,063	521,822	1.9
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	28	390,088	117,233	507,321	1.8
FUEL BLENDING	M061	5	1,874	23,829	25,703	.1
AQUEOUS INORGANIC TREATMENT	M071-M079	14	477,580	8,195	485,775	1.7
AQUEOUS ORGANIC TREATMENT	M081-M089	6	11,381,022	6,724	11,387,746	41.0
OTHER TREATMENT	M121-M129	51	1,419,186	3,593	1,422,779	5.1
LAND TREATMENT	M131	13	478,710	10,509	489,219	1.8
LANDFILL	M132	20	27,858	24,533	52,391	.2
SURFACE IMPOUNDMENT	M133	2	20,643	0	20,643	.1
UNDERGROUND INJECTION	M134	26	11,868,199	326,550	12,194,749	43.9
OTHER DISPOSAL	M137	1	1	0	1	.0
TOTAL		128	27,164,541	624,422	27,788,963	100.0
PERCENTAGE		-	97.8 %	2.2 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TEXAS

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	37,095
AR	10,790
AZ	748
CA	18,715
CO	4,599
CT	230
DE	24
FC	57
FL	156
GA	643
HI	122
IA	455
ID	1
IL	4,279
IN	124
KS	1,475
KY	794
LA	83,632
MA	55
MD	34
ME	20
MI	1,122
MN	53
MO	841
MS	4,199
NC	50
ND	533
NE	496
NJ	779
NM	1,757
NV	30
NY	517
OH	1,488
OK	8,709
OR	15
PA	1,526
PR	162
RI	60
SC	214
TN	1,466
UT	306
VA	125
WA	912
WI	17
WV	89
WY	62
TOTAL	189,576

Exports

State	Tons shipped
AL	1,827
AR	10,042
AZ	714
CA	334
FC	14,065
FL	113
GA	51
IL	18,019
IN	274
KS	5,288
KY	5,186
LA	209,414
MD	3
MI	28
MN	436
MO	1,985
MS	291
NE	90
NJ	258
NM	16
NV	257
NY	3
OH	1,985
OK	12,550
PA	12,136
SC	89
TN	615
UT	249
VA	642
VT	3
WI	87
WV	1,346
TOTAL	298,396

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TEXAS

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MOMX*	8,018,831	28.5
2	K048	7,969,252	28.3
3	D002	5,291,260	18.8
4	DOMX*	2,282,040	8.1
5	KOMX*	1,804,678	6.4
6	D007	1,104,365	3.9
7	K009	469,006	1.7
8	D001	445,955	1.6
9	D004	245,277	.9
10	RCRA	107,206	.4
11	K061	65,385	.2
12	D003	64,356	.2
13	FOMX*	44,244	.2
14	K049	40,787	.1
15	K051	32,498	.1
16	D008	22,515	.1
17	K112	22,288	.1
18	F002	21,848	.1
19	D010	20,488	.1
20	K027	13,332	.0
21	K017	10,897	.0
22	UOMX*	9,299	.0
23	K022	9,197	.0
24	K088	7,564	.0
25	K062	7,295	.0
26	F006	6,713	.0
27	F005	5,950	.0
28	K010	5,910	.0
29	K031	4,016	.0
30	U019	2,264	.0
31	F003	1,763	.0
32	P063	1,676	.0
33	K047	1,480	.0
34	U001	1,425	.0
35	U081	1,212	.0
36	K083	1,167	.0
37	F001	968	.0
38	K050	647	.0
39	D006	635	.0
40	K001	632	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TEXAS

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D007	611,499
		RCRA	790
		F006	9
		MOMX*	3
SOLVENTS RECOVERY	M021-M029	RCRA	43,664
		D001	18,417
		MOMX*	5,736
		D008	590
INCINERATION	M041-M049	MOMX*	264,690
		DOMX*	147,207
		RCRA	54,557
		D001	27,585
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	D001	195,634
		RCRA	148,140
		MOMX*	106,920
		DOMX*	30,529
FUEL BLENDING	M061	RCRA	23,806
		MOMX*	1,869
		D001	23
		DOMX*	2
AQUEOUS INORGANIC TREATMENT	M071-M079	KOMX*	361,600
		D007	63,445
		DOMX*	33,197
		D003	19,129
AQUEOUS ORGANIC TREATMENT	M081-M089	K048	7,808,800
		MOMX*	3,571,884
		RCRA	6,820
		D001	151
OTHER TREATMENT	M121-M129	D002	522,725
		DOMX*	389,379
		D004	233,248
		K048	116,540
LAND TREATMENT	M131	D007	354,432
		D002	87,259
		K049	21,256
		RCRA	11,323
LANDFILL	M132	RCRA	23,861
		K061	7,632
		MOMX*	5,644
		UOMX*	4,163
SURFACE IMPOUNDMENT	M133	D002	17,322
		KOMX*	3,216
		DOMX*	92
		D001	13

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

TEXAS

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management, 1989 (continued)

Management Method	Code	Waste Type	Quantity Managed in State (tons)
UNDERGROUND INJECTION	M134	D002	4,422,410
		MOMX*	4,013,771
		DOMX*	1,568,724
		KOMX*	1,369,324
OTHER DISPOSAL	M137	RCRA	1
TOTAL			27,788,963

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

TEXAS

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	TXD067285973	SHELL OIL CO DEER PARK COMPLEX	DEER PARK	7,840,363
02	TXD007330202	TEXAS EASTMAN COMPANY	LONGVIEW	4,507,313
03	TXD008123317	E I DUPONT DE NEMOURS	VICTORIA	3,635,042
04	TXD001700806	MONSANTO CO	ALVIN	2,070,731
05	TXD008079642	E I DUPONT DE NEMOURS	ORANGE	1,474,980
06	TXD008081101	E I DUPONT DE NEMOURS	BEAUMONT	1,381,919
07	TXD008079527	STERLING CHEM INC	TEXAS CITY	1,087,761
08	TXD083472266	ARCO CHEMICAL COMPANY (CHANNELVIEW)	CHANNELVIEW	721,081
09	TXD000751172	BP CHEMICALS INC	GREEN LAKE	655,317
10	TXD007376700	HOECHST CELANESE CHEMICAL GROUP, INC.	PAMPA	490,072
11	TXD026040709	HOECHST CELANESE CHEMICAL GROUP, INC.	BAY CITY	484,001
12	TXD078432457	HOECHST CELANESE CHEMICAL GROUP, INC.	PASADENA	461,456
13	TXD044452324	GAF CORPORATION TEXAS CITY	TEXAS CITY	418,341
14	TXD026481523	GATX TERMINALS CORPORATION	GALENA PARK	291,991
15	TXD000836486	ISK BIOTECH CORP	HOUSTON	275,941
16	TXD058275769	LYONDELL PETROCHEMICAL COMPANY	CHANNELVIEW	198,970
17	TXD990797714	MOBIL OIL CORP	BEAUMONT	142,401
18	TXD008079212	E I DUPONT DE NEMOURS	LAPORTE	116,174
19	TXD008092793	DOW CHEMICAL CO	FREEPORT	100,570
20	TXD097673149	EMPAK INC DEER PARK	DEER PARK	95,871
21	TXD008081697	BASF INMONT CORP	FREEPORT	95,867
22	TXD007365984	E-SYSTEMS INC	GREENVILLE	95,622
23	TXD069450997	MOTOROLA INC	AUSTIN	81,047
24	TXD008097487	OLIN CORPORATION	BEAUMONT	77,200
25	TXD057401614	ENDERBY-ANDERSON CO#	GAINESVILLE	69,013
26	TXD058265067	ARCO CHEMICAL CO	PASADENA	67,083
27	TX8800016125	US NASA LBJ SPACE CTR	HOUSTON	67,014
28	TXD049213127	WITCO CHEMICAL CORP	MARSHALL	63,483
29	TXD055141378	ROLLINS ENVIRONMENTAL SERVICES TX INC	DEER PARK	57,083
30	TXD000742304	GIBRALTER CHEMICAL RESOURCES, INC.	WINONA	49,936
31	TXD058260977	MOBAY CORPORATION	BAYTOWN	49,593
32	TXD056365760	WEAVER MFG CO INC	LEWISVILLE	29,994
33	TXD066362559	CHAPARRAL STEEL CO	MIDLOTHIAN	29,252
34	TXD099799074	ALLWASTE TANK CLEANING INC	LAPORTE	27,585
35	TXD059685339	DIAMOND SHAMROCK CORP MCKEE PLANTS	SUNRAY	26,752
36	TX2571724333	US AIR FORCE KELLY AFB	SAN ANTONIO	26,103
37	TXD008132268	COASTAL REFINING AND MARKETING INC	CORPUS CHRISTI	26,003
38	TXD981917024	OCCIDENTAL CHEM CORP	VICTORIA	24,782
39	TXD000747345	ROHM AND HAAS BAYPORT INC	LAPORTE	23,896
40	TXD980625990	AMOCO OIL CO	TEXAS CITY	21,944

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TEXAS

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
1	TXD067285973 SHELL OIL CO DEER PARK COMPLEX, DEER PARK					7,824,186
	AQUEOUS ORGANIC TREATMENT	M081-M089	7,809,087	0	7,809,087	
	INCINERATION	M041-M049	7,793	0	7,793	
	UNDERGROUND INJECTION	M134	4,975	0	4,975	
	LANDFILL	M132	2,331	0	2,331	
2	TXD007330202 TEXAS EASTMAN COMPANY, LONGVIEW					4,507,408
	AQUEOUS ORGANIC TREATMENT	M081-M089	3,467,464	104	3,467,568	
	METALS RECOVERY (FOR REUSE)	M011-M019	611,499	0	611,499	
	AQUEOUS INORGANIC TREATMENT	M071-M079	394,477	0	394,477	
	SOLVENTS RECOVERY	M021-M029	18,300	0	18,300	
	INCINERATION	M041-M049	14,271	16	14,287	
	LANDFILL	M132	1,277	0	1,277	
3	TXD008123317 E I DUPONT DE NEMOURS, VICTORIA					3,635,830
	UNDERGROUND INJECTION	M134	3,632,939	0	3,632,939	
	LANDFILL	M132	2,090	727	2,817	
	AQUEOUS INORGANIC TREATMENT	M071-M079	48	0	48	
	OTHER TREATMENT	M121-M129	26	0	26	
4	TXD001700806 MONSANTO CO., ALVIN					2,070,771
	UNDERGROUND INJECTION	M134	2,061,377	0	2,061,377	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	7,344	0	7,344	
	LANDFILL	M132	2,050	0	2,050	
5	TXD008079642 E I DUPONT DE NEMOURS, ORANGE					1,469,252
	UNDERGROUND INJECTION	M134	1,469,252	0	1,469,252	
6	TXD008081101 E I DUPONT DE NEMOURS, BEAUMONT					1,376,465
	UNDERGROUND INJECTION	M134	1,369,324	0	1,369,324	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	4,260	0	4,260	
	INCINERATION	M041-M049	2,881	0	2,881	
7	TXD008079527 STERLING CHEM INC., TEXAS CITY					1,063,240
	UNDERGROUND INJECTION	M134	1,062,766	0	1,062,766	
	INCINERATION	M041-M049	474	0	474	
8	TXD083472266 ARCO CHEMICAL COMPANY (CHANNELVIEW), CHANNELVIEW					894,206
	UNDERGROUND INJECTION	M134	706,006	31,547	737,553	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	96,248	60,405	156,653	
9	TXD000751172 BP CHEMICALS INC., GREEN LAKE					654,819
	UNDERGROUND INJECTION	M134	652,911	0	652,911	
	LANDFILL	M132	1,022	0	1,022	
	OTHER TREATMENT	M121-M129	886	0	886	
10	TXD007376700 HOECHST CELANESE CHEMICAL GROUP, INC., PAMPA					489,627
	LAND TREATMENT	M131	441,627	0	441,627	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	30,285	0	30,285	
	SURFACE IMPOUNDMENT	M133	17,322	0	17,322	
	INCINERATION	M041-M049	393	0	393	
11	TXD026040709 HOECHST CELANESE CHEMICAL GROUP, INC., BAY CITY					483,656
	UNDERGROUND INJECTION	M134	477,806	0	477,806	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	5,765	0	5,765	
	LANDFILL	M132	85	0	85	
12	TXD078432457 HOECHST CELANESE CHEMICAL GROUP, INC., PASADENA					427,227
	UNDERGROUND INJECTION	M134	216,211	0	216,211	
	INCINERATION	M041-M049	205,403	0	205,403	
	SOLVENTS RECOVERY	M021-M029	5,589	0	5,589	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	24	0	24	

uantity managed by storage only is not included.

TEXAS

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
13	TXD044452324 GAF CORPORATION TEXAS CITY, TEXAS CITY					327,
	OTHER TREATMENT	M121-M129	327,001	0	327,001	
	UNDERGROUND INJECTION	M134	16	0	16	
14	TXD026481523 GATX TERMINALS CORPORATION, GALENA PARK					291,
	OTHER TREATMENT	M121-M129	291,942	0	291,942	
15	TXD000836486 ISK BIOTECH CORP., HOUSTON					261,
	OTHER TREATMENT	M121-M129	242,068	0	242,068	
	AQUEOUS INORGANIC TREATMENT	M071-M079	19,129	0	19,129	
16	TXD058275769 LYONDELL PETROCHEMICAL COMPANY, CHANNELVIEW					165,
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	165,726	0	165,726	
17	TXD097673149 EMPAK INC DEER PARK, DEER PARK					135,
	UNDERGROUND INJECTION	M134	84,248	47,772	132,020	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	3,890	3,890	
18	TXD990797714 MOBIL OIL CORP., BEAUMONT					126,
	OTHER TREATMENT	M121-M129	126,113	0	126,113	
	LANDFILL	M132	1	0	1	
19	TXD008079212 E I DUPONT DE NEMOURS, LAPORTE				112,932	
	INCINERATION	M041-M049	60,498	0	60,498	
	OTHER TREATMENT	M121-M129	52,434	0	52,434	
20	TXD000838896 CHEMICAL WASTE MGMT., PORT ARTHUR					111
	UNDERGROUND INJECTION	M134	10,698	100,454	111,152	
21	TXD069450278 HOECHST CELANESE CORP., CORPUS CHRISTI					102
	AQUEOUS ORGANIC TREATMENT	M081-M089	102,070	0	102,070	
22	TXD008092793 DOW CHEMICAL CO., FREEPORT					100
	INCINERATION	M041-M049	82,669	656	83,325	
	OTHER TREATMENT	M121-M129	12,712	0	12,712	
	LANDFILL	M132	2,132	331	2,463	
	AQUEOUS ORGANIC TREATMENT	M081-M089	2,401	0	2,401	
23	TXD007365984 E-SYSTEMS INC., GREENVILLE					95
	OTHER TREATMENT	M121-M129	95,410	0	95,410	
24	TXD069450997 MOTOROLA INC., AUSTIN					77
	OTHER TREATMENT	M121-M129	77,197	0	77,197	
25	TXD008097487 OLIN CORPORATION, BEAUMONT					77
	OTHER TREATMENT	M121-M129	77,169	0	77,169	
26	TXD000719518 DISPOSAL SYSTEMS INC., DEER PARK					74
	UNDERGROUND INJECTION	M134	0	65,665	65,665	
	OTHER TREATMENT	M121-M129	0	3,372	3,372	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	2,730	2,730	
	SOLVENTS RECOVERY	M021-M029	0	2,223	2,223	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	375	375	
27	TXD000742304 GIBRALTER CHEMICAL RESOURCES, INC., WINONA					7:
	UNDERGROUND INJECTION	M134	14,445	39,542	53,987	
	FUEL BLENDING	M061	1,820	12,900	14,720	
	SOLVENTS RECOVERY	M021-M029	0	3,496	3,496	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	1,432	1,432	
28	TXD008081697 BASF INMONT CORP., FREEPORT					6
	INCINERATION	M041-M049	65,415	0	65,415	
	UNDERGROUND INJECTION	M134	2,061	0	2,061	
29	TXD049213127 WITCO CHEMICAL CORP., MARSHALL					6
	UNDERGROUND INJECTION	M134	63,452	0	63,452	

1 Quantity managed by storage only is not included.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TEXAS

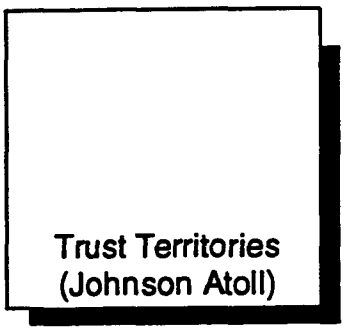
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

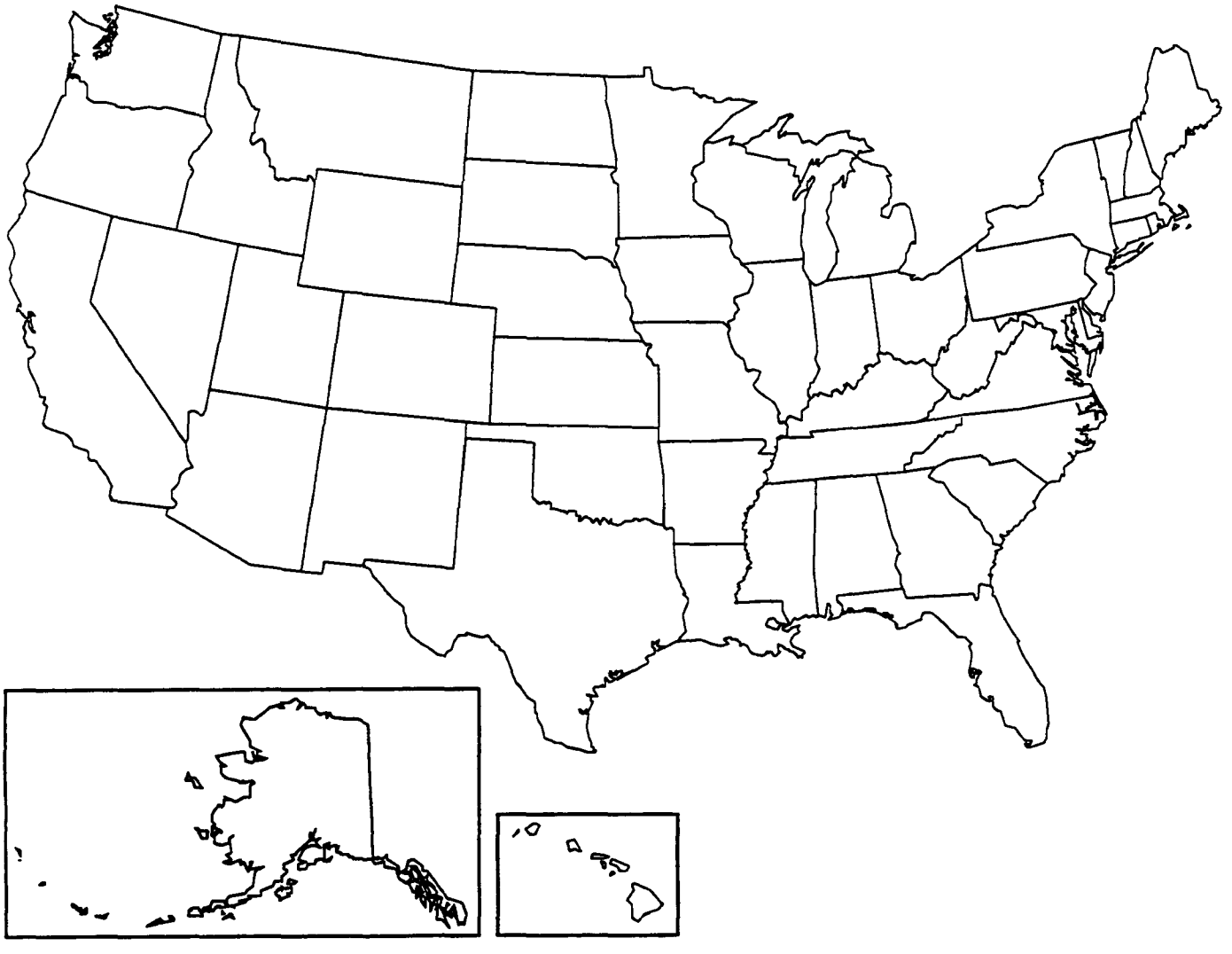
Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
30	TX8800016125 US NASA LBJ SPACE CTR, HOUSTON					62,755
	AQUEOUS INORGANIC TREATMENT	M071-M079	62,755	0	62,755	
31	TXD055141378 ROLLINS ENVIRONMENTAL SERVICES TX INC., DEER PARK					56,265
	INCINERATION	M041-M049	0	52,167	52,167	
	LANDFILL	M132	0	4,093	4,093	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	5	5	
32	TXD007926496 NORTH TX CEMENT CO., MIDLOTHIAN					55,040
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	55,040	55,040	
33	TXD007349327 TEXAS INDUSTRIES INC., MIDLOTHIAN					28,686
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	28,686	0	28,686	
34	TXD000761254 CHEMICAL WASTE MGT OF CORPUS CHRISTI, CORPUS CHRISTI					28,650
	UNDERGROUND INJECTION	M134	1,999	26,651	28,650	
35	TXD008113441 CELANESE ENGINEERING RESINS, BISHOP					26,890
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	11,397	0	11,397	
	OTHER TREATMENT	M121-M129	6,994	0	6,994	
	LANDFILL	M132	4,986	0	4,986	
	UNDERGROUND INJECTION	M134	3,513	0	3,513	
36	TXD059685339 DIAMOND SHAMROCK CORP MCKEE PLANTS, SUNRAY					26,723
	OTHER TREATMENT	M121-M129	24,432	0	24,432	
	LAND TREATMENT	M131	2,291	0	2,291	
37	TXD077603371 SAFETY-KLEEN CORP DENTON, DENTON					26,401
	SOLVENTS RECOVERY	M021-M029	0	26,401	26,401	
38	TXD008132268 COASTAL REFINING AND MARKETING INC., CORPUS CHRISTI					25,716
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	25,716	0	25,716	
39	TXD000747345 ROHM AND HAAS BAYPORT INC., LAPORTE					23,398
	OTHER TREATMENT	M121-M129	23,398	0	23,398	
40	TXD069452340 TEXAS ECOLOGISTS INC., ROBSTOWN					18,665
	LANDFILL	M132	0	18,665	18,665	

Quantity managed by storage only is not included.

Trust Territories

Region IX





TRUST TERRITORIES

EPA Region Address:	U.S. EPA Region IX RCRA Branch Mail Stop H-31 1235 Mission Street San Francisco, CA 94103
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State	U.S. Environmental Protection Agency, Region IX 75 Hawthorne Street, H-3-4 San Francisco, CA 94105
Contact Name:	Ms. Rebecca Smith Region IX Coordinator
Phone:	(415) 744-2050

Notes: No special notes for Trust Territories.

