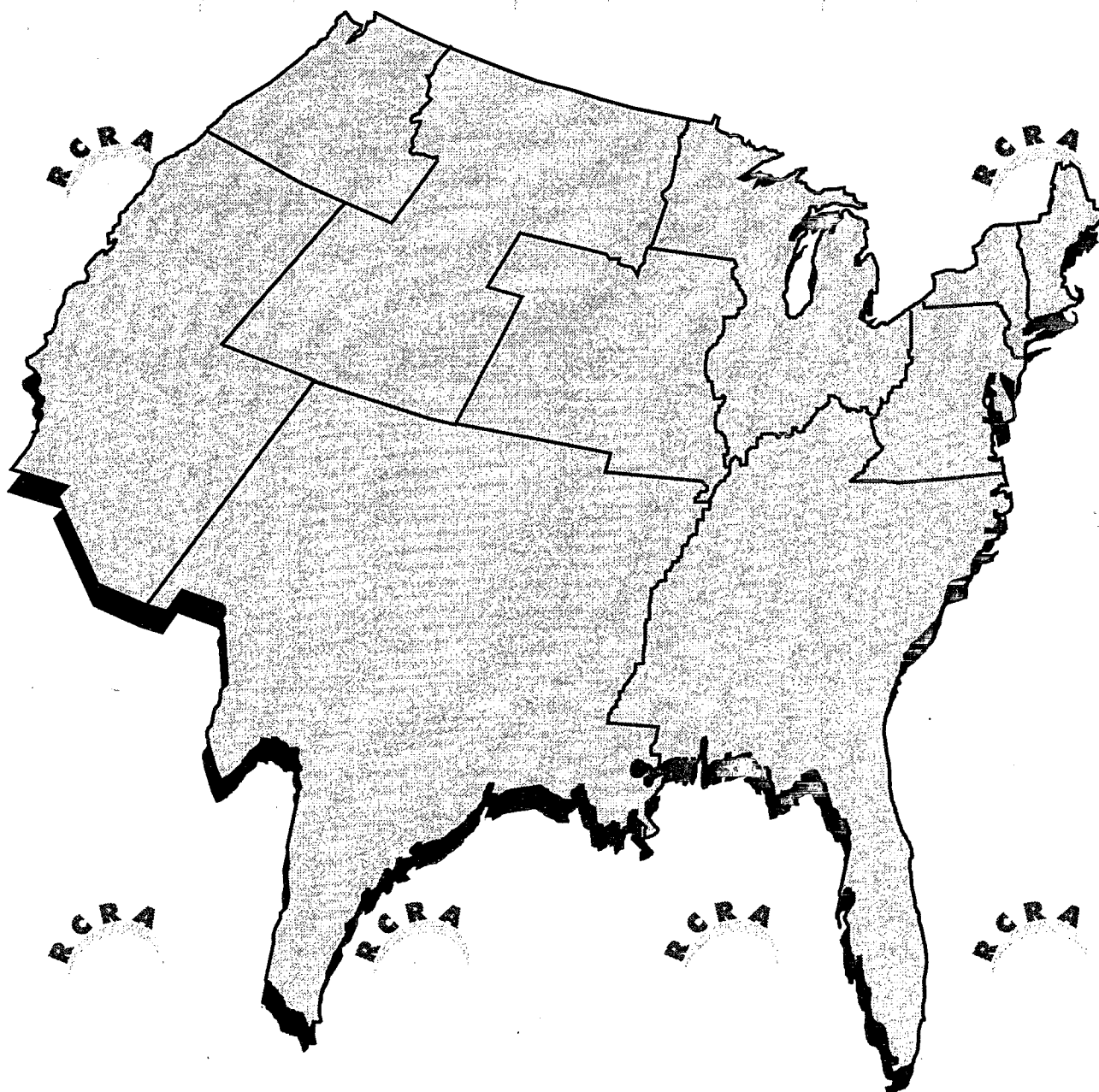




# National Analysis

## The National Biennial RCRA Hazardous Waste Report (Based on 1995 Data)



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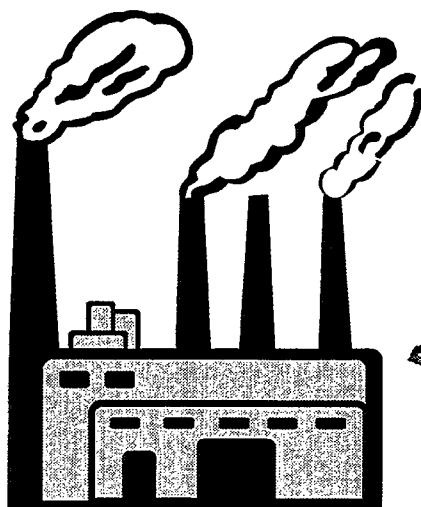
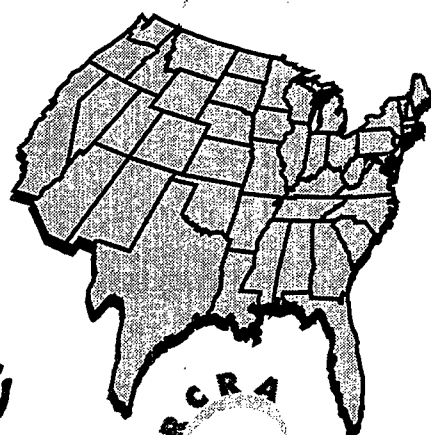
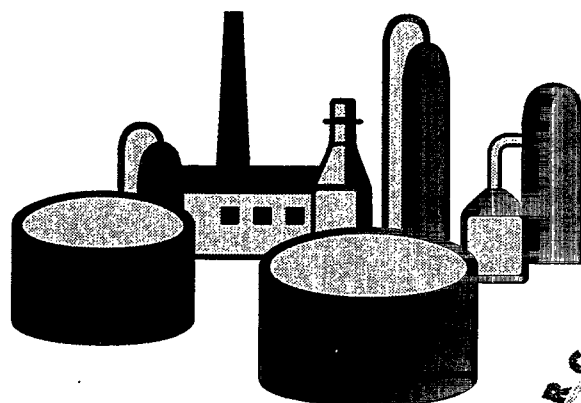
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