National Biennial RCRA Hazardous Waste Report
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TRUST TERRITORIES

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	2
Total Quantity of Regulated Waste Generated:	23 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	1
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	1
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	2 tons
Total RCRA TSD Facilities:	2

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
INVALID SYSTEM TYPE		1	0	2	2	100.0
TOTAL		1	0	2	2	100.0
PERCENTAGE		-	.0 %	100.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TRUST TERRITORIES

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports		Exports	
State	Tons Received	State	Tons shipped
UT	2	HI	24
TOTAL	2	TOTAL	24

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TRUST TERRITORIES

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D003	8	34.9
2	F002	4	16.0
3	D001	3	14.2
4	F005	3	12.5
5	MOMX*	3	11.2
6	F003	2	9.9
7	U125	0	1.3
8	D002	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TRUST TERRITORIES

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
INVALID SYSTEM TYPE		D003	2
TOTAL			2

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TRUST TERRITORIES

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	TT0570090001	JOHNSTON ATOLL CHEMICAL AGENT DISP. SYS.	APO SAN FRANCISCO	20
02	TT9570090002	FIELD COMMAND DEFENSE NUCLEAR AGENCY	APO SAN FRANCISCO	3

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

TRUST TERRITORIES

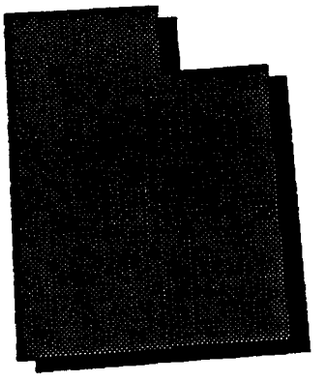
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

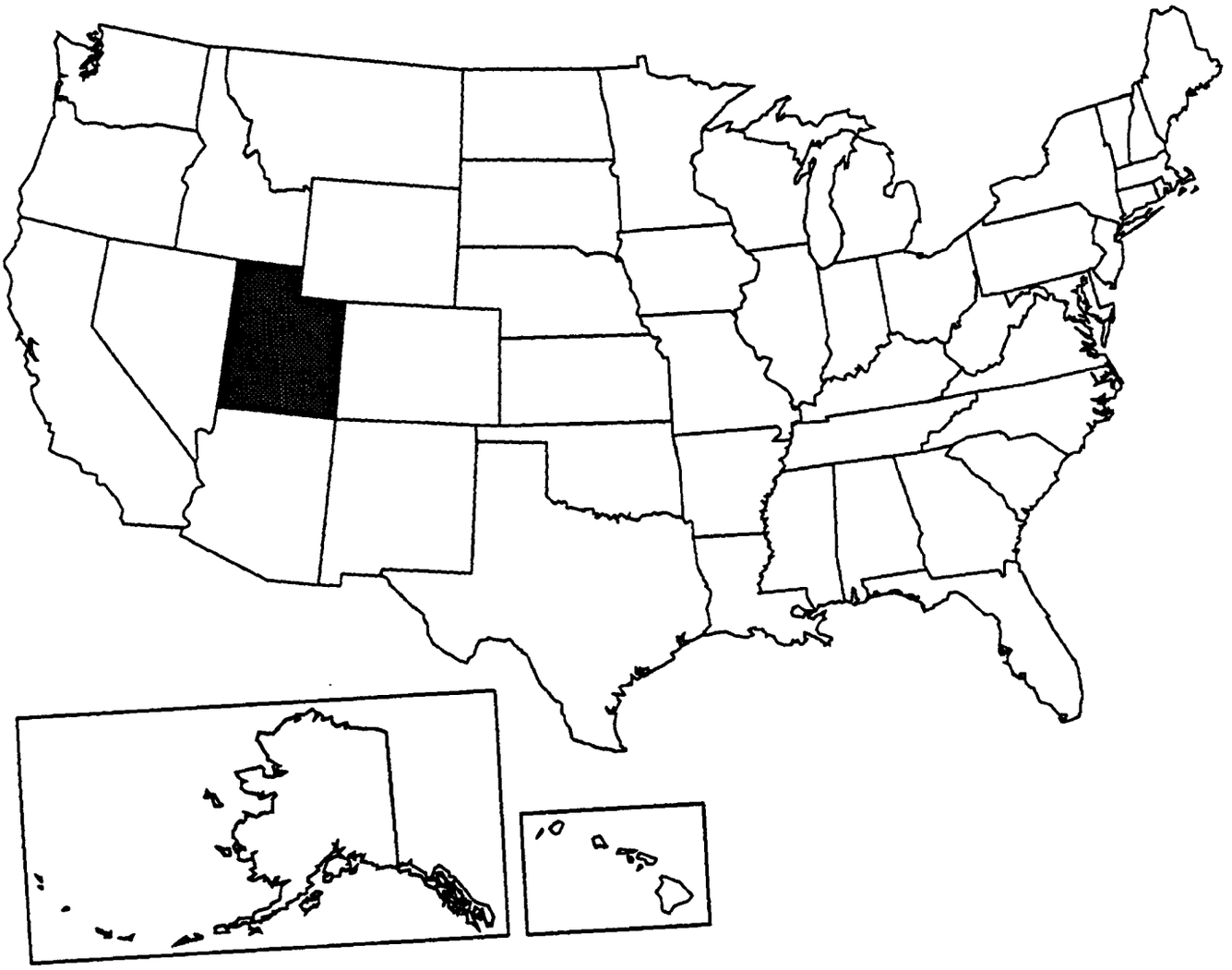
Rank	EPA ID	Site Name, City				Tot Manag
	Management Method		On Site	Off Site	Method Total	
1	TT0570090001	JOHNSTON ATOLL CHEMICAL AGENT DISP. SYS., APO SAN FRANCISCO				
	INVALID SYSTEM TYPE		0	2	2	

1 Quantity managed by storage only is not included.

Utah

Region VIII





UTAH

EPA Region Address:	U.S. EPA Region VIII Hazardous Waste Management Division Mail Stop HWM-RI 999 18th Street, Suite 500 Denver, CO 80202
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Bureau of Solid and Hazardous Waste Department of Environmental Quality 288 North 1460 West Post Office Box 144880 Salt Lake City, UT 84116-4880
Contact Name:	Mr. Kurt Nelson Biennial Report Coordinator
Phone:	(801) 538-6170

Notes: No special notes for Utah.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

UTAH

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	85
Total Quantity of Regulated Waste Generated:	211,563 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	7
Facilities managing only waste generated off site	4
Facilities managing waste generated both on and off site	3
Total RCRA TSD Facilities (excluding storage-only facilities):	14
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	258,227 tons
Total RCRA TSD Facilities:	34

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	1	0	32	32	.0
SOLVENTS RECOVERY	M021-M029	4	23	93	116	.0
OTHER RECOVERY	M031-M039	1	0	43	43	.0
INCINERATION	M041-M049	4	365	29	394	.2
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2	3,640	0	3,640	1.4
FUEL BLENDING	M061	1	0	82	82	.0
AQUEOUS INORGANIC TREATMENT	M071-M079	1	0	0	1	.0
AQUEOUS ORGANIC TREATMENT	M081-M089	2	168,664	0	168,664	65.3
STABILIZATION	M111-M119	1	4,101	19,932	24,034	9.3
OTHER TREATMENT	M121-M129	6	10,457	9,774	20,231	7.8
LAND TREATMENT	M131	1	0	358	358	.1
LANDFILL	M132	2	6,886	33,695	40,581	15.7
INVALID SYSTEM TYPE		3	0	53	53	.0
TOTAL		14	194,135	64,092	258,227	100.0
PERCENTAGE		-	75.2 %	24.8 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

UTAH

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AK	866
AL	0
AR	12
AZ	859
CA	33,897
CO	2,800
FL	2
GA	28
ID	182
IL	25
KS	26
KY	0
MD	0
ME	3
MO	377
MT	612
NC	132
ND	104
NE	2
NH	0
NJ	5
NM	906
NV	236
OH	1,993
OR	258
SC	8
TN	20
TX	210
WA	418
WY	2,655
TOTAL	46,639

Exports

State	Tons Shipped
AR	177
AS	0
AZ	381
CA	2,443
CO	431
DE	135
FC	99
ID	1,447
IL	323
KS	370
LA	12
MN	20
MO	10
NE	149
NV	94
OK	14
PA	72
TX	327
WA	0
TOTAL	6,505

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

UTAH

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	M0MX*	171,566	81.1
2	K044	8,938	4.2
3	D0MX*	8,860	4.2
4	K051	7,888	3.7
5	K087	3,638	1.7
6	D003	1,817	.9
7	D001	1,631	.8
8	D002	1,521	.7
9	F0MX*	1,332	.6
10	K0MX*	1,249	.6
11	D004	850	.4
12	D007	671	.3
13	D006	494	.2
14	F001	297	.1
15	F006	256	.1
16	F002	131	.1
17	D008	118	.1
18	U051	94	.0
19	F003	59	.0
20	K052	40	.0
21	K050	36	.0
22	U122	21	.0
23	U133	15	.0
24	K048	9	.0
25	K047	8	.0
26	F005	8	.0
27	D009	5	.0
28	U036	4	.0
29	K062	4	.0
30	F007	1	.0
31	U226	1	.0
32	U0MX*	1	.0
33	U160	0	.0
34	U069	0	.0
35	U223	0	.0
36	U136	0	.0
37	U129	0	.0
38	U037	0	.0
39	P042	0	.0
40	U080	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

UTAH

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D0MX*	27
		D002	5
		D008	0
SOLVENTS RECOVERY	M021-M029	F0MX*	84
		F001	22
		D001	4
		F003	3
OTHER RECOVERY	M031-M039	F002	21
		F001	19
		M0MX*	1
		F003	1
INCINERATION	M041-M049	D003	365
		F0MX*	16
		F003	13
		D001	0
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	K087	3,638
		D001	2
FUEL BLENDING	M061	F0MX*	63
		D001	8
		F005	6
		F003	5
AQUEOUS INORGANIC TREATMENT	M071-M079	M0MX*	0
		D0MX*	0
AQUEOUS ORGANIC TREATMENT	M081-M089	M0MX*	168,655
		K047	8
STABILIZATION	M111-M119	M0MX*	18,675
		D0MX*	3,781
		K0MX*	1,147
		D001	393
OTHER TREATMENT	M121-M129	K044	8,828
		M0MX*	6,702
		D003	3,312
		D0MX*	861
LAND TREATMENT	M131	M0MX*	358
LANDFILL	M132	M0MX*	31,089
		D0MX*	8,526
		K0MX*	397
		D001	376
INVALID SYSTEM TYPE		M0MX*	43
		D003	8
		D001	1
		D007	0
TOTAL			258,227

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

UTAH

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	UT3213820894	TOOELE ARMY DEPOT NORTH AREA	TOOELE	169,949
02	UTD009081357	THIOKOL CORPORATION UTAH BASED OPER.	PROMONTORY	10,230
03	UTD045267127	BIG WEST OIL CO./FLYING J INC.	NORTH SALT LAKE	7,275
04	UTD991301748	U.S. POLLUTION CONTROL, INC. GRASSY MTN.	TOOELE COUNTY	6,904
05	UTD009086133	GENEVA STEEL	OREM	3,673
06	UTD571724350	HILL AIR FORCE BASE	HILL AIR FORCE BASE	2,244
07	UTD001705029	BACCHUS WORKS, HERCULES INC.	WEST VALLEY CITY	1,444
08	UTD000826362	AMOCO OIL COMPANY	SALT LAKE CITY	1,089
09	UTD102525847	CRYSTAL SPECIALTIES, INC.	EPHRAIM	843
10	UT5210090002	TOOELE ARMY DEPOT - SOUTH AREA	TOOELE	773
11	UTD009073214	UNISYS SLC OPERATIONS	SALT LAKE CITY	573
12	UTD009073800	HARSHAW CHEMICAL COMPANY	SALT LAKE CITY	554
13	UTD073008237	NATIONAL SEMICONDUCTOR CORP.	WEST JORDAN	479
14	UTD009090580	PHILLIPS 66 COMPANY	WOODS CROSS	459
15	UTD980954168	LIKA UTAH AKA JR UTAH	SALT LAKE CITY	384
16	UTD982647695	PROFESSIONAL LITHOGRAPHERS	PROVO	361
17	UTD021533054	NUCOR STEEL	PLYMOUTH	353
18	UTD127673697	MORTON INTERNATIONAL, INC. ASP	PROMONTORY	320
19	UTD092029768	CHEVRON U.S.A. INC.	SALT LAKE CITY	274
20	UTD054680590	LEVOLOR CORP.	OGDEN	236
21	UTD009667536	SIGNETICS COMPANY	OREM	234
22	UTD009089277	IRECO INCORPORATED - LEHI SITE B	LEHI	207
23	UTT500010111	PACIFICORP DBA UTAH POWER - CARBON PLANT	HELPER	200
24	UTD073095804	LITTON SYSTEMS	SALT LAKE CITY	190
25	UTD073010902	LUNDAHL-ASTRO CIRCUITS	LOGAN	182
26	UTD056094873	MORTON INTERNATIONAL, INC. A.S.P.	OGDEN	153
27	UTD007939358	WHEELER MACHINERY CO.	SALT LAKE CITY	139
28	UTD041075896	SYRO STEEL CO.	CENTERVILLE	128
29	UTD009438359	VARIAN EIMAC	SALT LAKE CITY	121
30	UTD570090001	UTAH TEST AND TRAINING RANGE	UTTR	114
31	UTD092024934	WESTERN ZIRCONIUM WESTINGHOUSE-CNFD	OGDEN	111
32	UTD041310962	TROJAN CORPORATION	SPANISH FORK	106
33	UTD067972125	VOLVO WHITE TRUCKS	OGDEN	102
34	UTD980635890	SALT LAKE CIRCUITS	SALT LAKE CITY	94
35	UTD009087644	REILLY INDUSTRIES, INC.	PROVO	94
36	UTD980959340	ICM DIVISION OF WHEELER MACHINERY CO.	SALT LAKE CITY	87
37	UTD073093874	PENNZOIL PRODUCTS COMPANY	ROOSEVELT	57
38	UTD982589061	FLAMECO (BUILDING #2)	OGDEN	57
39	UTD980718886	BOURNS NETWORKS, INC.	LOGAN	53
40	UTD000826370	AMOCO OIL COMPANY-SALT LAKE REMOTE TANK	SALT LAKE CITY	48

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

UTAH

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	UT3213820894 TOOELE ARMY DEPOT NORTH AREA, TOOELE					168,
	AQUEOUS ORGANIC TREATMENT	M081-M089	168,655	0	168,655	
	INCINERATION	M041-M049	6	0	6	
2	UTD991301748 U.S. POLLUTION CONTROL, INC. GRASSY MTN., TOOELE COUNTY					72,
	LANDFILL	M132	6,886	33,628	40,513	
	STABILIZATION	M111-M119	4,101	19,932	24,034	
	OTHER TREATMENT	M121-M129	10	7,406	7,417	
	LAND TREATMENT	M131	0	358	358	
	INVALID SYSTEM TYPE		0	42	42	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	1	
3	UTD009081357 THIOKOL CORPORATION UTAH BASED OPER., PROMONTORY					12,
	OTHER TREATMENT	M121-M129	9,856	2,204	12,060	
	INVALID SYSTEM TYPE		0	3	3	
4	UTD009086133 GENEVA STEEL, OREM					3,
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3,638	0	3,638	
5	UT5210090002 TOOELE ARMY DEPOT - SOUTH AREA, TOOELE					
	OTHER TREATMENT	M121-M129	474	0	474	
	INCINERATION	M041-M049	244	0	244	
	INVALID SYSTEM TYPE		0	8	8	
6	UTD048406144 ASHLAND CHEMICAL, INC., CLEARFIELD					
	SOLVENTS RECOVERY	M021-M029	0	93	93	
	FUEL BLENDING	M061	0	82	82	
	LANDFILL	M132	0	68	68	
	OTHER RECOVERY	M031-M039	0	43	43	
	INCINERATION	M041-M049	0	29	29	
7	UTD980666721 IRECO INCORPORATED TOOELE TEST SITE, TOOELE					
	OTHER TREATMENT	M121-M129	0	164	164	
8	UTD041310962 TROJAN CORPORATION, SPANISH FORK					
	OTHER TREATMENT	M121-M129	116	0	116	
	AQUEOUS ORGANIC TREATMENT	M081-M089	8	0	8	
9	UTD570090001 UTAH TEST AND TRAINING RANGE, UTTR					
	INCINERATION	M041-M049	114	0	114	
10	UTD000716399 GREAT WESTERN CHEMICAL CO., SALT LAKE CITY					
	METALS RECOVERY (FOR REUSE)	M011-M019	0	32	32	
11	UTD571724350 HILL AIR FORCE BASE, HILL AIR FORCE BASE					
	SOLVENTS RECOVERY	M021-M029	19	0	19	
12	UT3750211259 DUGWAY PROVING GROUND, DUGWAY					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	2	0	2	
	SOLVENTS RECOVERY	M021-M029	2	0	2	
13	UTD045231396 EDO CORPORATION, FIBER SCIENCE DIV., SALT LAKE CITY					
	SOLVENTS RECOVERY	M021-M029	3	0	3	
14	UTD009089277 IRECO INCORPORATED - LEHI SITE B, LEHI					
	OTHER TREATMENT	M121-M129	0	0	0	

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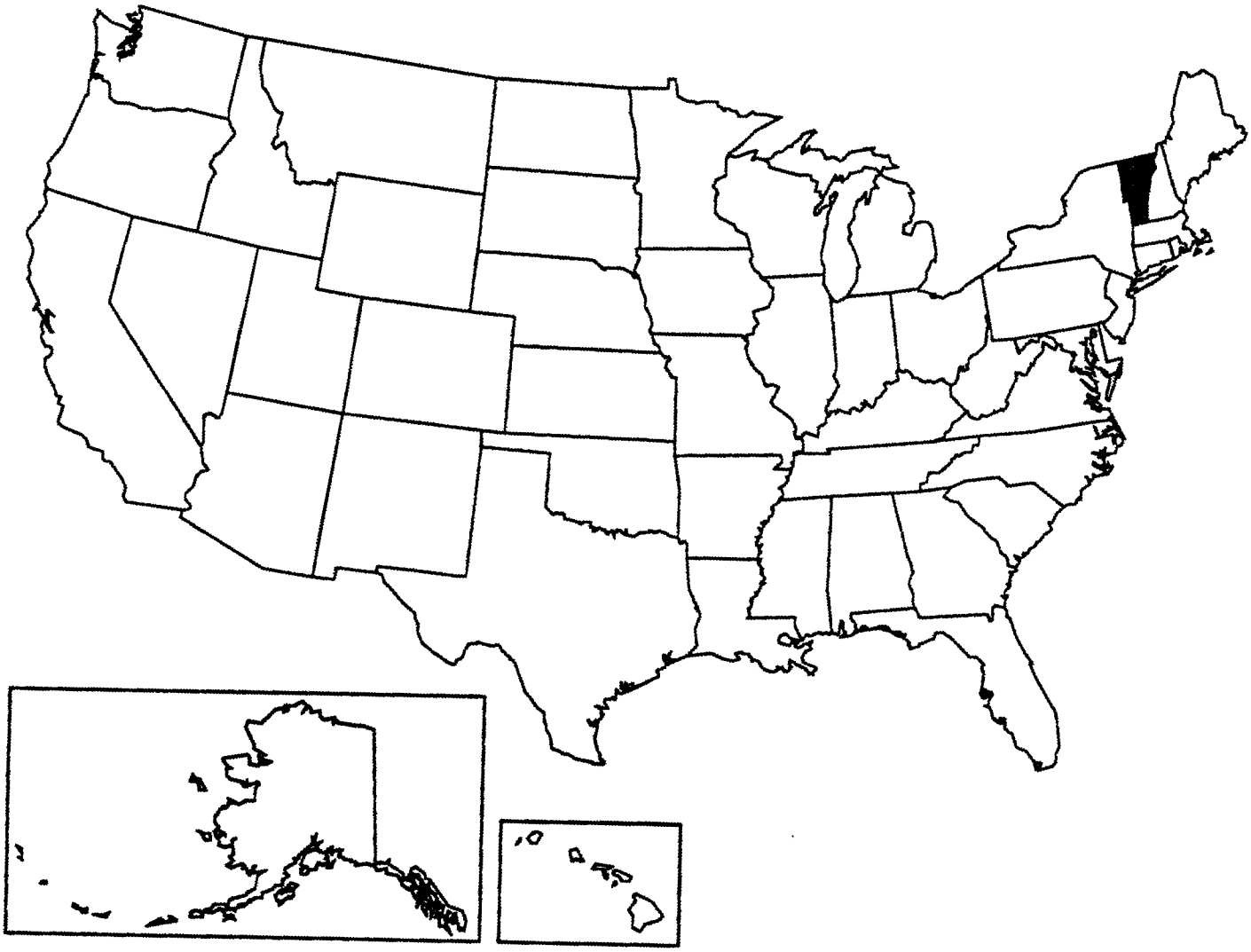
1 Quantity managed by storage only is not included.

Vermont

Region I



VERMONT

EPA Region Address:	U.S. EPA Region I RCRA Support Section Mail Stop HRW-CAN-3 JFK Federal Building Boston, MA 02203
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Hazardous Materials Management Agency for Natural Resources Department of Environmental Conservation 103 South Main Street Waterbury, VT 05671-0404
Contact Name:	Mr. Robert M. Wilson Environmental Technician
Phone:	(802) 244-8702

Notes: No special notes for Vermont.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VERMONT

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	42
Total Quantity of Regulated Waste Generated:	13,481 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	1
Facilities managing only waste generated off site	1
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	2
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	106 tons
Total RCRA TSD Facilities:	6

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	1	0	0	0	.0
SOLVENTS RECOVERY	M021-M029	2	67	0	67	63.2
INCINERATION	M041-M049	1	0	3	3	2.6
FUEL BLENDING	M061	1	0	26	26	24.3
AQUEOUS INORGANIC TREATMENT	M071-M079	1	0	2	2	1.6
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	1	0	2	2	2.0
LANDFILL	M132	1	0	6	6	5.8
INVALID SYSTEM TYPE		1	0	0	0	.4
TOTAL		2	67	39	106	100.0
PERCENTAGE		-	63.0 %	37.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VERMONT

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
MA	0
NH	70
NY	29
TOTAL	100

Exports

State	Tons Shipped
	0
AL	185
AR	17
CT	421
IL	1
KY	1,031
LA	8
MA	945
MD	28
MI	22
NH	0
NJ	479
NY	9,964
OH	534
PA	29
RI	177
TOTAL	13,840

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VERMONT

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F006	5,379	39.9
2	U210	2,521	18.7
3	D001	1,334	9.9
4	D002	1,019	7.6
5	D008	1,006	7.5
6	DOMX*	413	3.1
7	FOMX*	404	3.0
8	D007	364	2.7
9	F002	329	2.4
10	D005	164	1.2
11	F003	130	1.0
12	F001	109	.8
13	U044	77	.6
14	F005	47	.3
15	U031	38	.3
16	MOMX*	36	.3
17	D009	23	.2
18	D004	23	.2
19	U226	17	.1
20	F007	16	.1
21	D006	13	.1
22	D011	12	.1
23	U188	3	.0
24	D003	2	.0
25	U122	1	.0
26	UOMX*	1	.0
27	F008	0	.0
28	P098	0	.0
29	P106	0	.0
30	U019	0	.0
31	POMX*	0	.0
32	P030	0	.0
33	U080	0	.0
34	P048	0	.0
34	U006	0	.0
34	U133	0	.0
34	U223	0	.0
35	U117	0	.0
36	U121	0	.0
37	U147	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VERMONT

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D009	0
SOLVENTS RECOVERY	M021-M029	F003	67
		F001	0
		U228	0
INCINERATION	M041-M049	MOMX*	1
		F005	1
		DOMX*	0
		D001	0
FUEL BLENDING	M061	D001	17
		F005	5
		F003	3
		D002	1
AQUEOUS INORGANIC TREATMENT	M071-M079	D002	2
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	D001	2
LANDFILL	M132	F006	3
		D001	3
		D005	1
		D008	0
INVALID SYSTEM TYPE		D001	0
TOTAL			106

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VERMONT

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	VTD002065654	EVEREADY BATTERY COMPANY	ST ALBANS	4,904
02	VTD002084705	INTERNATIONAL BUSINESS MACHINES	ESSEX JUNCTION	4,067
03	VTD001780725	JOHNSON CONTROLS, INC.	BENNINGTON	830
04	VTD001075894	GENERAL ELECTRIC COMPANY	NORTH CLARENDON	539
05	VTD002065597	EVEREADY BATTERY COMPANY	BENNINGTON	488
06	VTD002085108	GENERAL ELECTRIC COMPANY	RUTLAND	477
07	VTD002083434	GENERAL ELECTRIC ARMAMENT SYSTEMS	BURLINGTON	452
08	VTD001086529	C.E. BRADLEY LABORATORIES, INC.	BRATTLEBORO	329
09	VTD002068070	SIMMONDS PRECISION PRODUCTS, INC.	VERGENNES	277
10	VTD980670319	VERMONT CIRCUITS, INC.	BRATTLEBORO	137
11	VTD099682494	BERTEK, INC	ST ALBANS	107
12	VTD039697347	VERMONT CASTINGS, INC.	RANDOLPH	90
13	VTD093254381	THE FONDA GROUP, INC.	ST. ALBANS	59
14	VTD069911873	UNION BUTTERFIELD	DERBY LINE	55
15	VTD001080126	VERMONT TAP & DIE COMPANY	LYNDONVILLE	54
16	VTD001081215	ETHAN ALLEN, INC.	BEECHER FALLS	49
17	VTD001082841	ORLEANS DIVISION OF ETHAN ALLEN, INC.	ORLEANS	43
18	VTD000649780	GENERAL ELECTRIC ARMAMENT SYSTEMS	BURLINGTON	38
19	VTD002068484	THE SHELBURNE CORPORATION	SHELBURNE	37
20	VTD055731038	STANLEY TOOLS - EAGLE SQUARE	SHAFTSBURY	34
21	VTD981065998	G.S. PRECISION, INC.	BRATTLEBORO	29
22	VTD001086149	BRYANT GRINDER CORPORATION	SPRINGFIELD	28
23	VTD002207504	BEN-MONT CORPORATION	BENNINGTON	28
24	VTD002493294	CHAMPLAIN CABLE CORPORATION	COLCHESTER	27
25	VTD052980836	CHAMPLAIN OIL CO., INC.	SOUTH BURLINGTON	26
26	VTD001089226	FELLOWS CORPORATION	NORTH SPRINGFIELD	26
27	VTD982194193	S.B. COLLINS, INC.	ST ALBANS	22
28	VTD064436074	EHV WEIDMANN INDUSTRIES, INC.	ST JOHNSBURY	20
29	VTD000791764	NORTHEAST TOOL DIVISION	LYNDONVILLE	20
30	VTD020673299	US SAMICA CORPORATION	RUTLAND	19
31	VTD002084309	CHESAPEAKE HARDWOOD PRODUCTS, INC	HANCOCK	18
32	VTD000636449	UNIVERSITY OF VERMONT	BURLINGTON	17
33	VTD000509174	TANSITOR ELECTRONICS, INC.	BENNINGTON	16
34	VTD020651675	MIDDLEBURY COLLEGE	MIDDLEBURY	15
35	VTD052980638	DOWTY ELECTRONICS COMPANY	BRANDON	14
36	VTD037368321	OMYA, INC.	PITTSFORD	14
37	VTD002070050	EDLUND COMPANY, INC.	BURLINGTON	14
38	VTD001083468	RANDOLPH DIVISION OF ETHAN ALLEN, INC.	RANDOLPH	13
39	VTD049476112	BOMBARDIER CORP	WEBSTERVILLE	13
40	VTD048419386	MASKA U.S., INC.	BRADFORD	13

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VERMONT

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	VTD001086529 C.E. BRADLEY LABORATORIES, INC., BRATTLEBORO					
	SOLVENTS RECOVERY	M021-M029	67	0	67	
2	VTD982766537 POLLUTION SOLUTIONS OF VERMONT, INC., WILLISTON					
	FUEL BLENDING	M061	0	26	26	
	LANDFILL	M132	0	6	6	
	INCINERATION	M041-M049	0	3	3	
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	2	2	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	2	2	
	INVALID SYSTEM TYPE		0	0	0	
	SOLVENTS RECOVERY	M021-M029	0	0	0	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	0	0	

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1 Excluding quantity managed by storage only.

Virgin Islands

Region II

VIRGIN ISLANDS

EPA Region Address:	U.S. EPA Region II Hazardous Waste Program Branch 26 Federal Plaza, Room 1105 New York, NY 10278
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Department of Planning and Natural Resources Building 11, Apartment 114 St. Croix, VI 00820
Contact Name: Phone:	Ms. Francine Lang

Notes: No special notes for the Virgin Islands.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGIN ISLANDS

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	1
Total Quantity of Regulated Waste Generated:	5,757 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	1
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	1
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	5,757 tons
Total RCRA TSD Facilities:	1

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
LAND TREATMENT	M131	1	5,757	0	5,757	100.0
TOTAL		1	5,757	0	5,757	100.0
PERCENTAGE		-	100.0 %	.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGIN ISLANDS

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
TOTAL	0

Exports

State	Tons Shipped
	0
TOTAL	0

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

VIRGIN ISLANDS

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	K051	3,799	66.0
2	K049	1,697	29.5
3	K050	153	2.7
4	K052	108	1.9
5	D0NX*	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGIN ISLANDS

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
LAND TREATMENT	M131	K051	3,799
		K049	1,697
		K050	153
		K052	108
TOTAL			5,757

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGIN ISLANDS

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	VID980536080	HESS OIL VIRGIN ISLANDS CORP	ST. CROIX	5,757

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGIN ISLANDS

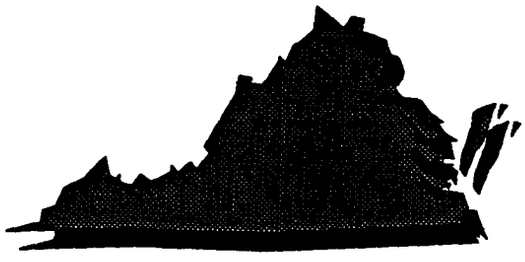
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

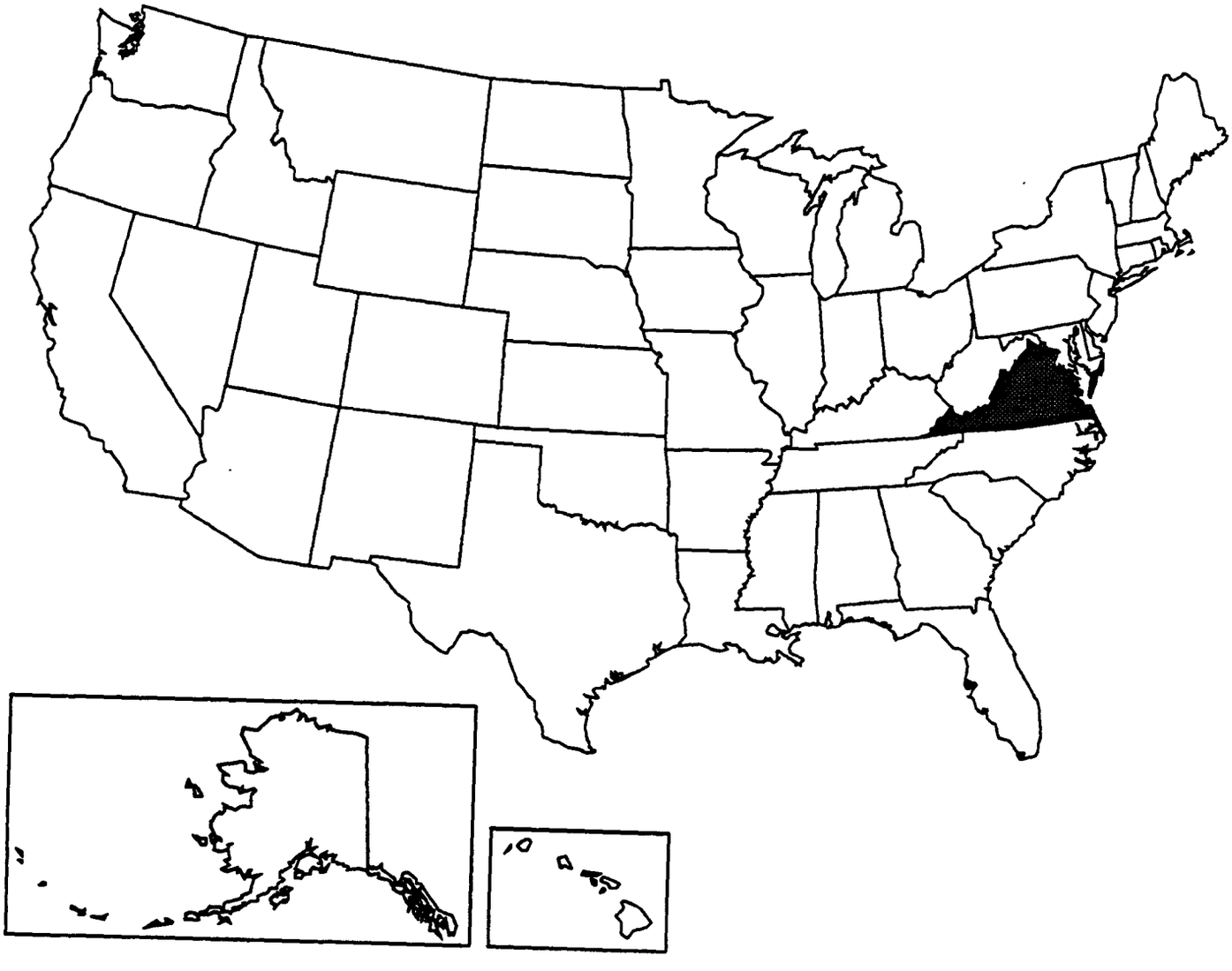
Rank	EPA ID	Site Name, City	Management Method	On Site	Off Site	Method Total	Tot Manag
1	VID980536080	HESS OIL VIRGIN ISLANDS CORP., ST. CROIX					5,
			LAND TREATMENT M131	5,757	0	5,757	

1 Excluding quantity managed by storage only.

Virginia

Region III





VIRGINIA

EPA Region Address:	U.S. EPA Region III Waste Management Branch Mail Stop 3HW53 841 Chestnut Street Philadelphia, PA 19107
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report for TSD's EPA Waste Minimization Report for LQG's
Address of Participating State Environmental Authority	Division of Technical Services Department of Waste Management 101 North 14th Street, 11th Floor Richmond, VA 23219
Contact Name:	Ms. Sherri Rasnake Environmental Programs Planner
Phone:	(804) 786-3258

Notes: No special notes for Virginia.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGINIA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	287
Total Quantity of Regulated Waste Generated:	5,227,092 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	19
Facilities managing only waste generated off site	3
Facilities managing waste generated both on and off site	3
Total RCRA TSD Facilities (excluding storage-only facilities):	25
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	5,324,021 tons
Total RCRA TSD Facilities:	52

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	3	4,848	7,143	11,991	.2
OTHER RECOVERY	M031-M039	1	1,858	0	1,858	.0
INCINERATION	M041-M049	4	13,288	0	13,288	.2
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	6	0	6	.0
FUEL BLENDING	M061	2	0	45,161	45,161	.8
AQUEOUS INORGANIC TREATMENT	M071-M079	7	5,032,970	0	5,032,970	94.5
AQUEOUS ORGANIC TREATMENT	M081-M089	4	106,313	0	106,313	2.0
STABILIZATION	M111-M119	2	1,653	0	1,653	.0
OTHER TREATMENT	M121-M129	13	98,866	11,731	110,597	2.1
INVALID SYSTEM TYPE		1	0	184	184	.0
TOTAL		25	5,259,802	64,219	5,324,021	100.0
PERCENTAGE		-	98.8 %	1.2 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGINIA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	1,263
CT	10,329
DC	79
FC	78
KY	11
MA	2,045
MD	195
NC	7,194
NJ	16,959
NY	236
OH	1,127
PA	9,766
SC	2,717
TN	293
TX	729
WV	89
TOTAL	53,109

Exports

State	Tons Shipped
AL	3,449
AR	210
CT	498
DE	20
FL	658
GA	251
IL	440
IN	1,129
KS	0
KY	306
LA	1,113
MA	29
MD	668
MI	916
MO	68
NC	4,086
NJ	6,751
NY	91
OH	1,690
OK	222
PA	10,392
RI	178
SC	6,922
TN	563
TX	165
WI	148
WV	27
TOTAL	40,988

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGINIA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	D002	4,075,827	78.0
2	DOMX*	1,042,407	19.9
3	F006	48,729	.9
4	D003	16,131	.3
5	F003	8,715	.2
6	K061	7,749	.1
7	MOMX*	6,055	.1
8	FOMX*	3,831	.1
9	K051	3,786	.1
10	D001	3,661	.1
11	F005	2,710	.1
12	D008	1,861	.0
13	UOMX*	1,021	.0
14	F002	1,013	.0
15	D006	924	.0
16	F001	774	.0
17	K062	614	.0
18	F028	222	.0
19	U220	221	.0
20	D007	200	.0
21	F007	184	.0
22	U051	90	.0
23	D004	65	.0
24	D009	56	.0
25	K044	31	.0
26	U122	27	.0
27	D011	24	.0
28	F019	23	.0
29	F008	21	.0
30	U161	19	.0
31	F004	17	.0
32	K045	14	.0
33	U154	13	.0
34	U133	10	.0
35	F009	9	.0
36	D014	7	.0
37	D005	3	.0
38	U210	3	.0
39	K001	3	.0
40	U080	2	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGINIA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F005	5,714
		MOMX*	3,100
		F003	2,371
		F001	576
OTHER RECOVERY	M031-M039	K051	1,816
		DOMX*	42
INCINERATION	M041-M049	DOMX*	11,713
		D003	971
		F003	604
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	F003	6
FUEL BLENDING	M061	FOMX*	33,410
		MOMX*	5,716
		F005	2,488
		D001	1,655
AQUEOUS INORGANIC TREATMENT	M071-M079	D002	4,044,102
		DOMX*	987,332
		FOMX*	1,500
		F006	28
AQUEOUS ORGANIC TREATMENT	M081-M089	DOMX*	94,038
		D003	7,314
		D002	4,937
		D001	23
STABILIZATION	M111-M119	DOMX*	1,653
OTHER TREATMENT	M121-M129	DOMX*	67,708
		D002	32,497
		D003	7,581
		K061	2,710
INVALID SYSTEM TYPE		D002	184
TOTAL			5,324,021

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGINIA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	VA1210020730	U S ARMY AMMUNITION PLANT	RADFORD	4,050,016
02	VAD066000993	AMERICAN TELEPHONE & TELEGRAPH	RICHMOND	933,670
03	VAD065385296	ALLIED-SIGNAL INC HOPEWELL PLT	HOPEWELL	79,072
04	VAD055848949	DAYSTROM FURNITURE INC	SOUTH BOSTON	46,516
05	VAD001307495	NEWPORT NEWS SHIPB'G & DRYDOCK	NEWPORT NEWS	34,803
06	VAD000820506	INTERMET - LYNCHBURG FOUNDRY	LYNCHBURG	8,321
07	VAD098442148	CONTROLS CORP OF AMERICA	VIRGINIA BEACH	7,933
08	VA8170024170	U S NAVY NAVAL WEAPONS STATION	YORKTOWN	7,702
09	VAD003122165	HERCULES INC	FRANKLIN	6,942
10	VAD003122553	ROANOKE ELECTRIC STEEL	ROANOKE	6,588
11	VAD050990357	AMOCO OIL CO	GRAFTON	4,083
12	VAD046156626	JAMES RIVER PAPER CO TREDEGAR	RICHMOND	2,674
13	VAD009305137	DUPONT - SPRUANCE PLANT	RICHMOND	2,577
14	VAD000820514	INTERMET - LYNCHBURG FOUNDRY	LYNCHBURG	2,533
15	VAD980554539	DUPONT	CEDARVILLE	2,193
16	VA6170061463	U S NAVY NAVAL BASE	NORFOLK	1,834
17	VAD065417008	GRIFFIN PIPE PRODUCTS	LYNCHBURG	1,586
18	VAD010063006	INTERMET - LYNCHBURG FOUNDRY	RADFORD	1,182
19	VAD003178035	NORFOLK STEEL	CHESAPEAKE	1,168
20	VAD083059311	VIRGINIA GALVANIZING CORP	ASHLAND	1,002
21	VAD003114832	DUPONT	WAYNESBORO	926
22	VA2210020416	U S ARMY FORT A P HILL	BOWLING GREEN	882
23	VAD000798702	WESTVACO	RICHMOND	841
24	VA1170024813	U S NAVY NORFOLK NAVAL SHIPYAR	PORTSMOUTH	837
25	VAD981034895	AUTOMATA	STERLING	826
26	VAD003074119	CROWN CORK & SEAL CORP	WINCHESTER	711
27	VAD055046049	FREEMAN CHEMICAL CORP.	CHATHAM	651
28	VAD066003161	VOLVO GM HEAVY TRUCK CORP	DUBLIN	648
29	VAD064872575	IBM CORPORATION	MANASSAS	595
30	VAD980714588	WESTVACO	RICHMOND	547
31	VAD980551782	GE FANUC AUTOMATION	CHARLOTTESVILLE	499
32	VAD980715114	HICKSON DANCHEM CORP	DANVILLE	480
33	VAD000019828	RELIANCE UNIVERSAL, INC	ROANOKE	469
34	VAD065378507	REYNOLDS METALS - BELLWOOD PL	RICHMOND	419
35	VAD003132438	GENICOM CORP	WAYNESBORO	401
36	VAD046979498	RICHMOND GRAVURE INC	RICHMOND	399
37	VAD003175262	HOECHST CELANESE - SPEC. CHEM.	PORTSMOUTH	391
38	VAD074747908	VPI & SU	BLACKSBURG	386
39	VAD065378515	REYNOLDS METALS CO	RICHMOND	386
40	VAD054039961	FEDERAL-MOGUL CORP	BLACKSBURG	378

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGINIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	VA1210020730 U S ARMY AMMUNITION PLANT, RADFORD					4,046,
	AQUEOUS INORGANIC TREATMENT	M071-M079	4,043,802	0	4,043,802	
	SOLVENTS RECOVERY	M021-M029	1,731	0	1,731	
	INCINERATION	M041-M049	971	0	971	
2	VAD066000993 AMERICAN TELEPHONE & TELEGRAPH, RICHMOND					930,
	AQUEOUS INORGANIC TREATMENT	M071-M079	905,988	0	905,988	
	AQUEOUS ORGANIC TREATMENT	M081-M089	24,858	0	24,858	
3	VAD065385296 ALLIED-SIGNAL INC HOPEWELL PLT, HOPEWELL					153,
	AQUEOUS ORGANIC TREATMENT	M081-M089	74,117	0	74,117	
	AQUEOUS INORGANIC TREATMENT	M071-M079	69,180	0	69,180	
	OTHER TREATMENT	M121-M129	4,937	0	4,937	
	INCINERATION	M041-M049	4,777	0	4,777	
4	VAD003122165 HERCULES INC., FRANKLIN					69
	OTHER TREATMENT	M121-M129	63,050	0	63,050	
	INCINERATION	M041-M049	6,936	0	6,936	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	6	0	6	
5	VAD001307495 NEWPORT NEWS SHIPB'G & DRYDOCK, NEWPORT NEWS					34
	OTHER TREATMENT	M121-M129	20,400	0	20,400	
	AQUEOUS INORGANIC TREATMENT	M071-M079	13,950	0	13,950	
	SOLVENTS RECOVERY	M021-M029	17	0	17	
6	VAD098443443 OLDOVER CORP., ARVONIA					29
	FUEL BLENDING	M061	0	29,040	29,040	
7	VAD077942266 OLDOVER CORP., CASCADE					16
	FUEL BLENDING	M061	0	16,121	16,121	
8	VAD000820506 INTERMET - LYNCHBURG FOUNDRY, LYNCHBURG					10
	OTHER TREATMENT	M121-M129	8,317	2,503	10,820	
9	VAD003111416 PRILLAMAN CHEMICAL CORP., MARTINSVILLE					10
	SOLVENTS RECOVERY	M021-M029	3,100	7,143	10,243	
10	VAD003180015 ROYSTER CO S. NORFOLK PLANT, CHESAPEAKE					9
	OTHER TREATMENT	M121-M129	0	9,222	9,222	
	INVALID SYSTEM TYPE		0	184	184	
11	VA8170024170 U S NAVY NAVAL WEAPONS STATION, YORKTOWN					7
	AQUEOUS ORGANIC TREATMENT	M081-M089	7,314	0	7,314	
	OTHER TREATMENT	M121-M129	90	0	90	
12	VAD050990357 AMOCO OIL CO., GRAFTON					1
	OTHER RECOVERY	M031-M039	1,858	0	1,858	
13	VAD065417008 GRIFFIN PIPE PRODUCTS, LYNCHBURG					1
	STABILIZATION	M111-M119	1,585	0	1,585	
14	VAD010063006 INTERMET - LYNCHBURG FOUNDRY, RADFORD					
	OTHER TREATMENT	M121-M129	1,182	0	1,182	
15	VAD003114832 DUPONT, WAYNESBORO					
	OTHER TREATMENT	M121-M129	628	0	628	
16	VAD055046049 FREEMAN CHEMICAL CORP., CHATHAM					
	INCINERATION	M041-M049	604	0	604	
17	VA6170061463 U S NAVY NAVAL BASE, NORFOLK					
	OTHER TREATMENT	M121-M129	110	0	110	
	AQUEOUS INORGANIC TREATMENT	M071-M079	14	0	14	
18	VAD089022685 C K COMPANY, SOUTH BOSTON					
	OTHER TREATMENT	M121-M129	102	0	102	

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1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

VIRGINIA

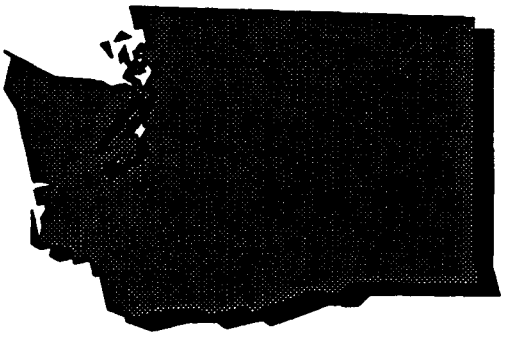
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

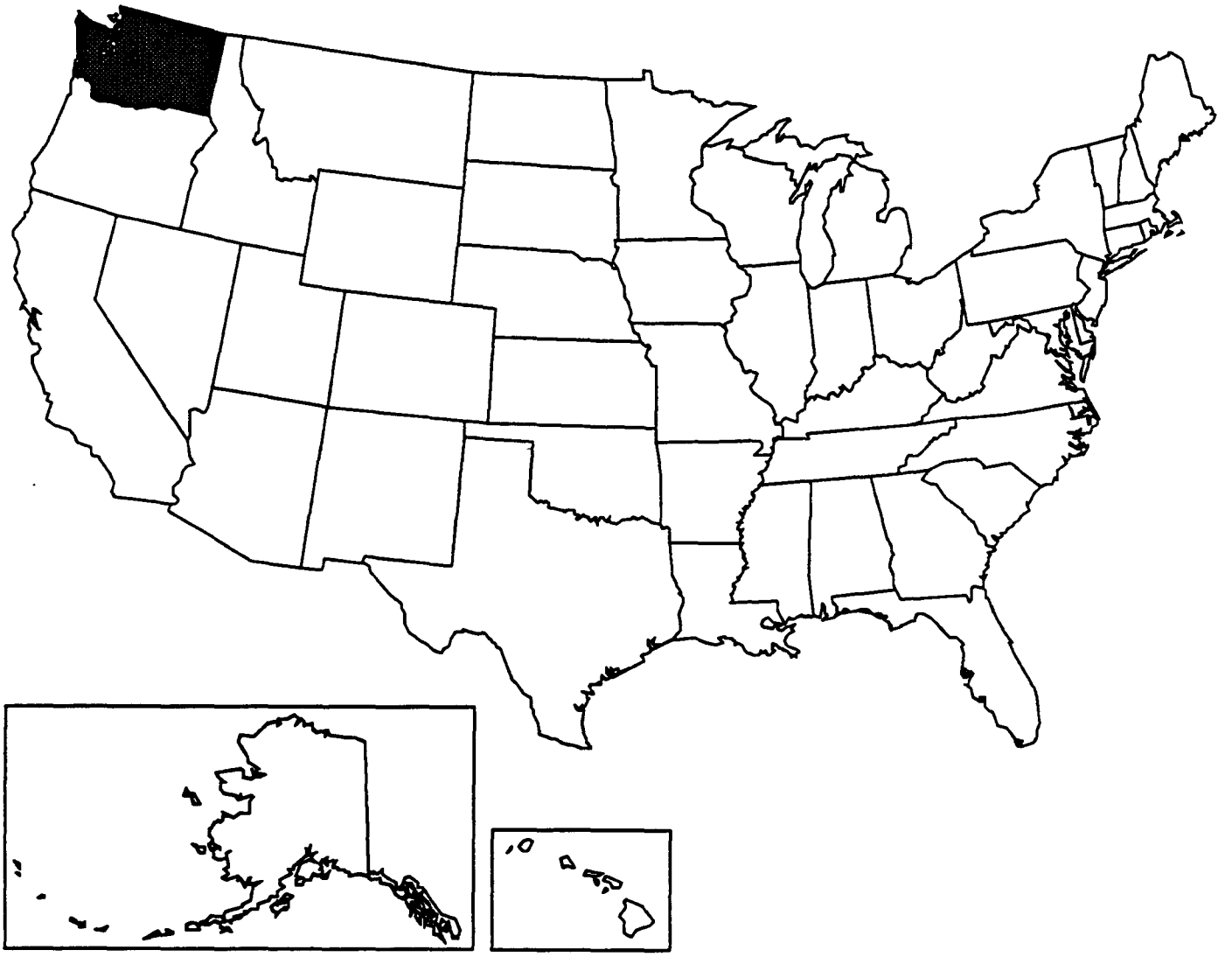
Rank	EPA ID	Site Name, City	Management Method		On Site	Off Site	Method Total	Total Managed 1
19	VAD003064490	BINGHAM & TAYLOR, CULPEPER						68
			STABILIZATION	M111-M119	68	0	68	
20	VA7170024684	U S NAVY SURFACE WARFARE CTR, DAHLGREN						41
			OTHER TREATMENT	M121-M129	34	6	41	
21	VAD089028377	REHRIG INTERNATIONAL, RICHMOND						28
			AQUEOUS INORGANIC TREATMENT	M071-M079	28	0	28	
22	VAD001705110	MERCK & CO., INC., ELKTON						23
			AQUEOUS ORGANIC TREATMENT	M081-M089	23	0	23	
23	VAD003114865	DUPONT, MARTINSVILLE						10
			OTHER TREATMENT	M121-M129	10	0	10	
24	VAD003175072	NORFOLK SHIPB'G & DRYDOCK, NORFOLK						8
			AQUEOUS INORGANIC TREATMENT	M071-M079	8	0	8	
25	VAD023741705	ATLANTIC RESEARCH CORP., GAINESVILLE						6
			OTHER TREATMENT	M121-M129	6	0	6	

1 Excluding quantity managed by storage only.

Washington

Region X





WASHINGTON

EPA Region Address:	U.S. EPA Region X Waste Management Branch Mail Stop HW-112 1200 6th Avenue Seattle, WA 98101
Biennial Report Data Collection Instrument:	State-specific annual report and EPA Waste Minimization Report
Address of Participating State Environmental Authority	Hazardous Waste Information Management Department of Ecology 4224 Sixth Avenue, Building 4 Mailstop PV-11 Lacey, WA 98504-8711
Contact Name: Phone:	Mr. Daniel Kruger (206) 459-6306

Notes: No special notes for Washington.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WASHINGTON

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	714
Total Quantity of Regulated Waste Generated:	228,323 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	10
Facilities managing only waste generated off site	11
Facilities managing waste generated both on and off site	2
Total RCRA TSD Facilities (excluding storage-only facilities):	23
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	170,943 tons
Total RCRA TSD Facilities:	56

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	3	4	686	690	.4
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1	0	548	548	.3
AQUEOUS INORGANIC TREATMENT	M071-M079	11	5,220	21,085	26,304	15.4
AQUEOUS ORGANIC TREATMENT	M081-M089	7	0	781	781	.5
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	6	109,664	280	109,944	64.3
SLUDGE TREATMENT	M101-M109	3	0	60	60	.0
STABILIZATION	M111-M119	3	0	293	293	.2
OTHER TREATMENT	M121-M129	12	18,251	8,653	26,904	15.7
LAND TREATMENT	M131	4	5,404	0	5,404	3.2
LANDFILL	M132	1	0	14	14	.0
TOTAL		23	138,543	32,400	170,943	100.0
PERCENTAGE		-	81.0 %	19.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WASHINGTON

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AK	926
CA	3,535
CO	3
FC	160
HI	63
IA	0
ID	256
IL	8
MT	718
NC	6
ND	45
NJ	1
NV	11
OR	8,773
PA	977
SD	2
TN	3
UT	5
WY	9
TOTAL	15,501

Exports

State	Tons Shipped
AL	15
AR	721
AZ	352
CA	2,604
CO	18
FC	35
ID	4,698
IL	6,515
KS	4,036
LA	228
MI	16
MN	0
MO	95
NE	1,708
NY	0
OK	1
OR	30,792
PA	3,856
SC	0
TX	1,355
UT	430
TOTAL	57,476

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WASHINGTON

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	DOMX*	157,882	69.1
2	MOMX*	19,059	8.3
3	K061	9,747	4.3
4	D002	8,093	3.5
5	D004	6,193	2.7
6	FOMX*	4,947	2.2
7	D001	3,711	1.6
8	D007	3,076	1.3
9	KOMX*	2,834	1.2
10	K051	2,597	1.1
11	F006	2,417	1.1
12	D008	2,404	1.1
13	K052	1,400	.6
14	F005	792	.3
15	F002	611	.3
16	F001	477	.2
17	F007	446	.2
18	F003	422	.2
19	D003	351	.2
20	POMX*	314	.1
21	D009	154	.1
22	D006	107	.0
23	K049	55	.0
24	K001	54	.0
25	U226	37	.0
26	D011	29	.0
27	F027	26	.0
28	K050	16	.0
29	F009	15	.0
30	K048	15	.0
31	F019	13	.0
32	U061	3	.0
33	UOMX*	3	.0
34	U134	3	.0
35	F008	2	.0
36	U240	2	.0
37	P042	2	.0
38	D005	2	.0
39	P020	1	.0
40	P075	1	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WASHINGTON

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	MOMX*	266
		FOMX*	107
		F001	101
		F003	65
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	FOMX*	230
		MOMX*	97
		F001	73
		F002	53
AQUEOUS INORGANIC TREATMENT	M071-M079	DOMX*	13,441
		D002	3,864
		MOMX*	2,911
		D007	2,393
AQUEOUS ORGANIC TREATMENT	M081-M089	MOMX*	394
		FOMX*	302
		K001	32
		F002	30
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	DOMX*	109,659
		MOMX*	218
		FOMX*	61
		D011	5
SLUDGE TREATMENT	M101-M109	K001	26
		DOMX*	16
		D002	9
		UOMX*	6
STABILIZATION	M111-M119	MOMX*	162
		DOMX*	88
		D007	27
		D002	6
OTHER TREATMENT	M121-M129	DOMX*	20,710
		D001	1,552
		D008	1,011
		MOMX*	977
LAND TREATMENT	M131	K051	2,113
		KOMX*	1,810
		K052	1,400
		K049	50
LANDFILL	M132	DOMX*	14
TOTAL			170,943

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

WASHINGTON

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	WA7890008967	DEPARTMENT OF ENERGY	RICHLAND	132,726
02	WAD020257945	CHEMICAL PROCESSORS INC	TACOMA	10,389
03	WAD000812909	CHEMICAL PROCESSORS INC	SEATTLE	9,304
04	WAD058367152	NORTHWEST ENVIROSERVICE, INC.	SEATTLE	6,971
05	WAD009265851	SEATTLE STEEL INC	SEATTLE	6,489
06	WAD009256819	BOEING - PLANT 2	SEATTLE	6,456
07	WAD980982912	BOEING - THOMPSON SITE	SEATTLE	6,418
08	WAD041337130	BOEING - AUBURN	AUBURN	3,894
09	WAD991281767	CROSBY & OVERTON INC	KENT	3,320
10	WAD042480210	SALMON BAY STEEL CORP	KENT	3,174
11	WAD009249509	KENWORTH TRUCK COMPANY	TUKWILA	2,458
12	WAD009250366	BP OIL COMPANY FERNDALE REFINE	FERNDALE	2,155
13	WAD061670766	BOEING-KENT SPACE CENTER	KENT	1,994
14	WAD009275082	SHELL OIL COMPANY	ANACORTES	1,866
15	WAD041585464	BOEING - EVERETT	EVERETT	1,856
16	WAD092300250	CHEMICAL PROCESSORS INC	WASHOUGAL	1,540
17	WAD980982037	BOEING - NORTH BOEING FIELD	SEATTLE	1,535
18	WA8570024200	MCCHORD AIR FORCE BASE	MCCHORD AFB	1,363
19	WAD009262171	BOEING - RENTON	RENTON	1,336
20	WAD009252297	GEORGIA-PACIFIC CORPORATION	BELLINGHAM	1,034
21	WAD009276197	TEXACO REFINING & MARKETING IN	ANACORTES	1,005
22	WA1170023419	NAVAL UNDERSEA WARFARE ENGINEE	KEYPORT	916
23	WA2170023418	PUGET SOUND NAVAL SHIPYARD	BREMERTON	908
24	WA9170023361	NAS WHIDBEY ISLAND	OAK HARBOR	717
25	WAD980724520	CHEMICAL WASTE MANAGEMENT, INC	KENT	706
26	WAD069548154	ARCO PRODUCTS CO	FERNDALE	695
27	WA3142300091	USDI BUREAU OF RECLAMATION	PASCO	600
28	WA5170027291	NAVAL SUBMARINE BASE BANGOR	SILVERDALE	584
29	WAD009252719	U S OIL & REFINING CO	TACOMA	528
30	WAD980978951	PACIFIC CIRCUITS INC.	REDMOND	478
31	WAD988467023	PFIZER SPECIALTY MINERALS INC	LONGVIEW	469
32	WAD048440424	KEY TRONIC CORPORATION	SPOKANE	404
33	WAD076655182	BSB DIVERSIFIED--HYTEK FINISHE	KENT	403
34	WAD980833099	SEH AMERICA INC.	VANCOUVER	401
35	WAD086258894	JOHN FLUKE MFG. CO., INC.	EVERETT	394
36	WAD009624347	NORTHWEST PETROCHEMICAL CORPOR	ANACORTES	383
37	WAD009242314	OCCIDENTAL CHEMICAL CORPORATIO	TACOMA	369
38	WAD009257999	FENTRON BUILDING PRODUCTS COMP	SEATTLE	353
39	WAD000643577	FMC CORPORATION	YAKIMA	319
40	WAD009258468	TODD PACIFIC SHIPYARDS CORP.	SEATTLE	303

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WASHINGTON

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tota Manage
1	WA7890008967 DEPARTMENT OF ENERGY, RICHLAND					133,3
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	109,659	0	109,659	
	OTHER TREATMENT	M121-M129	17,636	899	18,536	
	AQUEOUS INORGANIC TREATMENT	M071-M079	5,143	0	5,143	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	0	0	
2	WAD020257945 CHEMICAL PROCESSORS INC., TACOMA					13,1
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	12,919	12,919	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	201	201	
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	0	0	
3	WAD058367152 NORTHWEST ENVIROSERVICE, INC., SEATTLE					10,1
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	6,353	6,353	
	OTHER TREATMENT	M121-M129	0	3,636	3,636	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	143	143	
	STABILIZATION	M111-M119	0	17	17	
	LANDFILL	M132	0	14	14	
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	10	10	
4	WAD991281767 CROSBY & OVERTON INC., KENT					3,9
	OTHER TREATMENT	M121-M129	0	3,775	3,775	
	STABILIZATION	M111-M119	0	89	89	
	SLUDGE TREATMENT	M101-M109	0	22	22	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	18	18	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	15	15	
5	WAD009250366 BP OIL COMPANY FERNDALE REFINE, FERNDALE					2,1
	LAND TREATMENT	M131	1,998	0	1,998	
	OTHER TREATMENT	M121-M129	102	0	102	
6	WAD009275082 SHELL OIL COMPANY, ANACORTES					1,7
	LAND TREATMENT	M131	1,719	0	1,719	
7	WAD041337130 BOEING - AUBURN, AUBURN					1,4
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	1,451	1,451	
8	WAD009276197 TEXACO REFINING & MARKETING IN, ANACORTES					9
	LAND TREATMENT	M131	996	0	996	
9	WAD092300250 CHEMICAL PROCESSORS INC., WASHOUGAL					9
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	548	548	
	SOLVENTS RECOVERY	M021-M029	0	396	396	
	SLUDGE TREATMENT	M101-M109	0	9	9	
10	WAD041585464 BOEING - EVERETT, EVERETT					8
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	371	371	
	AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	270	270	
	STABILIZATION	M111-M119	0	187	187	
11	WAD069548154 ARCO PRODUCTS CO., FERNDALE					6
	LAND TREATMENT	M131	691	0	691	
12	WAD009252297 GEORGIA-PACIFIC CORPORATION, BELLINGHAM					5
	OTHER TREATMENT	M121-M129	512	0	512	
13	WAD000812909 CHEMICAL PROCESSORS INC., SEATTLE					3
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	346	346	
	OTHER TREATMENT	M121-M129	0	0	0	
14	WAD037991528 WASHINGTON CHEMICAL INC., SPOKANE					3
	SOLVENTS RECOVERY	M021-M029	0	290	291	

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1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WASHINGTON

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

Rank	EPA ID / Site Name, City	Management Method		On Site	Off Site	Method Total	Total Managed 1
15	WAD061669644 PENBERTHY ELECTROMELT INTL INC., SEATTLE						197
		OTHER TREATMENT	M121-M129	0	120	120	
		AQUEOUS ORGANIC TREATMENT	M081-M089	0	48	48	
		SLUDGE TREATMENT	M101-M109	0	28	28	
16	WA8214053995 US ARMY, YAKIMA FIRING CENTER, YAKIMA						128
		OTHER TREATMENT	M121-M129	0	128	128	
17	WAD000812917 CHEMICAL PROCESSORS INC., SEATTLE						95
		OTHER TREATMENT	M121-M129	0	95	95	
18	WAD051247716 DAVIS WALKER CORPORATION, KENT						66
		AQUEOUS INORGANIC TREATMENT	M071-M079	66	0	66	
19	WAD991281841 HEWLETT PACKARD, LIBERTY LAKE						10
		AQUEOUS INORGANIC TREATMENT	M071-M079	10	0	10	
20	WAD041485301 WASHINGTON STATE UNIVERSITY, PULLMAN						5
		AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	5	0	5	
		AQUEOUS ORGANIC TREATMENT	M081-M089	0	0	0	
		AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
		OTHER TREATMENT	M121-M129	0	0	0	
21	WAD000064642 JOHNSON MATTHEY ELECTRONICS IN, SPOKANE						4
		SOLVENTS RECOVERY	M021-M029	4	0	4	
		AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
22	WA2170023418 PUGET SOUND NAVAL SHIPYARD, BREMERTON						1
		OTHER TREATMENT	M121-M129	1	0	1	
		AQUEOUS INORGANIC TREATMENT	M071-M079	0	0	0	
		AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	0	0	0	
23	WAD009262171 BOEING - RENTON, RENTON						1
		OTHER TREATMENT	M121-M129	0	1	1	

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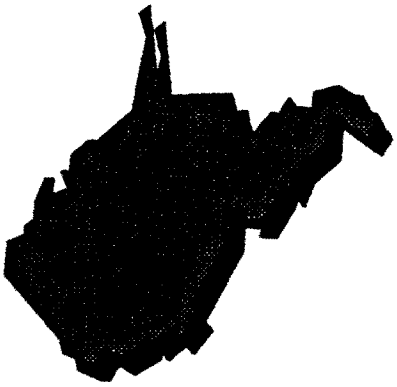
cluding quantity managed by storage only.

West Virginia

Region III



WEST VIRGINIA

EPA Region Address:	U.S. EPA Region III Waste Management Branch Mail Stop 3HW53 841 Chestnut Street Philadelphia, PA 19107
Biennial Report Data Collection Instrument:	State-specific annual report
Address of Participating State Environmental Authority	Generator Assistance Program Waste Management Section Department of Natural Resources 1356 Hansford Street Charleston, WV 25301
Contact Name:	Mr. Dale Moncer Environmental Analyst
Phone:	

Notes: No special notes for West Virginia.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WEST VIRGINIA

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	102
Total Quantity of Regulated Waste Generated:	14,390,206 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	7
Facilities managing only waste generated off site	0
Facilities managing waste generated both on and off site	7
Total RCRA TSD Facilities (excluding storage-only facilities):	14
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	14,335,403 tons
Total RCRA TSD Facilities:	19

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
METALS RECOVERY (FOR REUSE)	M011-M019	1	0	137	137	.0
SOLVENTS RECOVERY	M021-M029	1	19	0	19	.0
INCINERATION	M041-M049	8	28,319	380	28,699	.2
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	4	4,240	202	4,442	.0
AQUEOUS INORGANIC TREATMENT	M071-M079	2	24	87	110	.0
AQUEOUS ORGANIC TREATMENT	M081-M089	4	14,254,669	0	14,254,669	99.4
OTHER TREATMENT	M121-M129	5	27,717	831	28,548	.2
LANDFILL	M132	2	17,329	4	17,334	.1
SURFACE IMPOUNDMENT	M133	1	1,446	0	1,446	.0
TOTAL		14	14,333,763	1,641	14,335,403	100.0
PERCENTAGE		-	100.0 %	.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WEST VIRGINIA

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AR	72
CT	7
IN	360
KY	147
MA	116
NH	23
NJ	109
NY	2
OR	2
PA	421
TX	516
TOTAL	1,774

Exports

State	Tons Shipped
AL	317
AR	472
DE	29
FL	172
GA	187
IL	176
IN	2,296
KY	349
LA	794
MD	27
MI	713
MN	137
NC	557
NJ	8,076
NY	584
OH	37,080
PA	7,589
SC	3,583
TN	4
TX	548
VA	78
TOTAL	63,767

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

WEST VIRGINIA

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	MONX*	13,513,270	93.9
2	KONX*	580,032	4.0
3	U019	162,338	1.1
4	D002	43,340	.3
5	F006	14,719	.1
6	F003	13,020	.1
7	D001	12,073	.1
8	DONX*	10,822	.1
9	UONX*	7,839	.1
10	K035	6,765	.0
11	K062	4,568	.0
12	K027	4,413	.0
13	FONX*	3,552	.0
14	K061	2,047	.0
15	D003	1,662	.0
16	D008	1,661	.0
17	D007	1,368	.0
18	F002	1,352	.0
19	F008	1,162	.0
20	F005	1,050	.0
21	U051	599	.0
22	F007	496	.0
23	K083	271	.0
24	D009	247	.0
25	K087	224	.0
26	U220	174	.0
27	K048	143	.0
28	D004	135	.0
29	K016	130	.0
30	U221	130	.0
31	K106	97	.0
32	K044	94	.0
33	U044	72	.0
34	K085	53	.0
35	U165	42	.0
36	F001	36	.0
37	U080	35	.0
38	D006	26	.0
39	U223	21	.0
40	D005	20	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WEST VIRGINIA

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
METALS RECOVERY (FOR REUSE)	M011-M019	D001	137
SOLVENTS RECOVERY	M021-M029	F003	19
INCINERATION	M041-M049	MONX*	10,214
		D001	7,297
		K027	4,788
		FONX*	3,382
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	MONX*	3,610
		F003	624
		D001	174
		D003	28
AQUEOUS INORGANIC TREATMENT	M071-M079	D007	107
		D001	3
AQUEOUS ORGANIC TREATMENT	M081-M089	MONX*	13,483,853
		KONX*	578,624
		U019	162,336
		D002	10,461
OTHER TREATMENT	M121-M129	D002	26,278
		F007	1,215
		F008	640
		MONX*	360
LANDFILL	M132	MONX*	10,377
		UONX*	6,235
		DONX*	624
		D007	51
SURFACE IMPOUNDMENT	M133	MONX*	1,446
TOTAL			14,335,403

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

WEST VIRGINIA

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	WVD004341491	AMERICAN CYANAMID COMPANY	WILLOW ISLAND	7,886,806
02	WVD005005509	RHONE-POULENC AG COMPANY	INSTITUTE	5,814,145
03	WVD056866312	MOBAY CORPORATION	NATRIUM	585,036
04	WVD045875291	DUPONT WASHINGTON WORKS	WASHINGTON	32,167
05	WVD000068908	WEIRTON STEEL CORPORATION	WEIRTON	19,470
06	WVD004325353	UNION CARBIDE CORPORATION	LONG REACH	17,191
07	WVD004336749	KOPPERS INDUSTRIES INC	FOLLANSBEE	7,140
08	WVD981102890	FMC CORPORATION	IINSTITUTE	5,232
09	WVD005012851	DUPONT	BELLE	2,753
10	WVD072667801	STEEL OF WEST VIRGINIA	HUNTINGTON	2,074
11	WVD980555239	OLIN CORPORATION	MOUNDSVILLE	1,645
12	WVD981034101	SAFETY-KLEEN CORP	WHEELING	1,641
13	WVD060692126	PITTSBURGH TUBE COMPANY	JANE LEW	1,154
14	WVD136333580	HOMER LAUGHLIN CHINA CO	NEWELL	1,111
15	WVD005005087	FMC CORPORATION	NITRO	694
16	WVD039990965	MONSANTO CHEMICAL COMPANY	NITRO	661
17	WVD005005079	FMC CORPORATION	SOUTH CHARLESTON	628
18	WVD000737387	SAFETY-KLEEN CORP	NITRO	620
19	WVD981945215	NEWELL SPECIALTY CHEMICALS INC	NEWELL	580
20	WVD000765297	LCP CHEMICALS - WV INC/HANLIN CHEMICALS	MOUNDSVILLE	553
21	WVD981730757	AC&S INC	NITRO	507
22	WVD039060983	WHEELING-PITTSBURGH STEEL CORP	WHEELING	500
23	WVD060682291	UNION CARBIDE CORPORATION	SOUTH CHARLESTON	462
24	WVD003095536	3M COMPANY	MIDDLEWAY	449
25	WVD981107600	ADSORPTION SYSTEMS INC	MORGANTOWN	360
26	WVD000797720	WHEELING-PITTSBURGH STEEL CORP	BEECH BOTTOM	359
27	WVD981738909	AMERICAN WOODMARK CORPORATION	MOOREFIELD	343
28	WVD980552384	GE SPECIALTY CHEMICALS INC NORTH PLANT	MORGANTOWN	309
29	WVD041517830	USC COMPANY	WEIRTON	301
30	WVD980552202	BELPAR CHEMICAL SERVICES	MINERAL WELLS	296
31	WVD088911854	GE CHEMICALS INC	WASHINGTON	294
32	WVD061769592	ANCHOR HOCKING PACKAGING CO	WEIRTON	264
33	WV0170023691	ALLEGANY BALLISTICS LAB / HERCULES INC	ROCKET CENTER	261
34	WVD003080959	KOPPERS INDUSTRIES INC	GREEN SPRING	239
35	WVD005010277	OCCIDENTAL CHEMICAL CORPORATION	BELLE	237
36	WVD004319539	WHEELING-PITTSBURGH STEEL CORP	FOLLANSBEE	227
37	WVD041952714	DUPONT POTOMAC RIVER WORKS	FALLING WATERS	223
38	WVD003062643	BADGER POWHATAN	RANSON	199
39	WVD988767596	CEREDO COMPRESSOR STATION	HUNTINGTON	190
40	WVD004336343	PPG INDUSTRIES INC NATRIUM PLANT	NATRIUM	189

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WEST VIRGINIA

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	WVD004341491 AMERICAN CYANAMID COMPANY, WILLOW ISLAND					7,884,
	AQUEOUS ORGANIC TREATMENT	M081-M089	7,872,801	0	7,872,801	
	INCINERATION	M041-M049	10,710	0	10,710	
	SURFACE IMPOUNDMENT	M133	1,446	0	1,446	
2	WVD005005509 RHONE-POULENC AG COMPANY, INSTITUTE					5,813,
	AQUEOUS ORGANIC TREATMENT	M081-M089	5,793,245	0	5,793,245	
	LANDFILL	M132	16,695	4	16,699	
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3,610	0	3,610	
3	WVD056866312 MOBAY CORPORATION, NATRIUM					583,
	AQUEOUS ORGANIC TREATMENT	M081-M089	578,782	0	578,782	
	INCINERATION	M041-M049	4,820	375	5,195	
4	WVD045875291 DUPONT WASHINGTON WORKS, WASHINGTON					31,
	OTHER TREATMENT	M121-M129	26,278	0	26,278	
	INCINERATION	M041-M049	5,415	0	5,415	
	AQUEOUS INORGANIC TREATMENT	M071-M079	3	0	3	
5	WVD004325353 UNION CARBIDE CORPORATION, LONG REACH					17,
	AQUEOUS ORGANIC TREATMENT	M081-M089	9,841	0	9,841	
	INCINERATION	M041-M049	6,712	0	6,712	
	LANDFILL	M132	634	0	634	
6	WVD000068908 WEIRTON STEEL CORPORATION, WEIRTON					1,
	OTHER TREATMENT	M121-M129	1,079	776	1,855	
7	WVD039990965 MONSANTO CHEMICAL COMPANY, NITRO					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	622	0	622	
8	WVD060682291 UNION CARBIDE CORPORATION, SOUTH CHARLESTON					
	INCINERATION	M041-M049	461	4	465	
	METALS RECOVERY (FOR REUSE)	M011-M019	0	137	137	
9	WVD981107600 ADSORPTION SYSTEMS INC., MORGANTOWN					
	OTHER TREATMENT	M121-M129	360	0	360	
10	WV0170023691 ALLEGANY BALLISTICS LAB / HERCULES INC., ROCKET CENTER					
	INCINERATION	M041-M049	183	0	183	
11	WVD005005483 UNION CARBIDE SOUTH CHARLESTON PLANT, SOUTH CHARLESTON					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	8	173	181	
12	WVD076826015 INCO ALLOYS INTERNATIONAL INC., HUNTINGTON					
	AQUEOUS INORGANIC TREATMENT	M071-M079	21	87	107	
	OTHER TREATMENT	M121-M129	0	55	55	
	INCINERATION	M041-M049	0	1	1	
13	WVD041952714 DUPONT POTOMAC RIVER WORKS, FALLING WATERS					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	0	28	28	
	SOLVENTS RECOVERY	M021-M029	19	0	19	
	INCINERATION	M041-M049	18	0	18	
14	WVD980552384 GE SPECIALTY CHEMICALS INC NORTH PLANT, MORGANTOWN					
	OTHER TREATMENT	M121-M129	0	0	0	

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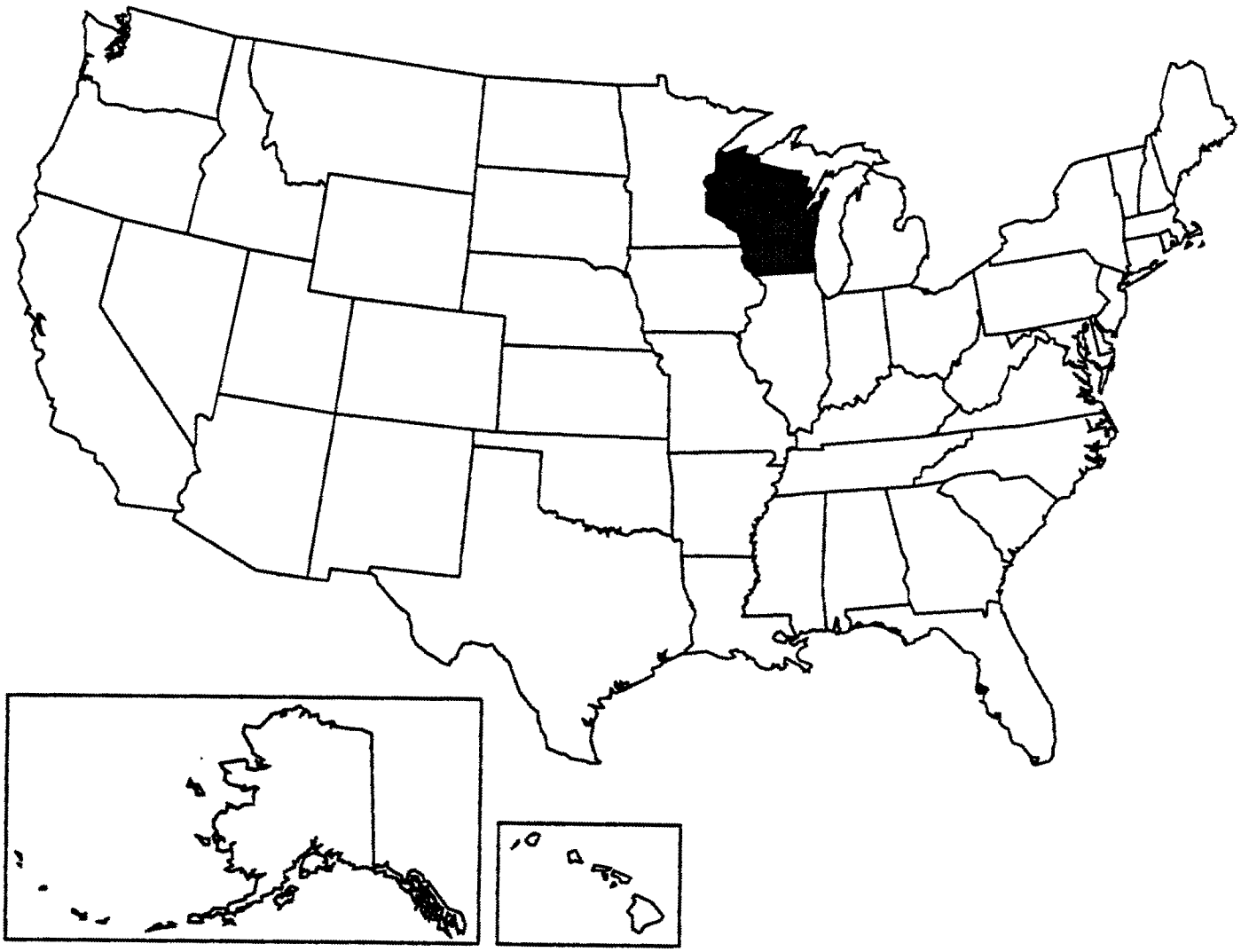
1 Excluding quantity managed by storage only.

Wisconsin

Region V



WISCONSIN

EPA Region Address:	U.S. EPA Region V Waste Management Division 230 S. Dearborn Street Mail Stop 5HR13 Chicago, IL 60604
Biennial Report Data Collection Instrument:	Customized EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Wisconsin Department of Natural Resources Bureau of Solid and Hazardous Waste Hazardous Waste Management Section 101 South Webster SW/3 Madison, WI 53707
Contact Name:	Ms. Aggie Cook
Phone:	(608) 266-2414

Notes: No special notes for Wisconsin.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WISCONSIN

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	559
Total Quantity of Regulated Waste Generated:	411,897 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	18
Facilities managing only waste generated off site	8
Facilities managing waste generated both on and off site	8
Total RCRA TSD Facilities (excluding storage-only facilities):	34
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	371,333 tons
Total RCRA TSD Facilities:	55

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
SOLVENTS RECOVERY	M021-M029	11	5,289	33,222	38,511	10.4
INCINERATION	M041-M049	4	2,462	198	2,659	.7
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	3	1,990	165	2,155	.6
FUEL BLENDING	M061	2	34,126	10,709	44,835	12.1
AQUEOUS INORGANIC TREATMENT	M071-M079	10	270,478	3,447	273,925	73.8
AQUEOUS ORGANIC TREATMENT	M081-M089	2	88	2	90	.0
STABILIZATION	M111-M119	1	622	0	622	.2
OTHER TREATMENT	M121-M129	6	6,083	0	6,083	1.6
INVALID SYSTEM TYPE		10	0	2,454	2,454	.7
TOTAL		34	321,138	50,195	371,333	100.0
PERCENTAGE		-	86.5 %	13.5 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WISCONSIN

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
AL	241
AR	50
CA	44
IA	4,118
IL	12,486
IN	1,113
KS	558
KY	23
LA	4
MA	0
MD	14
MI	525
MN	3,469
MO	304
MT	2
NC	12
ND	26
NE	0
NY	25
OH	110
SD	22
TN	42
TX	199
TOTAL	23,387

Exports

State	Tons Shipped
AL	569
AR	276
AZ	120
CA	113
CT	3
FL	0
GA	4
IA	1,640
IL	29,224
IN	10,067
KS	115
KY	789
LA	810
MA	20
MD	2
MI	18,459
MN	1,634
MO	30,787
NC	8
NE	4,305
NJ	47
NY	0
OH	11,462
OK	171
PA	55
RI	39
SC	119
TN	348
TX	2
TOTAL	111,190

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

WISCONSIN

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	F006	145,621	35.4
2	D007	76,220	18.5
3	F003	43,362	10.5
4	D003	35,090	8.5
5	D008	30,456	7.4
6	D002	21,219	5.2
7	K071	18,830	4.6
8	D001	14,615	3.5
9	K062	11,176	2.7
10	F005	4,495	1.1
11	D004	4,331	1.1
12	F019	2,095	.5
13	F002	1,780	.4
14	F001	1,205	.3
15	D006	343	.1
16	D009	338	.1
17	K051	129	.0
18	D005	83	.0
19	F008	76	.0
20	P058	73	.0
21	U190	53	.0
22	F027	49	.0
23	F007	43	.0
24	P023	42	.0
25	K106	38	.0
26	D010	30	.0
27	P002	24	.0
28	U226	23	.0
29	U239	10	.0
30	D014	8	.0
31	F011	6	.0
32	D011	3	.0
33	U154	3	.0
34	F004	3	.0
35	U115	2	.0
36	K086	2	.0
37	F024	2	.0
38	U083	2	.0
39	U188	1	.0
40	U134	1	.0

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WISCONSIN

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
SOLVENTS RECOVERY	M021-M029	F005	19,023
		F003	11,269
		D001	4,798
		F002	2,681
INCINERATION	M041-M049	D001	1,648
		F003	910
		F005	94
		F002	7
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	D001	2,120
		F005	35
FUEL BLENDING	M061	F003	34,689
		D001	9,142
		F005	684
		F002	246
AQUEOUS INORGANIC TREATMENT	M071-M079	F006	139,054
		D007	70,600
		D003	34,964
		K071	18,795
AQUEOUS ORGANIC TREATMENT	M081-M089	F027	88
		D004	2
STABILIZATION	M111-M119	D008	622
OTHER TREATMENT	M121-M129	D004	4,272
		D001	1,570
		D002	188
		F005	32
INVALID SYSTEM TYPE		D001	1,360
		F005	366
		F003	343
		F001	169
TOTAL			371,333

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

WISCONSIN

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	WID006107122	WILLIAMS S K CO	WAUWATOSA	231,911
02	WID098547854	METRO LANDFILL & DEVELOPMENT COMPANY	FRANKLIN	21,994
03	WID000808824	AVGANIC INDUSTRIES INC	COTTAGE GROVE	21,838
04	WID059972935	PPG INDUSTRIES INC	OAK CREEK	19,628
05	WID046536231	VULCAN MATERIALS CO	PORT EDWARDS	18,904
06	WID006085815	A O SMITH AUTOMOTIVE PRODUCTS CO	MILWAUKEE	16,320
07	WID054105218	MASTER LOCK COMPANY INC	MILWAUKEE	8,956
08	WID006073225	KOHLER COMPANY	KOHLER	4,509
09	WID990829475	WASTE RESEARCH & RECLAMATION	EAU CLAIRE	3,970
10	WID006089189	MACWHYTE COMPANY	KENOSHA	3,967
11	WID006141402	FORT HOWARD STEEL INC	GREEN BAY	3,775
12	WID096344056	US CHROME CORP OF WISCONSIN	FOND DU LAC	3,398
13	WID028877074	CHARTER MANUFACTURING COMPANY-PROCESS	SAUKVILLE	3,072
14	WID980615439	COOK COMPOSITES AND POLYMERS CO	SAUKVILLE	2,422
15	WID006091425	JOHNSON SC & SON INC	STURTEVANT	2,308
16	WID073830028	W6250 WEST PIONEER RD PO BOX1939	FOND DU LAC	2,237
17	WID980905293	PIERCE MANUFACTURING INC	APPLETON	1,794
18	WID006125215	US WORMALD INC - ANSUL FIRE PROTECTION	MARINETTE	1,755
19	WID006102545	JOHN DEERE-HORICON WORKS OF DEERE & CO	HORICON	1,615
20	WID053687968	MIDWEST STEEL CO	MADISON	1,505
21	WID980898266	SPECIALTYCHEM PRODUCTS CORP	MARINETTE	1,456
22	WID059980045	GM TRUCK AND BUS ASSEMBLY PLANT	JANESVILLE	1,366
23	WID023350192	MILWAUKEE SOLVENTS & CHEMICAL CORP	MENOMONEE FALLS	1,331
24	WID006072425	CHRYSLER MOTORS MILW MANUF	MILWAUKEE	1,158
25	WID006116529	TECUMSEH PRODUCTS CO INC	NEW HOLSTEIN	993
26	WID006096192	ACME GALVANIZING INC	MILWAUKEE	923
27	WID006082531	BRIGGS & STRATTON CORP	WAUWATOSA	864
28	WID050269372	CHRYSLER MOTORS CORP	KENOSHA	810
29	WID007947898	HOFFER'S INC-COATINGS DIVISION	WAUSAU	669
30	WID000808964	3M CO-BLDG SUPPLY & CLEANING PRODCTS DIV	PRAIRIE DU CHIEN	604
31	WID000808519	CHRYSLER MOTORS CORP	KENOSHA	511
32	WID000808857	JOHNSON CONTROLS INC GLOBE BATTERY	MILWAUKEE	509
33	WID006095038	OILGEAR COMPANY	MILWAUKEE	485
34	WID006120919	UNIROYAL ENGINEERED PRODUCTS, INC.	STOUGHTON	479
35	WID006101695	OUTOKUMPU AMERICAN BRASS INC	KENOSHA	471
36	WID006126999	PIERCE MANUFACTURING INC	APPLETON	420
37	WID006144737	CURWOOD INC	NEW LONDON	408
38	WI9210020054	US ARMY BADGER AMMUNITION PLANT	BARABOO	403
39	WID006078307	BRADLEY CORPORATION	MENOMONEE FLS	376
40	WID006183826	NORTHERN ENGRAVING CORP	SPARTA	370

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WISCONSIN

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Tot Manag
1	WID006107122 WILLIAMS S K CO., WAUWATOSA					231,
	AQUEOUS INORGANIC TREATMENT	M071-M079	231,756	0	231,756	
2	WID000808824 AVGANIC INDUSTRIES INC., COTTAGE GROVE					61,
	FUEL BLENDING	M061	21,471	10,709	32,180	
	SOLVENTS RECOVERY	M021-M029	0	28,796	28,796	
	INVALID SYSTEM TYPE		0	41	41	
3	WID046536231 VULCAN MATERIALS CO., PORT EDWARDS					18,
	AQUEOUS INORGANIC TREATMENT	M071-M079	18,795	0	18,795	
4	WID059972935 PPG INDUSTRIES INC., OAK CREEK					14,
	OTHER TREATMENT	M121-M129	5,825	0	5,825	
	SOLVENTS RECOVERY	M021-M029	4,851	0	4,851	
	AQUEOUS INORGANIC TREATMENT	M071-M079	4,272	0	4,272	
	INVALID SYSTEM TYPE		0	3	3	
5	WID990829475 WASTE RESEARCH & RECLAMATION, EAU CLAIRE					12,
	FUEL BLENDING	M061	12,655	0	12,655	
6	WID054105218 MASTER LOCK COMPANY INC., MILWAUKEE					8,
	AQUEOUS INORGANIC TREATMENT	M071-M079	8,707	0	8,707	
7	WID023350192 MILWAUKEE SOLVENTS & CHEMICAL CORP., MENOMONEE FALLS					4,
	SOLVENTS RECOVERY	M021-M029	0	4,422	4,422	
8	WID006435895 HYDRITE CHEMICAL COMPANY, MILWAUKEE					3,
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	3,405	3,405	
9	WID096344056 US CHROME CORP OF WISCONSIN, FOND DU LAC					3,
	AQUEOUS INORGANIC TREATMENT	M071-M079	3,270	0	3,270	
10	WID980615439 COOK COMPOSITES AND POLYMERS CO, SAUKVILLE					2,
	INCINERATION	M041-M049	2,404	155	2,558	
11	WID006091425 JOHNSON SC & SON INC., STURTEVANT					1
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1,888	0	1,888	
	INVALID SYSTEM TYPE		0	30	30	
12	WID073830028 W6250 WEST PIONEER RD PO BOX1939, FOND DU LAC					1
	AQUEOUS INORGANIC TREATMENT	M071-M079	1,694	0	1,694	
	SOLVENTS RECOVERY	M021-M029	116	0	116	
13	WID006073225 KOHLER COMPANY, KOHLER					1
	AQUEOUS INORGANIC TREATMENT	M071-M079	1,100	0	1,100	
	STABILIZATION	M111-M119	622	0	622	
14	WID981097769 SAFETY-KLEEN CORP-(5-100-01), WAUKESHA					1
	INVALID SYSTEM TYPE		0	1,163	1,163	
15	WID006125215 US WORMALD INC - ANSUL FIRE PROTECTION, MARINETTE					1
	AQUEOUS INORGANIC TREATMENT	M071-M079	884	0	884	
	OTHER TREATMENT	M121-M129	188	0	188	
16	WID980896633 SAFETY-KLEEN CORP-(5-197-01), MADISON					
	INVALID SYSTEM TYPE		0	536	536	
17	WID006120919 UNIROYAL ENGINEERED PRODUCTS, INC., STOUGHTON					
	SOLVENTS RECOVERY	M021-M029	270	0	270	
	OTHER TREATMENT	M121-M129	32	0	32	
18	WID981187297 SAFETY-KLEEN CORP-(5-176-01), KAUKAUNA					
	INVALID SYSTEM TYPE		0	277	277	
19	WID053689196 ASHLAND CHEMICAL INC., MILWAUKEE					
	INVALID SYSTEM TYPE		0	276	276	
20	WID000713636 BRIGGS & STRATTON CORP., MENOMONEE FALLS					
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	68	165	232	

1 Excluding quantity managed by storage only.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WISCONSIN

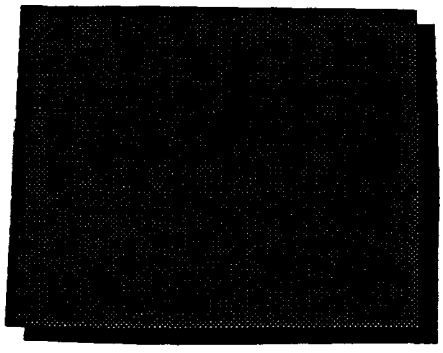
TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989 (continued)

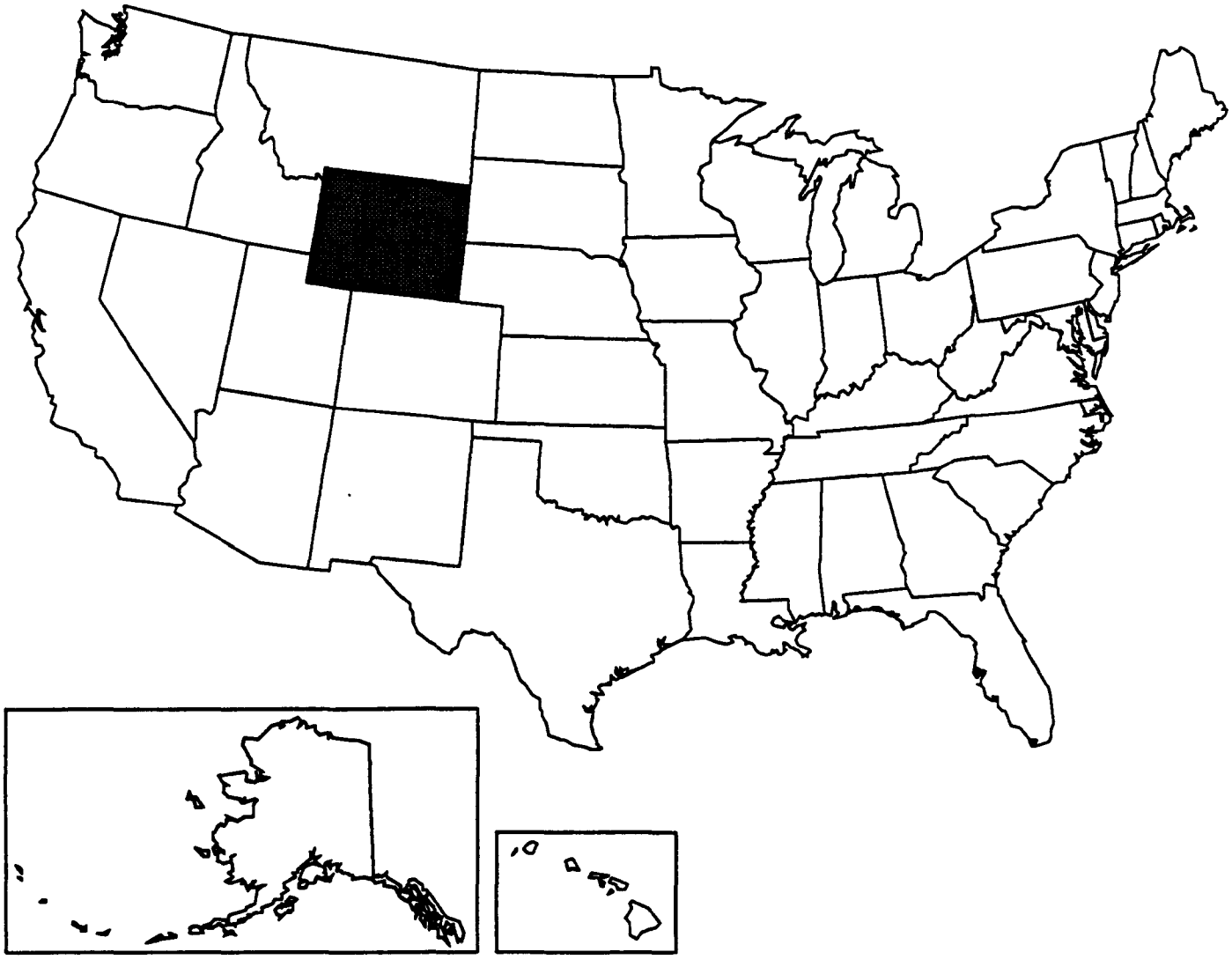
Rank	EPA ID / Site Name, City / Management Method		On Site	Off Site	Method Total	Total Managed 1
21	WID073838880 NATIONAL TANK SVC OF WIS INC., WEST ALLIS					96
	INVALID SYSTEM TYPE		0	79	79	
	OTHER TREATMENT	M121-M129	17	0	17	
22	WID006144737 CURWOOD INC., NEW LONDON					94
	INCINERATION	M041-M049	57	37	94	
23	WID044393114 ZIMPRO PASSAVANT, ROTHSCHILD					91
	INVALID SYSTEM TYPE		0	46	46	
	AQUEOUS INORGANIC TREATMENT	M071-M079	0	43	43	
	AQUEOUS ORGANIC TREATMENT	M081-M089	0	2	2	
	INCINERATION	M041-M049	1	0	1	
24	WID006135818 SEMLING-MENKE CO INC., MERRILL					88
	AQUEOUS ORGANIC TREATMENT	M081-M089	88	0	88	
25	WID006116529 TECUMSEH PRODUCTS CO INC., NEW HOLSTEIN					42
	SOLVENTS RECOVERY	M021-M029	42	0	42	
26	WID030199434 ALGOMA HARDWOODS INC., ALGOMA					35
	ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	35	0	35	
27	WID006113906 ALDRICH CHEMICAL COMPANY INC., MILWAUKEE					22
	OTHER TREATMENT	M121-M129	22	0	22	
28	WID006142061 OMC TRADE WINDS, MANAWA					11
	INCINERATION	M041-M049	0	6	6	
	SOLVENTS RECOVERY	M021-M029	0	4	4	
29	WID006070429 EGGERS HARDWOOD PRODUCTS CORP., NEENAH					10
	SOLVENTS RECOVERY	M021-M029	10	0	10	
30	WID980896641 SAFETY-KLEEN CORP-(5-150-01), LA CROSSE					2
	INVALID SYSTEM TYPE		0	2	2	
31	WI9210020054 US ARMY BADGER AMMUNITION PLANT, BARABOO					1
	SOLVENTS RECOVERY	M021-M029	1	0	1	
32	WID084224179 OMC PARTS & ACCESSORIES, BELOIT					1
	SOLVENTS RECOVERY	M021-M029	1	0	1	
33	WIT560012247 UNIV OF WIS-MILWAUKEE, MILWAUKEE					0
	OTHER TREATMENT	M121-M129	0	0	0	
34	WID023542756 MARTIN PONTIAC INC., SHEBOYGAN					0
	SOLVENTS RECOVERY	M021-M029	0	0	0	

Excluding quantity managed by storage only.

Wyoming

Region VIII





WYOMING

EPA Region Address:	U.S. EPA Region VIII Hazardous Waste Management Division Mail Stop HWM-RI 999 18th Street, Suite 500 Denver, CO 80202
Biennial Report Data Collection Instrument:	EPA Hazardous Waste Report
Address of Participating State Environmental Authority	Solid Waste Management Program Department of Environmental Quality 122 West 25th Street Cheyenne, WY 82002
Contact Name:	Mr. Carl Anderson Region I Supervisor
Phone:	(307) 777-7752

Notes: No special notes for Wyoming.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WYOMING

Table 1. RCRA Hazardous Waste Generation and Management, 1989

Total Number of RCRA Large Quantity Generators:	19
Total Quantity of Regulated Waste Generated:	3,180 tons
RCRA TSD Facilities (excluding storage-only facilities)	
Facilities managing only waste generated on site	0
Facilities managing only waste generated off site	1
Facilities managing waste generated both on and off site	0
Total RCRA TSD Facilities (excluding storage-only facilities):	1
Total Quantity of RCRA Regulated Waste Managed in RCRA TSD units: (excluding quantity managed in storage only)	287 tons
Total RCRA TSD Facilities:	7

Final Disposition of Wastes Managed in RCRA Processes

Management Method	Code	No. of facilities using method*	Hazardous Waste Managed Quantities (tons) On site	Off site	Total	Percent
LAND TREATMENT	M131	1	0	287	287	100.0
TOTAL		1	0	287	287	100.0
PERCENTAGE		-	.0 %	100.0 %	100%	-

*Column may not sum to total because facilities may have multiple handling methods.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WYOMING

TABLE 2. RCRA Hazardous Waste Imports and Exports, 1989

Imports

State	Tons Received
	0
TOTAL	0

Exports

State	Tons Shipped
CO	0
ID	751
NE	60
TX	7
UT	2,136
VT	0
TOTAL	2,954

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WYOMING

TABLE 3. RANK ORDER OF 40 LARGEST HAZARDOUS WASTES GENERATED, 1989

Rank	Waste Type	Quantity Generated (tons)	Percentage
1	K051	2,369	74.5
2	K001	268	8.4
3	MOMX*	262	8.2
4	K049	105	3.3
5	D001	75	2.3
6	FOMX*	29	.9
7	DOMX*	21	.7
8	D007	17	.5
9	U210	15	.5
10	K050	12	.4
11	D008	6	.2
12	D009	2	.1
13	D002	1	.0
14	F002	0	.0
15	F005	0	.0
15	K048	0	.0

* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report
(Based on 1989 Data)

WYOMING

Table 4. Four Largest Quantities and Types of RCRA Hazardous Waste Managed, by RCRA Management Method, 1989

Management Method	Code	Waste Type	Quantity Managed in State (tons)
LAND TREATMENT	M131	K051	287
TOTAL			287

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* These waste types represent waste streams that were characterized by more than one EPA waste code. An explanation of the derivation of these mixture codes is provided in Section 2-3.

National Biennial RCRA Hazardous Waste Report

(Based on 1989 Data)

WYOMING

TABLE 5. FORTY LARGEST RCRA HAZARDOUS WASTE GENERATORS AND RCRA QUANTITY GENERATED, 1989

RANK	EPAID	SITE NAME	CITY	TOTAL GENERATED (U.S. TONS)
01	WYD048743009	LITTLE AMERICA REFINING COMPANY	CASPER	1,300
02	WYD051843613	FRONTIER OIL CHEYENNE REF (HUSKY/RMT)	CHEYENNE	884
03	WYD007064447	AMOCO OIL COMPANY CASPER REFINERY	CASPER	554
04	WYD061112470	UNION PACIFIC RAILROAD	LARAMIE	268
05	WYD079959185	SINCLAIR OIL CORPORATION	SINCLAIR	37
06	WYD093295079	CROWN CORK & SEAL INC	WORLAND	28
07	WYD048128227	WYOMING MACHINERY COMPANY	CASPER	18
08	WYD083705707	THUNDER BASIN COAL -BLACK THUNDER MINE	WRIGHT	16
09	WYD120371810	UNION PACIFIC RAILROAD YARD	CHEYENNE	15
10	WYD980962005	WELCHEM INC. WORLAND FACILITY	WORLAND	12
11	WYD058854688	AMAX COAL CO. BELLE AYR MINE	GILLETTE	11
12	WYD030434724	BAKER HUGHES TUBULAR SERVICES	CASPER	10
13	WYD098713563	KERR-MCGEE COAL CORP - JACOBS RANCH MINE	WRIGHT	9
14	WYD000712687	NALCO CHEMICAL COMPANY	EVANSVILLE	8
15	WYD982597973	LYNN'S SERVICE CENTER	CODY	6
16	WYD982647885	FMC CORPORATION	MILLS	3
17	WYD064052475	UNICHEM INTERNATIONAL INC.	CASPER	2
18	WYD072972144	BRIDGER COAL COMPANY	ROCK SPRINGS	1
19	WYD982590333	MOUNTAIN VIEW AUTO BODY	LARAMIE	0

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(Based on 1989 Data)

WYOMING

TABLE 6. FORTY LARGEST RCRA HAZARDOUS WASTE FACILITIES, 1989

Rank	EPA ID	Site Name, City	Management Method	On Site	Off Site	Method Total	Tota Manag
1	WYD991301086	AMOCO PIPELINE TANK FARM, CASPER	LAND TREATMENT M131	0	287	287	2

1 Excluding quantity managed by storage only.

Appendix A

Definitions

DEFINITIONS

Accumulation

A site that does not hold RCRA Interim Status or a RCRA permit (i.e., a site that does not have active RCRA Part A or Part B permit applications) may accumulate hazardous waste for a short period of time before shipping it off site. The waste must be accumulated in either tanks or containers; it may not be accumulated in surface impoundments.

Generators of more than 1,000 kg (2,200 lbs) of hazardous waste per month may accumulate their waste for up to 90 days before shipping it off site.

Generators of 100 kg (220 lbs) to 1,000 kg (2,200 lbs) of hazardous waste per month may accumulate their waste for up to 180 days before shipping it off site. If the nearest treatment, storage, disposal, or recycling facility to which they can send their waste is more than 200 miles away, they may accumulate their waste for 270 days.

Activity/Production Index

The activity/production index is a measure of changes in production, activity, economics and/or other factors that affected the quantity of hazardous waste generated in 1989, compared to 1988. The Index is used to distinguish between inter-year hazardous waste generation quantity changes resulting from waste minimization activity, and changes that were attributable to production, activity, economics or other factors.

Acute Hazardous Waste

Acute hazardous waste is any hazardous waste with an EPA Waste Code beginning with the letter "P", or any of the following "F" codes: F020, F021, F022, F023, F026, and F027. These wastes are subject to stringent quantity standards for accumulation and generation.

Authorized State

An authorized State is one which has obtained authorization from EPA to direct the RCRA program.

CAS Number

The Chemical Abstracts Service (CAS) number identifies a toxic chemical by a unique eight-digit number.

CBI

Confidential Business Information (CBI) refers to information a facility does not wish to make available to the general public for competitive business reasons. CBI may be claimed for certain information in your report. A claim of CBI may be made in accordance with 40 CFR Part 2, Subpart B.

Note: Definitions are not legally binding. Refer to Title 40 of CFR for precise legal wording.

CFR	The Code of Federal Regulations, or CFR, contains the detailed regulations, written by Federal Agencies, to implement the provisions of laws passed by Congress. Regulations in the CFR have the force of Federal law.
Characteristic Waste	A waste classified as hazardous because it is ignitable, corrosive, reactive, or toxic as determined by the EP toxicity test is a characteristic waste. It has an EPA Waste Code in the range "D001" to "D017". Each of these four characteristics are defined in 40 CFR 261.20 Subpart C.
Delisted Wastes	Delisted wastes are site-specific wastes that are excluded from reporting under 40 CFR 260.20 and 260.22. A waste at a particular generating site may be excluded or delisted from the lists of hazardous waste in Subpart D of Part 261 by petitioning the EPA Administrator for a regulatory amendment.
Disposal	Disposal means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste into or on any land or water so that such hazardous waste may enter the environment or be emitted into the air or discharged into any waters including ground water.
EPA	The Environmental Protection Agency, EPA, is also called USEPA, for United States Environmental Protection Agency. Established in 1970 by presidential executive order, it brings together parts of various government agencies involved with the control of pollution. Note that some State environmental authorities may be called EPA also, as in Illinois EPA.
EPA Identification Number	The EPA identification number is a 12-character digit number assigned by either EPA or the authorized State to each generator, transporter, and treatment, storage, or disposal facility. Facilities which are not generators but anticipate possible generation activity may also apply for and receive an EPA ID number. The first two characters are alphabetical and stand for the state in which the site is physically located. The third character can be either alphabetical or numeric. The remaining nine characters are always numeric.
Excluded Wastes	A list of wastes that are excluded from regulation under 40 CFR 261.4 and 261.3(c)(2)(ii).
Facility	In this report, a facility is a site which manages hazardous wastes on site. Facilities are also called "TSDs" or "TSDRs."

Note: Definitions are not legally binding. Refer to Title 40 of CFR for precise legal wording.

Form R	Form R is also called the Toxic Chemical Release Inventory (TRI) Report form. This form is required by Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986), Public Law 99-499. The information on this form was last collected for calendar year 1988 with the report due by July 1, 1989.
Generator	A generator is a site or mobile source whose actions or processes produce hazardous waste.
Generator Notification Form	Every site which generates, treats, stores, or disposes of hazardous waste must inform EPA of its hazardous waste activity by filing EPA Form 8700-12, Notification of Hazardous Waste Activity (Hazardous Waste Activity Notification Form). After receiving the notification form, EPA assigns an identification number (EPA ID) to the site.
Hazardous Waste	By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. It is a solid waste which possesses at least one of four characteristics (ignitability, corrosivity, reactivity, and EP toxicity), or appears on special EPA lists. A hazardous waste is regulated under Subtitle C of RCRA. The regulatory definition of hazardous waste is found in 40 CFR 261.3.
Listed Wastes	Listed wastes are those wastes specifically named in 40 CFR 261.3. These wastes are listed as hazardous under RCRA but have not been subjected to the toxic characteristics listing process because the dangers they present are considered self evident. They bear EPA Waste Codes beginning with the letters F, P, U, or K.
NPDES	National Pollutant Discharge Elimination System, or NPDES, is a provision of the Clean Water Act which prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA, a State, or (where delegated), a tribal government on an Indian reservation.
Operator	An operator is the person responsible for the overall operation of the site in question.
Opportunity Assessment	An opportunity assessment is a procedure that identifies practices that can be implemented to reduce the generation of hazardous waste (source reduction) or the quantity that must subsequently be treated, stored, disposed of, or recycled.
POTW	A POTW, Publicly Owned Treatment Works, is a waste treatment works owned by a State, unit of local government or Indian tribe usually designed to treat domestic wastewaters.

Note: Definitions are not legally binding. Refer to Title 40 of CFR for precise legal wording.

RCRA	The Resource Conservation and Recovery Act (RCRA) is the Federal statute that regulates the generation, treatment, storage, disposal, or recycling of solid and hazardous waste.
RCRA Permit	A site is said to have RCRA permit if it has submitted both a RCRA Part A permit application and a RCRA Part B permit application, and has had the Part B permit application approved.
RCRA Regulated Units	RCRA regulated units are units which treat, store, or dispose of hazardous waste and are subject to regulation (i.e., required to have, or be covered by, a RCRA permit). Interim Status Permits are included. Excluded are containers and tanks used exclusively for short-term accumulation exempted under 40 CFR 262.34.
Recycling	Recycling is the process of minimizing the generation of waste by recovering usable products that might otherwise become waste. It also refers to the reclamation of useful constituent fractions within a waste material or removal of contaminants from a waste to allow it to be reused. As used in this report, recycling implies use, reuse, or reclamation of a waste, either on site or off site, after it has been generated.
Respondent	A site that must complete at least one particular form is a respondent.
Site	In this report, site refers to any holder of an EPA Identification Number. A site may be a "generator", a "facility" (or "TSDR facility"), or both, or a non-regulated facility which has conservatively requested and received an EPA ID number.
Sanitary Sewer	A channel or conduit that carries household, commercial, and industrial wastewater from the source to a treatment plant or receiving stream.
Sludge	A semi-solid residue from any number of air or water treatment processes. Sludge can be a hazardous waste.
Solid Waste	Solid waste is solid, semi-solid, liquid or containerized gaseous material which is discarded and/or has served its intended purpose, including garbage, refuse or sludge which is not specifically exempted. Wastes exempted from being considered solid wastes are materials found in domestic wastewater, irrigation return flows, point source discharges regulated under the Federal Clean Water Act, in-situ mining wastes, and Atomic Energy Commission source, special nuclear, or by-product material.

Note: Definitions are not legally binding. Refer to Title 40 of CFR for precise legal wording.

Solvent	A solvent is a substance (usually liquid) capable of dissolving or dispersing one or more other substances. These include, but are not limited to, the non-spent materials listed in EPA Waste Codes F001 through F005.
Source Code	The source code describes the production or service process associated with generation of waste.
Source Reduction	Source reduction is the reduction or elimination of waste at the source, usually within a process. Source reduction measures include process modifications, feedstock substitutions, improvements in feedstock purity, housekeeping and management practices, increases in the efficiency of machinery, and recycling within a process. Source reduction implies any action that reduces the toxicity or the amount of waste exiting a process.
Standard Industrial Classification (SIC) Code	The SIC code is a four-digit coding system, developed by the U.S. Bureau of the Census and the Office of Management and Budget (OMB), that categorizes the principal product or group of products produced or distributed, or services rendered at a site's physical location.
Storage	Storage is the temporary holding of waste pending treatment or disposal. Storage methods include containers, tanks, waste piles and surface impoundments.
System	A system contains one or more processes used together to treat, recycle, or dispose of a hazardous waste. A list of system types begins on page 57.
TDR	TDR means treatment, disposal, or recycling.
Treatment	Treatment means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such wastes, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable to recovery, storage, or reduction in volume.
TRI	TRI stands for Toxic Chemical Release Inventory, a data collection system for toxic chemical releases under SARA Title III, Section 313.
TRI Constituent	TRI constituent is the specific toxic chemical(s), identified by a CAS number, which was reported on the 1988 TRI report (Form R[s]).

Note: Definitions are not legally binding. Refer to Title 40 of CFR for precise legal wording.

TSDR	TSDR means treatment, storage, disposal, or recycling.
UIC	Underground Injection Control (UIC) is the program under the Safe Drinking Water Act that regulates the use of wells to pump fluids into the ground. Materials pumped into the ground include chemical containing wastes. A well involved in this program is identified by a unique identification number.
Unauthorized State	An unauthorized State is one that has not obtained authorization from EPA to direct its own RCRA program.
Uniform Hazardous Waste Manifest	The shipping document (EPA form 8700-22 or 8700-22a) that pertains to hazardous waste and is duly signed by the generator is called a Uniform Hazardous Waste Manifest.
Waste Codes	Waste codes are EPA identifiers which consist of one letter (D, F, P, U, or K) and three numbers. The list of waste codes that respondents should use begins on page 35.
Waste Minimization	Waste minimization means the reduction, to the extent feasible, of hazardous waste that is generated or subsequently treated, stored, or disposed of. It includes any source reduction or recycling activity undertaken by a generator that results in: (1) the reduction of total volume or quantity of hazardous waste; (2) the reduction of toxicity of hazardous waste; or (3) both, as long as the reduction is consistent with the goal of minimizing present and future threats to human health and the environment.
Waste Min	Waste min is a common abbreviation for waste minimization. (See above.)

Note: Definitions are not legally binding. Refer to Title 40 of CFR for precise legal wording.

Appendix B

System Type Codes

SYSTEM TYPE CODES

Code	System type
Metals recovery (for reuse)	
M011	High temperature metals recovery
M012	Retorting
M013	Secondary smelting
M014	Other metals recovery for reuse: e.g., ion exchange, reverse osmosis, acid leaching, etc. (Specify in Comments)
M019	Metals recovery - type unknown
Solvents recovery	
M021	Fractionation/distillation
M022	Thin film evaporation
M023	Solvent extraction
M024	Other solvent recovery (Specify in Comments)
M029	Solvents recovery - type unknown
Other recovery	
M031	Acid regeneration
M032	Other recovery: e.g., waste oil recovery, nonsolvent organics recovery, etc. (Specify in Comments)
M039	Other recovery - type unknown
Incineration	
M041	Incineration - liquids
M042	Incineration - sludges
M043	Incineration - solids
M044	Incineration - gases
M049	Incineration - type unknown
Energy recovery (reuse as fuel)	
M051	Energy recovery - liquids
M052	Energy recovery - sludges
M053	Energy recovery - solids
M059	Energy recovery - type unknown
Fuel blending	
M061	Fuel blending
Aqueous inorganic treatment	
M071	Chrome reduction followed by chemical precipitation
M072	Cyanide destruction followed by chemical precipitation
M073	Cyanide destruction only
M074	Chemical oxidation followed by chemical precipitation
M075	Chemical oxidation only
M076	Wet air oxidation
M077	Chemical precipitation
M078	Other aqueous inorganic treatment: e.g., ion exchange, reverse osmosis, etc. (Specify in Comments)
M079	Aqueous inorganic treatment - type unknown
Aqueous organic treatment	
M081	Biological treatment
M082	Carbon adsorption
M083	Air/steam stripping
M084	Wet air oxidation
M085	Other aqueous organic treatment (Specify in Comments)
M089	Aqueous organic treatment - type unknown

SYSTEM TYPE CODES (Continued)

Code	System type
Aqueous organic and inorganic treatment	
M091	Chemical precipitation in combination with biological treatment
M092	Chemical precipitation in combination with carbon adsorption
M093	Wet air oxidation
M094	Other organic/inorganic treatment (Specify in Comments)
M099	Aqueous organic and inorganic treatment - type unknown
Sludge treatment	
M101	Sludge dewatering
M102	Addition of excess lime
M103	Absorption/adsorption
M104	Solvent extraction
M109	Sludge treatment - type unknown
Stabilization	
M111	Stabilization/Chemical fixation using cementious and/or pozzolanic materials
M112	Other stabilization (Specify in Comments)
M119	Stabilization - type unknown
Other treatment	
M121	Neutralization only
M122	Evaporation only
M123	Setting/clarification only
M124	Phase separation (e.g., emulsion breaking, filtration) only
M125	Other treatment (Specify in Comments)
M129	Other treatment - type unknown
Disposal	
M131	Land treatment/application/farming
M132	Landfill
M133	Surface impoundment (to be closed as a landfill)
M134	Deepwell/underground injection
M135	Direct discharge to sewer/POTW (no prior treatment)
M136	Direct discharge to surface water under NPDES (no prior treatment)
M137	Other disposal (Specify in Comments)
Transfer facility storage	
M141	Transfer facility storage, waste was shipped off site with no on-site TDR activity

Appendix C

Related Documents

Appendix C
Related Documents

The Supporting Statement for EPA Information Collection Request, Number 0976, 1989 Hazardous Waste Report.

1989 Biennial Report Data Element Dictionary, Version 1.3.0.

1989 Hazardous Waste Report Instructions and Forms, EPA Form 8700-13A/B, Revised 11-89, OMB Number 2050-0024.

1989 Waste Minimization Report.

Report of Capacity for Managing Hazardous Waste: Analysis of Data Submitted in 1989 Capacity Assurance Plans Required under CERCLA Section 104 (c) (9), Washington, D.C., 1991.

Appendix D

EPA Waste Codes

EPA HAZARDOUS WASTE CODES

Code	Waste description
Characteristic Hazardous Waste	
D001	Ignitable waste
D002	Corrosive waste
D003	Reactive waste
D004	Arsenic
D005	Barium
D006	Cadmium
D007	Chromium
D008	Lead
D009	Mercury
D010	Selenium
D011	Silver
D012	Endrin(1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimeth-ano-naphthalene)
D013	Lindane (1,2,3,4,5,6-hexa-chlorocyclohexane, gamma isomer)
D014	Methoxychlor (1,1,1-trichloro-2,2-bis [p-methoxyphenyl] ethane)
D015	Toxaphene ($C_{10}H_{10}Cl_8$, technical chlorinated camphene, 67-69 percent chlorine)
D016	2,4-D (2,4-dichlorophenoxyacetic acid)
D017	2,4,5-TP Silvex (2,4,5-trichlorophenoxypropionic acid)
Hazardous Waste from Nonspecific Sources	
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene; trichlorethylene; methylene chloride; 1,1,1-trichloroethane; carbon tetrachloride and chlorinated fluorocarbons and all spent solvent mixtures/blends used in degreasing containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F002	The following spent halogenated solvents: tetrachloroethylene; methylene chloride; trichloroethylene; 1,1,1-trichloroethane; chlorobenzene; 1,1,2-trichloro-1,2,2-trifluoroethane; ortho-dichlorobenzene; trichlorofluoromethane; and 1,1,2, trichloroethane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F003	The following spent nonhalogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above nonhalogenated solvents, and a total of 10 percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F004	The following spent nonhalogenated solvents: cresols, cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents; all spent solvent mixtures/blends containing before use a total of 10 percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-

(Continued)

Code	Waste description
	nitropropane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum
F007	Spent cyanide plating bath solutions from electroplating operations
F008	Plating bath residues from the bottom of plating baths from electroplating operations in which cyanides are used in the process
F009	Spent stripping and cleaning bath solutions from electroplating operations in which cyanides are used in the process
F010	Quenching bath residues from oil baths from metal heat treating operations in which cyanides are used in the process
F011	Spent cyanide solutions from slat bath pot cleaning from metal heat treating operations
F012	Quenching waste water treatment sludges from metal heat treating operations in which cyanides are used in the process
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol or of intermediates used to produce their pesticide derivatives (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce derivatives
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta- or hexachlorobenzenes under alkaline conditions
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating porcess) of tri- and tetrachlorophenols (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)
F024	Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having a carbon content from one to five, utilizing free radical catalyzed processes (This listing does not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in Section 261.32.)

Code	Waste description
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027

Hazardous Waste from Specific Sources

Code	Waste description
K001	Bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments
K003	Wastewater treatment sludge from the production of molybdate orange pigments
K004	Wastewater treatment sludge from the production of zinc yellow pigments
K005	Wastewater treatment sludge from the production of chrome green pigments
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)
K007	Wastewater treatment sludge from the production of iron blue pigments
K008	Oven residue from the production of chrome oxide green pigments
K009	Distillation bottoms from the production of acetaldehyde from ethylene
K010	Distillation side cuts from the production of acetaldehyde from ethylene
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile
K015	Still bottoms from the distillation of benzyl chloride
K016	Heavy ends or distillation residues from the production of carbon tetrachloride
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin
K018	Heavy ends from the fractionation column in ethyl chloride production
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production
K021	Aqueous spent antimony catalyst waste from fluoromethane production
K022	Distillation bottom tars from the production of phenol/acetone from cumene
K023	Distillation light ends from the production of phthalic anhydride from naphthalene
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene

Code	Waste description
K026	Stripping still tails from the production of methyl ethyl pyridines
K027	Centrifuge and distillation residues from toluene diisocyanate production
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene
K031	By-product salts generated in the production of MSMA and cacodylic acid
K032	Wastewater treatment sludge from the production of chlordane
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane
K035	Wastewater treatment sludges generated in the production of creosote
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton
K037	Wastewater treatment sludges from the production of disulfoton
K038	Wastewater from the washing and stripping of phorate production
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate
K040	Wastewater treatment sludge from the production of phorate
K041	Wastewater treatment sludge from the production of toxaphene
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T
K043	2,6-dichlorophenol waste from the production of 2,4-D
K044	Wastewater treatment sludges from the manufacturing and processing of explosives
K045	Spent carbon from the treatment of wastewater containing explosives
K046	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds
K047	Pink/red water from TNT operations
K048	Dissolved air flotation (DAF) float from the petroleum refining industry
K049	Slop oil emulsion solids from the petroleum refining industry
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry
K051	API separator sludge from the petroleum refining industry
K052	Tank bottoms (leaded) from the petroleum refining industry
K060	Ammonia still lime sludge from coking operations
K061	Emission control dust/sludge from the primary production of steel in electric furnaces
K062	Spent pickle liquor from steel finishing operations of plants that produce iron or steel
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities
K066	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production
K069	Emission control dust/sludge from secondary lead smelting

Code	Waste description
K071	Brine purification muds from the mercury cell process in chlorine production, in which separately prepurified brine is not used
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production
K083	Distillation bottoms from aniline production
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead
K087	Decanter tank tar sludge from coking operations
K088	Spent potliners from primary aluminum reduction
K090	Emission control dust or sludge from ferrochromiumsilicon production
K091	Emission control dust or sludge from ferrochromium production
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene
K095	Distillation bottoms from the production of 1,1,1-trichloroethane
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane
K098	Untreated process wastewater from the production of toxaphene
K099	Untreated wastewater from the production of 2,4-D
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
K103	Process residues from aniline extraction from the production of aniline
K104	Combined wastewater streams generated from nitrobenzene/aniline production
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes
K106	Wastewater treatment sludge from the mercury cell process in chlorine production
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene
K112	Reaction byproduct water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene
K113	Condensed liquid light ends from purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene

Code	Waste description
K114	Vicinals from the purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene
K115	Heavy ends from purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene
K123	Process wastewater (including supernates, filtrates, and wash waters) from the production of Ethylenebisdithiocarbamic Acids and their salts. Hazardous Code T
K124	Reactor vent scrubber water from the production of Ethylenebisdithiocarbamic Acids and their salts. Hazardous Code T
K125	Filtration, evaporation, and centrifugation of solids from the production of Ethylenebisdithiocarbamic Acids and their salts. Hazardous Code T and C
K126	Baghouse dust and floor sweepings in milling and packaging operations from production or formulation of Ethylenebisdithiocarbamic Acids and their salts. Hazardous Code T
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene

Discarded Commercial Chemical Products, Off-Specification Species, Container Residuals, and Spill Residues Thereof--Acute Hazardous Waste
(An alphabetized listing can be found at 40 CFR 261.33.)

Code	Waste description
P001	Warfarin, when present at concentrations greater than or equal to 0.3%
P001	3-(alpha-Acetonyl-benzyl)-4-hydroxycoumarin and salts, when present at concentrations greater than 0.3%
P002	Acetamide, N-(aminothioxomethyl)
P002	1-Acetyl-2-thiourea
P003	2-Propenal
P003	Acrolein
P004	1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,exo-dimethanonaphthalene
P004	Aldrin
P005	2-propen-1-ol
P005	Allyl alcohol
P006	Aluminum phosphide (r,t)
P007	3(2H)-isoxazolone,5-(aminomethyl)-
P007	5-(aminomethyl)-3-isoxazolol
P008	4-a-aminopyridine
P008	4-pyridinamine
P008	4-aminopyridine
P009	Phenol,2,4,6-trinitro-,ammonium salt (r)
P009	Ammonium picrate (r)
P010	Arsenic acid (t)
P011	Arsenic pentoxide (t)
P011	Arsenic (V) oxide (t)
P012	Arsenic (III) oxide (t)
P012	Arsenic trioxide (t)
P013	Barium cyanide
P014	Thiophenol

Code	Waste description
P014	Benzenethiol
P015	Beryllium dust (t)
P016	Methane,oxybis(chloro)-
P016	Bis(chloromethyl) ether
P017	2-propanone,1-bromo- (t)
P017	Bromoacetone (t)
P018	Strychnidinone,2,3-dimethoxy-
P018	Brucine
P020	Dinoseb
P020	Phenol,2,4-dinitro-6-(1-methylpropyl)-
P021	Calcium cyanide
P022	Carbon bisulfide (t)
P022	Carbon disulfide (t)
P023	Acetaldehyde, chloro-
P023	Chloroacetaldehyde
P024	Benzenamine, 4-chloro-
P024	p-Chloroaniline
P026	Thiourea, (2-chlorophenyl)-
P026	1-(o-Chlorophenyl)thiourea
P027	Propanenitrile,3-chloro-
P027	3-Chloropropionitrile
P028	Benzene, (chloromethyl)-
P028	Benzyl chloride
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts), not elsewhere specified (t)
P031	Cyanogen
P033	Cyanogen chloride
P033	Chlorine cyanide
P034	4,6-dinitro-o-cyclohexylphenol (t)
P034	Phenol,2-cyclohexyl-4,6-dinitro- (t)
P036	Dichlorophenylarsine
P036	Phenyl dichloroarsine
P037	Dieldrin
P037	1,2,3,4,10,10-hexachloro-6,7-expoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4:5,8-dimethanonaph-thalene
P038	Diethylarsine (t)
P038	Arsine, diethyl- (t)
P039	0,0-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate (t)
P039	Disulfoton (t)
P040	0,0-diethyl 0-pyrazinyl phosphorothioate
P040	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester
P041	Diethyl-p-nitrophenyl phosphate
P041	Phosphoric acid, diethyl p-nitrophenyl ester
P042	Epinephrine
P042	1,2-benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-
P043	Diisopropyl fluorophosphate
P043	Fluoridic acid, bis(1-methylethyl) ester
P043	Phosphorofluoridic acid, bis(1-methylethyl) ester
P044	Dimethoate (t)
P044	Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl]ester (t)
P045	3,3-dimethyl-1-(methylthio)-2-butanone, 0-[(methylamino)carbonyl]oxime
P045	Thiofanox
P046	alpha,alpha-dimethylphenethylamine (t)
P046	Ethanamine,1,1-dimethyl-2-phenyl- (t)
P047	4,6-dinitro-o-cresol and salts
P047	Phenol,2,4-dinetro-6-methyl-, and salts
P048	2,4-dinitrophenol
P048	Phenol,2,4-dinitro-

Code	Waste description
P049	2,4-Dithiobiuret
P049	Thioimidodicarbonic diamide
P050	Endosulfan
P050	5-norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro,cyclic sulfite
P051	1,2,3,4,10,10-hexachloro-6,7-expoxy-1,4,4a,5,6,7,8,8a-oxtahydro-endo,endo-1,4:5,8-dimethanon-aphthalene
P051	Endrin
P054	Ethylenimine
P054	Aziridine
P056	Fluorine
P057	Fluoroacetamide
P057	Acetamide,2-fluor-
P058	Fluoroacetic acid, sodium salt
P058	Acetic acid, fluoro-, sodium salt
P059	Heptachlor
P059	4,7-methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P060	Hexachlorohexahydro-endo,endo-dimethanonapthalene
P060	1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, endo-dimethanonaphthalene
P062	Hexaethyl tetraphosphate
P062	Tetraphosphoric acid, hexaethyl ester
P063	Hydrocyanic acid
P063	Hydrogen cyanide
P064	Methyl isocyanate
P064	Isocyanic acid, methyl ester
P065	Fulminic acid, mercury(II) salt (r,t)
P065	Mercury fulminate (r,t)
P066	Methomyl
P066	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester
P067	2-methylaziridine
P067	1,2-propylenimine
P068	Hydrazine,methyl-
P068	Methyl hydrazine
P069	2-methyllactonitrile
P069	Propanenitrile,2-hydroxy-2-methyl-
P070	Propanal, 2-methyl-2-(methylthio)-, 0[(methylamino)carbonyl]oxime
P070	Aldicarb
P071	0,0-dimethyl 0-p-nitrophenyl phosphorothioate
P071	Methyl parathion
P072	alpha-Naphthylthiourea
P072	Thiourea, 1-naphthalenyl-
P073	Nickel tetracarbonyl
P073	Nickel carbonyl
P074	Nickel(II)cyanide
P074	Nickel cyanide
P075	Nicotine and salts (t)
P075	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts
P076	Nitrogen (II) oxide (t)
P076	Nitric oxide (t)
P077	p-Nitroaniline (t)
P077	Benzenamine, 4-nitro-
P078	Nitrogen (IV) oxide
P078	Nitrogen dioxide
P081	Nitroglycerine (r,t)
P081	1,2,3-propanetriol,trinitrate-(r)
P082	Dimethylnitrosamine
P082	N-nitrosodimethylamine
P084	Ethenamine,N-methyl-N-nitroso-
P084	N-nitrosomethylvinylamine

Code	Waste description
P085	Diphosphoramide,octamethyl-
P085	Octamethylpyrophosphoramide
P087	Osmium tetroxide
P087	Osmium oxide
P088	Endothall
P088	7-oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	Parathion (t)
P089	Phosphorothioic acid,0,0-diethyl 0-(p-nitrophenyl) ester (t)
P092	Mercury,(acetato-0)phenyl-
P092	Phenylmercuric acetate
P093	N-phenylthiourea
P093	Thiourea, phenyl-
P094	Phosphorothioic acid, 0,0-diethyl S-(ethylthio)methyl ester (t)
P094	Phorate (t)
P095	Phosgene (t)
P095	Carbonyl chloride
P096	Hydrogen phosphide
P096	Phosphine
P097	Famphur
P097	Phosphorothioic acid, 0,0-dimethyl 0-[p-((dimethylamino)-sulfonyl)phenyl]ester
P098	Potassium cyanide
P099	Potassium silver cyanide
P101	Ethyl cyanide
P101	Propanenitrile
P102	Propargyl alcohol
P102	2-propyn-1-ol
P103	Selenourea
P103	Carbamimidoselenoic acid
P104	Silver cyanide
P105	Sodium azide
P106	Sodium cyanide
P108	Strychnidin-10-one, and salts (t)
P108	Strychnine and salts (t)
P109	Dithiopyrophosphoric acid, tetraethyl ester
P109	Tetraethyldithiopyrophosphate
P110	Plumbane,tetraethyl-
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
P111	Pyrophosphoric acid, tetraethyl ester
P112	Methane,tetranitro- (r)
P112	Tetranitromethane (r)
P113	Thallium(III) oxide
P113	Thallic oxide
P114	Thallium(I) selenide
P115	Sulfuric acid, thallium(I) salt
P115	Thallium(I)sulfate
P116	Hydrazinecarbothioamide
P116	Thiosemicarbazide
P118	Methanethiol,trichloro-
P118	Trichloromethanethiol
P119	Vanadic acid, ammonium salt
P119	Ammonium vanadate
P120	Vanadium pentoxide
P120	Vanadium(V) oxide
P121	Zinc cyanide
P122	Zinc phosphide (r,t)
P122	Zinc phosphide, when present at concentrations greater than 10%
P123	Toxaphene
P123	Camphene, octachloro-

Code	Waste description
Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof--Toxic Waste *(An alphabetized listing can be found at 40 CFR 261.33.)*	
U001	Ethanal (i)
U001	Acetaldehyde (i)
U002	2-propanone (i)
U002	Acetone (i)
U003	Ethanenitrile (i,t)
U003	Acetonitrile (i,t)
U004	Ethanone,1-phenyl-
U004	Acetophenone
U005	2-acetylaminofluorene
U005	Acetamide, N-9H-fluoren-2-yl-
U006	Ethanoyl chloride (c,r,t)
U006	Acetyl chloride (c,r,t)
U007	2-propenamide
U007	Acrylamide
U008	2-propenoic acid (i)
U008	Acrylic acid (i)
U009	2-propenenitrile
U009	Acrylonitrile
U010	Mitomycin C
U010	Azirino(2'3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-[((aminocarbonyl) oxy)methyl]-1,1a,2,8, 8a,8b-hexahydro-8a-methoxy-5-methyl-
U011	1H-1,2,4-triazol-3-amine
U011	Amitrole
U012	Benzenamine (i,t)
U012	Aniline (i,t)
U014	Auramine
U014	Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-
U015	L-serine, diazoacetate (ester)
U015	Azaserine
U016	Benz[c]acridine
U016	3,4-benzacridine
U017	Benzal chloride
U017	Benezene, (dichloromethyl)-
U018	Benz[a]anthracene
U018	1,2-benzanthracene
U019	Benzene (i,t)
U020	Benzenesulfonyl chloride (c,r)
U020	Benzenesulfonic acid chloride (c,r)
U021	Benzidine
U021	(1,1'-biphenyl)-4,4'-diamine
U022	Benzo[a]pyrene
U022	3,4-benzopyrene
U023	Benzotrichloride (c,r,t)
U023	Benzene, (trichloromethyl)-(c,r,t)
U024	Bis(2-chloroethoxy) methane
U024	Ethane,1,1'-[methylenebis(oxy)]bis[2-chloro-
U025	Dichloroethyl ether
U025	Ethane,1,1'-oxybis[2-chloro-
U026	2-naphthylamine,N,N-bis(2-chloromethyl)-
U026	Chlornaphazine
U027	Propane,2,2'-oxybis[2-chloro-
U027	Bis(2-chloroisopropyl) ether
U028	Bis(2-ethylhexyl) phthalate
U028	1,2-benzenedicarboxylic acid, [bis(2-ethylhexyl)]ester
U029	Methane, bromo-
U029	Methyl bromide
U030	4-bromophenyl phenyl ether
U030	Benzene, 1-bromo-4-phenoxy-

Code	Waste description
U031	1-butanol (i)
U031	N-butyl alchohol (i)
U032	Calcium chromate
U032	Chromic acid, calcium salt
U033	Carbonyl fluoride (r,t)
U033	Carbon oxyfluoride (r,t)
U034	Chloral
U034	Acetaldehyde, trichloro-
U035	Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-
U035	Chlorambucil
U036	4,7-methanoindan, 1,2,4,5,6,7,8,8-octa-chloro-3a,4,7,7a-tetrahydro-
U036	Chlordane, technical
U037	Chlorobenzene
U037	Benzene, chloro-
U038	Ethyl 4,4'-dichlorobenzilate
U038	Benzeneacetic acid, 4-chloro-alpha-4-chloro-phenyl)-alpha-hydroxy, ethyl ester
U039	Phenol,4-chloro-3-methyl-
U039	4-chloro-m-cresol
U041	Oxirane,2-(chloromethyl)-
U041	1-chloro-2,3-expoxypropane
U042	Ethene,2-chloroethoxy-
U042	2-chloroethyl vinyl ether
U043	Ethene,chloro
U043	Vinyl chloride
U044	Methane, trichloro-
U044	Chloroform
U045	Methane, chloro-(i,t)
U045	Methyl chloride (i,t)
U046	Methane, chloromethoxy-
U046	Chloromethyl methyl ether
U047	Naphthalene, 2-chloro-
U047	beta-chloronaphthalene
U048	Phenol,2-chloro-
U048	o-chlorophenol
U049	4-chloro-o-toluidine,hydrochloride
U049	Benzenamine, 4-chloro-2-methyl-
U050	1,2-benzphenanthrene
U050	Chrysene
U051	Creosote
U052	Cresylic acid
U052	Cresols
U053	2-butenal
U053	Crotonaldehyde
U055	Cumene (i)
U055	Benzene, (1-methylethyl)-(i)
U056	Cyclohexane (i)
U056	Benzene, hexahydro- (i)
U057	Cyclohexanone (i)
U058	2H-1,3,2-oxazaphosphorine, 2-[bis(2-chloroethyl)amino]-tetrahydro-2 oxide
U058	Cyclophosphamide
U059	5,12-naphthacenedione, (8S-cis)-8-acetyl[(3-amino-2,3,6-trideoxy-alpha-L-lyxohexopyranosyl)oxyl] -7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-
U059	Daunomycin
U060	Dichloro diphenyl dichloroethane
U060	DDD
U061	DDT
U061	Dichloro diphenyl trichloroethane
U062	Diallate
U062	S-(2,3-dichloroallyl) diisopropylthiocarbamate
U063	Dibenz[a,h]anthracene

EPA HAZARDOUS WASTE CODES (Continued)

Code	Waste description
U063	1,2:5,6-dibenzanthracene
U064	Dibenz[a,i]pyrene
U064	1,2:7,8-dibenzopyrene
U066	Propane,1-2-dibromo-3-chloro-
U066	1,2-dibromo-3-chloropropane
U067	Ethylene dibromide
U067	Ethane, 1,2-dibromo-
U068	Methane, dibromo-
U068	Methylene bromide
U069	Dibutyl phthalate
U069	1,2-benzenedicarboxylic acid, dibutyl ester
U070	o-dichlorobenzene
U070	Benzene, 1,2-dichloro-
U071	m-dichlorobenzene
U071	Benzene, 1,3-dichloro-
U072	p-dichlorobenzene
U072	Benzene, 1,4-dichloro
U073	(1,1'-biphenyl)-4,4'-diamine,3,3'-dichloro
U073	3,3'-dichlorobenzidine
U074	2-butene,1,4-dichloro-(i,t)
U074	1,4-dichloro-2-butene (i,t)
U075	Methane, dichlorodifluoro-
U075	Dichlorodifluoromethane
U076	Ethylidene dichloride
U076	Ethane,1,1-dichloro-
U077	Ethylene dichloride
U077	Ethane,1,2-dichloro-
U078	Ethene,1-1-dichloro-
U078	1,1-dichloroethylene
U079	Ethene, trans-1,2-dichloro-
U079	1,2-dichloroethylene
U080	Methane, dichloro-
U080	Methylene chloride
U081	Phenol,2,4-dichloro-
U081	2,4-Dichlorophenol
U082	Phenol,2,6-dichloro-
U082	2,6-dichlorophenol
U083	Propylene dichloride
U083	1,2-dichloropropane
U084	Propene,1,3-dichloro-
U084	1,3-dichloropropene
U085	2,2'-bioxirane (i,t)
U085	1,2:3,4-diepoxybutane (i,t)
U086	Hydrazine, 1,2-diethyl-
U086	N,N-diethylhydrazine
U087	Phosphorodithioic acid,0,0-diethyl-, S-methyl-ester
U087	0,0-diethyl-S-methyl-dithiophosphate
U088	Diethyl phthalate
U088	1,2-benzenedicarboxylic acid, diethyl ester
U089	4,4'-stilbenediol,alpha,alpha'-diethyl-
U089	Diethylstilbestrol
U090	Dihydrosafrole
U090	Benzene,1,2-methylenedioxy-4-propyl-
U091	(1,1'-biphenyl)-4,4'-diamine,3,3'-dimethoxy-
U091	3,3'-dimethoxybenzidine
U092	Methanamine, N-methyl-(i)
U092	Dimethylamine (i)
U093	Dimethylaminoazobenzene
U093	Benzenamine, N,N-dimethyl-4-phenylazo-
U094	7,12-dimethylbenz[a]anthracene
U094	1,2-benzanthracene,7,12-dimethyl-
U095	(1,1'-biphenyl)-4,4'-diamine,3,3'-dimethyl-
U095	3,3'-dimethylbenzidine

EPA HAZARDOUS WASTE CODES (Continued)

Code	Waste description
U096	Hydroperoxide, 1-methyl-phenylethyl-(r)
U096	Alpha,alpha-Dimethylbenzylhydroperoxide-(r)
U097	Carbamoyl chloride,dimethyl-
U097	Dimethylcarbamoyl chloride
U098	Hydrazine,1,1-dimethyl-
U098	1,1-dimethylhydrazine
U099	Hydrazine, 1,2-dimethyl-
U099	1,2-dimethylhydrazine
U101	Phenol,2,4-dimethyl-
U101	2,4-dimethylphenol
U102	Dimethyl phthalate
U102	1-2-benzenedicarboxylic acid, dimethyl ester
U103	Sulfuric acid, dimethyl ester
U103	Dimethyl sulfate
U105	2,4-dinitrotoluene
U105	Benzene, 1-methyl-2,4-dinitro-
U106	2,6-dinitrotoluene
U106	Benzene, 1-methyl-2,6-dinitro
U107	Di-n-octyl phthalate
U107	1-2-benzenedicarboxylic acid, di-n-octyl ester
U108	1,4-diethylene dioxide
U108	1,4-dioxane
U109	Hydrazine, 1,2-diphenyl-
U109	1,2-diphenylhydrazine
U110	1-propanamine,N-propyl-(i)
U110	Dipropylamine (i)
U111	N-nitroso-N-propylamine
U111	Di-N-propylnitrosamine
U112	Ethyl acetate (i)
U112	Acetic acid, ethyl ester (i)
U113	2-propenoic acid, ethyl ester (i)
U113	Ethyl acrylate (i)
U114	Ethylenebis(dithiocarbamic acid), salts and esters
U114	1,2-ethanediylbiscarbamodithioic acid
U115	Oxirane (i,t)
U115	Ethylene oxide (i,t)
U116	Ethylene thiourea
U116	2-imidazolidinethione
U117	Ethyl ether (1)
U117	Ethane,1,1'-oxybis- (i)
U118	2-propenoic acid, 2-methyl-, ethyl ester
U118	Ethyl methacrylate
U119	Ethyl methanesulfonate
U119	Methanesulfonic acid, ethyl ester
U120	Fluoranthene
U120	Benzo[j,k]fluorene
U121	Trichloromonofluoromethane
U121	Methane, trichlorofluoro-
U122	Formaldehyde
U122	Methylene oxide
U123	Formic acid (c,t)
U123	Methanoic acid (c,t)
U124	Furan (i)
U124	Furfuran (i)
U125	Furfural (i)
U125	2-furancarboxaldehyde (i)
U126	1-propanol,2,3-epoxy-
U126	Glycidylaldehyde
U127	Hexachlorobenzene
U127	Benzene, hexachloro-
U128	Hexachlorobutadene

EPA HAZARDOUS WASTE CODES (Continued)

Code	Waste description
U128	1,3-butadiene,1,1,2,3,4,4-hexachloro-
U129	Hexachlorocyclohexane (gamma isomer)
U129	Lindane
U130	Hexachlorocyclopentadene
U130	1,3-cyclopentadiene,1,2,3,4,5,5-hexa-chloro-
U131	Hexachloroethane
U131	Ethane,1,1,1,2,2,2-hexachloro-
U132	Hexachlorophene
U132	2,2-methylenebis(3,4,6-trichlorophenol)
U133	Hydrazine (r,t)
U133	Diamine (r,t)
U134	Hydrogen fluoride (c,t)
U134	Hydrofluoric acid (c,t)
U135	Sulfur hydride
U135	Hydrogen sulfide
U136	Hydroxydimethylarsine oxide
U136	Cacodylic acid
U137	1,10-(1,2-phenylene)pyrene
U137	Ideno[1,2,3-cd]pyrene
U138	Methane, iodo-
U138	Methyl iodide
U139	Ferric dextran
U139	Iron dextran
U140	1-propanol,2-methyl- (i,t)
U140	Isobutyl alcohol (i,t)
U141	Isosafrole
U141	Benzene, 1,2-methylenedioxy-4-propenyl-
U142	Kepone
U142	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one
U143	Lasiocarpine
U144	Lead acetate
U144	Acetic acid, lead salt
U145	Phosphoric acid, lead salt
U145	Lead phosphate
U146	Lead subacetate
U147	2,5-furandione
U147	Maleic anhydride
U148	Maleic hydrazide
U148	1,2-dihydro-3,6-pyradizinedione
U149	Propanedinitrile
U149	Malononitrile
U150	Melphalan
U150	Alanine, 3-[p-bis(2-chloroethyl)amino] phenyl-,L-
U151	Mercury
U152	Propenenitrile,2-methyl- (i,t)
U152	Methacrylonitrile (i,t)
U153	Thiomethanol (i,t)
U153	Methanethiol (i,t)
U154	Methanol (i)
U154	Methyl alcohol (i)
U155	Pyridine, 2-[(2-dimethylamino)ethyl]-2-phenylamino-
U155	Methapyrilene
U156	Methyl chlorocarbonate (i,t)
U156	Carbonochloridic acid, methyl ester (i,t)
U157	3-methylcholanthrene
U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U158	4,4'-Methylenebis(2-chloroaniline)
U158	Benzenamine,4,4'-methylenebis(2-chloro-
U159	Methyl ethyl ketone (i,t)
U159	2-butanone (i,t)
U160	Methyl ethyl ketone peroxide (r,t)

EPA HAZARDOUS WASTE CODES (Continued)

Code	Waste description
U160	2-butanone peroxide (r,t)
U161	4-methyl-2-pentanone (i)
U161	Methyl isobutyl ketone (i)
U162	2-propenoic acid, 2-methyl-, methyl ester (i,t)
U162	Methyl methacrylate (i,t)
U163	Guanidine, N-nitroso-N-methyl-N'-nitro-
U163	N-methyl-N'-nitro-N-nitrosoguanidine
U164	4(1H)-pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U164	Methylthiouracil
U165	Naphthalene
U166	1,4,naphthoquinone
U166	1,4-naphthalenedione
U167	1-naphthylamine
U167	alpha-naphthylamine
U168	2-naphthylamine
U168	beta-naphthylamine
U169	Nitrobenzene (i,t)
U169	Benzene, nitro- (i,t)
U170	Phenol,4-nitro-
U170	p-nitrophenol
U171	Propane,2-nitro-(i,t)
U171	2-Nitropropane (i,t)
U172	N-nitrosodi-N-butylamine
U172	1-butanamine, N-butyl-N-nitroso-
U173	Ethanol,2,2-(nitrosoimino)bis-
U173	N-nitrosodiethanolamine
U174	N-nitrosodiethylamine
U174	Ethanamine, N-ethyl-N-nitroso-
U176	N-nitroso-N-ethylurea
U176	Carbamide,N-ethyl-N-nitroso-
U177	N-nitroso-N-methylurea
U177	Carbamide,N-methyl-N-nitroso-
U178	N-nitroso-N-methylurethane
U178	Carbamic acid, methylnitroso-, ethyl ester
U179	N-nitrosopiperidine
U179	Pyridine,hexahydro-N-nitroso-
U180	Nitrosopyrrolidine
U180	Pyrrole, tetrahydro-N-nitroso-
U181	5-nitro-o-toluidine
U181	Benzenamine,2-methyl-5-nitro
U182	Paraldehyde
U182	1,3,5-trioxane,2,4,6-trimethyl-
U183	Pentachlorobenzene
U183	Benzene, pentachloro-
U184	Pentachloroethane
U184	Ethane, pentachloro-
U185	Pentachloronitrobenzene
U185	Benzene, pentachloronitro-
U186	1,3-pentadiene (i)
U186	1-methylbutadiene (i)
U187	Phenacetin
U187	Acetamide, N-(4-ethoxyphenyl)-
U188	Phenol
U188	Benzene, hydroxy-
U189	Phosphorus sulfide (r)
U189	Sulfur phosphide (r)
U190	Phthalic anhydride
U190	1,2-benzenedicarboxylic acid anhydride
U191	2-picoline
U191	Pyridine, 2-methyl-
U192	Pronamide
U192	3,5-dichloro-N-(1,1-dimethyl-2-propynyl) benzamide

Code	Waste description
U193	1,2-oxathiolane, 2,2-dioxide
U193	1,3-propane sultone
U194	1-propanamine (i,t)
U194	N-propylamine (i,t)
U196	Pyridine
U197	p-benzoquinone
U197	1,4-cyclohexadienedione
U200	Reserpine
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxy-benzoyl)oxy]-, methyl ester
U201	Resorcinol
U201	1,3-benzenediol
U202	Saccharin and salts
U202	1,2-benzisothiazolin-3-one,1,1-dioxide, and salts
U203	Safrole
U203	Benzene, 1,2-methylenedioxy-4-allyl-
U204	Selenious acid
U204	Selenium dioxide
U205	Selenium disulfide (r,t)
U205	Sulfur selenide (r,t)
U206	Streptozotocin
U206	D-glucopyranose, 2-deoxy-2(3-methyl-3-nitrosoureido)-
U207	1,2,4,5-tetrachlorobenzene
U207	Benzene, 1,2,4,5-tetrachloro-
U208	1,1,1,2-tetrachloroethane
U208	Ethane,1,1,1,2-tetrachloro-
U209	1,1,2,2-tetrachloroethane
U209	Ethane,1-1-2-2-tetrachloro-
U210	Tetrachloroethylene
U210	Ethene,1,1,2,2-tetrachloro
U211	Methane, tetrachloro-
U211	Carbon tetrachloride
U213	Tetrahydrofuran (i)
U213	Furan, tetrahydro- (i)
U214	Thallium(I) acetate
U214	Acetic acid, thallium(I) salt
U215	Thallium(I) carbonate
U215	Carbonic acid, dithallium(I) salt
U216	Thallium(I) chloride
U217	Thallium(I) nitrate
U218	Thioacetamide
U218	Ethanethioamide
U219	Thiourea
U219	Carbamide, thio-
U220	Toluene
U220	Benzene, methyl-
U221	Toluenediamine
U221	Diaminotoluene
U222	o-toluidine hydrochloride
U222	Benzenamine, 2-methyl-, hydrochloride
U223	Toluene diisocyanate (r,t)
U223	Benzene, 1,3-diisocyanatomethyl- (r,t)
U225	Methane, tribromo-
U225	Bromoform
U226	1,1,1-trichloroethane
U226	Methylchloroform
U227	1,1,2-trichloroethane
U227	Ethane, 1,1,2-trichloro-
U228	Trichloroethylene
U228	Trichloroethene
U234	sym-trinitrobenzene (r,t)
U234	Benzene,1,3,5-trinitro- (r,t)

Appendix E

1989 Hazardous Waste Report Forms

OMB# 2050-0024 Expires 3-31-92

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME _____

EPA ID NO. |_|_|_|_|_|_|_|_|_|_|_|_|

U.S. ENVIRONMENTAL PROTECTION AGENCY

1989 Hazardous Waste Report

FORM **IC**

IDENTIFICATION AND CERTIFICATION

INSTRUCTIONS: Read the detailed instructions beginning on page 7 of the 1989 Hazardous Waste Report booklet before completing this form.

SEC. I Site name and location address. Complete items A through H. Check the box ☒ in items A, B, D, E, F, G, and H if same as label; if different, enter corrections. If label is absent, enter information. Instruction page 7.

A. EPA ID No.
Same as label ☐ or → |_|_|_|_|_|_|_|_|_|_|_|_|

B. Site/company name
Same as label ☐ or →

C. Has the site name associated with this EPA ID changed since 1987? ☐ 1 Yes ☐ 2 No

D. Street name and number. If not applicable, enter industrial park, building name or other physical location description.
Same as label ☐ or →

E. City, town, village, etc.
Same as label ☐ or →

F. County

G. State
Same as label ☐ |_|_|

H. Zip Code
Same as label ☐ |_|_|_|_|_| – |_|_|_|_|

SEC. II Mailing address of site. Instruction page 7.

A. Is the mailing address the same as the location address? ☐ 1 Yes (SKIP TO SEC. III) ☐ 2 No (COMPLETE SEC. II)

B. Number and street name of mailing address

C. City, town, village, etc.

D. State |_|_|

E. Zip Code |_|_|_|_|_| – |_|_|_|_|

SEC. III Name, title, and telephone number of the person who should be contacted if questions arise regarding this report. Instruction page 7.

A. Please print: Last name First name M.I.

B. Title

C. Telephone |_|_|_| |_|_|_| – |_|_|_|_|
Extension |_|_|_|_|

SEC. IV Enter the Standard Industrial Classification (SIC) Code that describes the principal products, group of products, produced or distributed, or the services rendered at the site's physical location. Enter more than one SIC Code only if no one industry description includes the combined activities of the site. Instruction page 8.

A.	B.	C.	D.
|_|_|_|_|	|_|_|_|_|	|_|_|_|_|	|_|_|_|_|

SEC. V I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. Number of form pages submitted
Form IC |_|2| Form GM |_|_|_| Form WR |_|_|_| Form PS |_|_|_|

B. Please print: Last name First name M.I.

C. Title

D. Signature

E. Date of signature |_|_| MO. |_|_| DAY |_|_| YR.

EPA Form 8700-13A/B (5-80) (Revised 11-85) (Revised 12-87) (Revised 11-89)

OVER —>

Sec. VI Generator Status

A. 1989 generation (CHECK ONE BOX BELOW)
Instruction page 8

- ☐ 1 No (CONTINUE TO BOX B)
- ☐ 2 LQG
- ☐ 3 SQG
- ☐ 4 CESQG

(SKIP TO SEC. VII)

B. Reason for not generating (CHECK ALL THAT APPLY)
Page 10

- ☐ 1 Never generated
- ☐ 2 Out of business
- ☐ 3 Only excluded or delisted waste
- ☐ 4 Only non-hazardous waste
- ☐ 5 Periodic or occasional generator
- ☐ 6 Waste minimization activity
- ☐ 7 Other (SPECIFY IN COMMENTS)

Sec. VII On-Site Waste Management Status

A. Storage
Instruction page 11

☐

B. RCRA treatment, recycling, or disposal
Page 11

☐

C. RCRA-exempt treatment, recycling, or disposal
Page 12

☐

Sec. VIII Waste Minimization Activity during 1988 or 1989

A. Did this site begin or expand a source reduction activity during 1988 or 1989?
Instruction page 12

- ☐ 1 Yes
- ☐ 2 No

B. Did this site begin or expand a recycling activity during 1988 or 1989?
Page 13

- ☐ 1 Yes
- ☐ 2 No

C. Did this site conduct a source reduction or recycling opportunity assessment during 1988 or 1989?
Page 13

- ☐ 1 Yes
- ☐ 2 No

D. What factors have limited this site from initiating new source reduction activities during 1988 or 1989?
(CHECK ALL THAT APPLY)
Page 13

- ☐ 01 No factors have limited new source reduction activities.
- ☐ 02 Insufficient capital to install new source reduction equipment or implement new source reduction practices.
- ☐ 03 Lack of technical information on source reduction techniques applicable to the specific production processes.
- ☐ 04 Source reduction is not economically feasible: cost savings in waste management or production will not recover the capital investment.
- ☐ 05 Concern that product quality may decline as a result of source reduction.
- ☐ 06 Technical limitations of the production processes.
- ☐ 07 Permitting burdens.
- ☐ 08 Other (SPECIFY IN COMMENTS)

E. What factors have limited this site from initiating new on-site or off-site recycling activities during 1988 or 1989?
(CHECK ALL THAT APPLY)
Page 13

- ☐ 01 No factors have limited new recycling activities.
- ☐ 02 Insufficient capital to install new recycling equipment or implement new recycling practices.
- ☐ 03 Lack of technical information on recycling techniques applicable to this site's specific production processes.
- ☐ 04 Recycling not economically feasible: cost savings in waste management or production will not recover the capital investment.
- ☐ 05 Concern that product quality may decline as a result of recycling.
- ☐ 06 Requirements to manifest wastes inhibit shipments off site for recycling.
- ☐ 07 Financial liability provisions inhibit shipments off site for recycling.
- ☐ 08 Technical limitations of product processes inhibit shipments off site for recycling.
- ☐ 09 Techical limitations of production processes inhibit on-site recycling.
- ☐ 10 Permitting burdens inhibit recycling.
- ☐ 11 Lack of permitted off-site recycling facilities.
- ☐ 12 Unable to identify a market for recyclable materials.
- ☐ 13 Other (SPECIFY IN COMMENTS)

Comments:

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME _____

EPA ID NO. |_|_|_|_|_|_|_|_|_|_|_|_|

U.S. ENVIRONMENTAL PROTECTION AGENCY

1989 Hazardous Waste Report

FORM GM

WASTE GENERATION AND MANAGEMENT

INSTRUCTIONS: Read the detailed instructions beginning on page 14 of the 1989 Hazardous Waste Report booklet before completing this form.

Sec. I A. Waste description Instruction Page 15

B. EPA hazardous waste code Page 15	C. State hazardous waste code Page 16
|_|_|_|_| |_|_|_|_| |_|_|_|_| |_|_|_|_|	|_|_|_|_|_|_| |_|_|_|_|_|_|

D. SIC code Page 16	E. Source code Page 16	F. Form code Page 16	G. Origin Page 16 Code |_|
|_|_|_|_|	|A|_|_|	|B|_|_|_|	System type |M|_|_|_|

H. TRI constituent Page 17	I. CAS numbers Page 17
|_|	1. |_|_|_|_|_|-|_|_|-|_| 2. |_|_|_|_|_|-|_|_|-|_| 3. |_|_|_|_|_|-|_|_|-|_| 4. |_|_|_|_|_|-|_|_|-|_| 5. |_|_|_|_|_|-|_|_|-|_|

Sec. II

A. Quantity generated in 1988 Instruction Page 17	B. Quantity generated in 1989 Page 17	C. UOM Page 18	D. Density Page 18	E. Was this waste treated, disposed or recycled on site or discharged to a sewer/POTW? Page 18
|_|_|_|_|_|_|_|_|_|_|	|_|_|_|_|_|_|_|_|_|_|	|_|	|_|_|_| . |_|_| ☐ 1 lbs/gal ☐ 2 sg	☐ 1 Yes (CONTINUE TO SYSTEM 1) ☐ 2 No (SKIP TO SEC. III)

SYSTEM 1 System type Page 18	Quantity treated, disposed or recycled in 1989 Page 18	SYSTEM 2 System type Page 18	Quantity treated, disposed or recycled in 1989 Page 18
|M|_|_|_|	|_|_|_|_|_|_|_|_|_|_|	|M|_|_|_|	|_|_|_|_|_|_|_|_|_|_|

Sec. III A. Was this waste shipped off site? Instruction Page 19 ☐ 1 Yes (CONTINUE TO BOX B) ☐ 2 No (SKIP TO SEC. IV)

	B. EPA ID No. of facility to which waste was shipped Instruction Page 19	C. System type Page 19	D. Total quantity shipped in 1989 Page 19
Site 1	|_|_|_|_|_|_|_|_|_|_|_|_|	|M|_|_|_|	|_|_|_|_|_|_|_|_|_|_|
Site 2	|_|_|_|_|_|_|_|_|_|_|_|_|	|M|_|_|_|	|_|_|_|_|_|_|_|_|_|_|

Sec. IV A. Waste minimization results in 1989 Instruction Page 20 ☐ 1 Yes (CONTINUE TO BOX B) ☐ 2 No (THIS FORM IS COMPLETE)

B. Activity Page 21	C. Other effects Page 21	D. Quantity recycled in 1989 due to new activities Page 21	E. Activity/Production Index Page 21	F. Source Reduction Quantity Page 22
|W|_|_| |W|_|_| |W|_|_| |W|_|_|	☐ 1 Yes ☐ 2 No	|_|_|_|_|_|_|_|_|_|_|	|_|_|_| . |_|	|_|_|_|_|_|_|_|_|_|_|

Comments:

Page ____ of ____

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME _____

_____

EPA ID NO. |_|_|_|_|_|_|_|_|_|_|_|_|

U.S. ENVIRONMENTAL PROTECTION AGENCY

1989 Hazardous Waste Report

FORM WR

WASTE RECEIVED FROM OFF SITE

INSTRUCTIONS: Read the detailed instructions beginning on page 27 of the 1989 Hazardous Waste Report booklet before completing this form.

Waste 1

A. Description of hazardous waste
Instruction Page 27

B. EPA hazardous waste code
Page 28

C. State hazardous waste code
Page 28

D. Off-site source EPA ID No.
Page 28

E. Quantity received in 1989
Page 28

F. UOM
Page 28

G. Density
Page 28
☐ 1 lbs/gal ☐ 2 sg

H. Waste form code
Page 29
B

I. System type
Page 29
M

Waste 2

A. Description of hazardous waste
Instruction Page 27

B. EPA hazardous waste code
Page 28

C. State hazardous waste code
Page 28

D. Off-site source EPA ID No.
Page 28
☐ Check if ID same as in Waste 1
or ->

E. Quantity received in 1989
Page 28

F. UOM
Page 28

G. Density
Page 28
☐ 1 lbs/gal ☐ 2 sg

H. Waste form code
Page 29
B

I. System type
Page 29
M

Waste 3

A. Description of hazardous waste
Instruction Page 27

B. EPA hazardous waste code
Page 28

C. State hazardous waste code
Page 28

D. Off-site source EPA ID No.
Page 28
☐ Check if ID same as in Waste 2
or ->

E. Quantity received in 1989
Page 28

F. UOM
Page 28

G. Density
Page 28
☐ 1 lbs/gal ☐ 2 sg

H. Waste form code
Page29
B

I. System type
Page 29
M

Comments:

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME _____

EPA ID NO. |_|_|_|_|_|_|_|_|_|_|_|_|

U.S. ENVIRONMENTAL PROTECTION AGENCY

1989 Hazardous Waste Report

FORM PS

WASTE TREATMENT, DISPOSAL, OR RECYCLING PROCESS SYSTEMS

INSTRUCTIONS: Read the detailed instructions beginning on page 30 of the 1989 Hazardous Waste Report booklet before completing this form.

Sec. I

A. Waste treatment, disposal or recycling system description
Instruction Page 36

B. System type Page 36	C. Regulatory status Page 36	D. Operational status Page 37	E. Unit types Page 37
M			

Sec. II

A. 1989 influent quantity Instruction Page 38

		UOM	Density
Total			.
RCRA			☐ 1 lbs/gal ☐ 2 sg

B. Maximum operational capacity Page 39

Total	
RCRA	

C. 1989 liquid effluent quantity Page 40

		UOM	Density
Total			.
RCRA			☐ 1 lbs/gal ☐ 2 sg

D. 1989 solid/sludge residual quantity Page 41

		UOM	Density
Total			.
RCRA			☐ 1 lbs/gal 2 ☐ sg

E. Limitations on capacity Page 41

1. ___ 2. ___ 3. ___

F. Commercial availability code Page 41

___

G. Percent capacity commercially available Page 42

___ %

Sec. III

A. Planned change in maximum operational capacity Instruction Page 42

☐ 1 Yes (CONTINUE TO BOX B)
☐ 2 No (THIS FORM IS COMPLETE)

B. New maximum operational capacity Page 42

		UOM
Total		
RCRA		

C. Planned year of change Page 43

1 1 9 ___

D. Future commercial availability code Page 43

___

E. Percent future capacity commercially available Page 43

___ %

Comments:

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME _____

EPA ID NO. |_|_|_|_|_|_|_|_|_|_|_|_|

U.S. ENVIRONMENTAL PROTECTION AGENCY

1989 Hazardous Waste Report

FORM OI

OFF-SITE IDENTIFICATION

INSTRUCTIONS: Read the detailed instructions on the back of this page before completing this form.

Site 1

A. EPA ID No. of off-site installation or transporter |_|_|_|_|_|_|_|_|_|_|_|_|

B. Name of off-site installation or transporter

C. Handler type (CHECK ALL THAT APPLY)

- ☐ Generator
- ☐ Transporter
- ☐ TSDR

D. Address of off-site installation

Street _____

City _____ State |_|_| Zip Code |_|_|_|_|_| – |_|_|_|_|

Site 2

A. EPA ID No. of off-site installation or transporter |_|_|_|_|_|_|_|_|_|_|_|_|

B. Name of off-site installation or transporter

C. Handler type (CHECK ALL THAT APPLY)

- ☐ Generator
- ☐ Transporter
- ☐ TSDR

D. Address of off-site installation

Street _____

City _____ State |_|_| Zip Code |_|_|_|_|_| – |_|_|_|_|

Site 3

A. EPA ID No. of off-site installation or transporter |_|_|_|_|_|_|_|_|_|_|_|_|

B. Name of off-site installation or transporter

C. Handler type (CHECK ALL THAT APPLY)

- ☐ Generator
- ☐ Transporter
- ☐ TSDR

D. Address of off-site installation

Street _____

City _____ State |_|_| Zip Code |_|_|_|_|_| – |_|_|_|_|

Site 4

A. EPA ID No. of off-site installation or transporter |_|_|_|_|_|_|_|_|_|_|_|_|

B. Name of off-site installation or transporter

C. Handler type (CHECK ALL THAT APPLY)

- ☐ Generator
- ☐ Transporter
- ☐ TSDR

D. Address of off-site installation

Street _____

City _____ State |_|_| Zip Code |_|_|_|_|_| – |_|_|_|_|

Site 5

A. EPA ID No. of off-site installation or transporter |_|_|_|_|_|_|_|_|_|_|_|_|

B. Name of off-site installation or transporter

C. Handler type (CHECK ALL THAT APPLY)

- ☐ Generator
- ☐ Transporter
- ☐ TSDR

D. Address of off-site installation

Street _____

City _____ State |_|_| Zip Code |_|_|_|_|_| – |_|_|_|_|

Comments: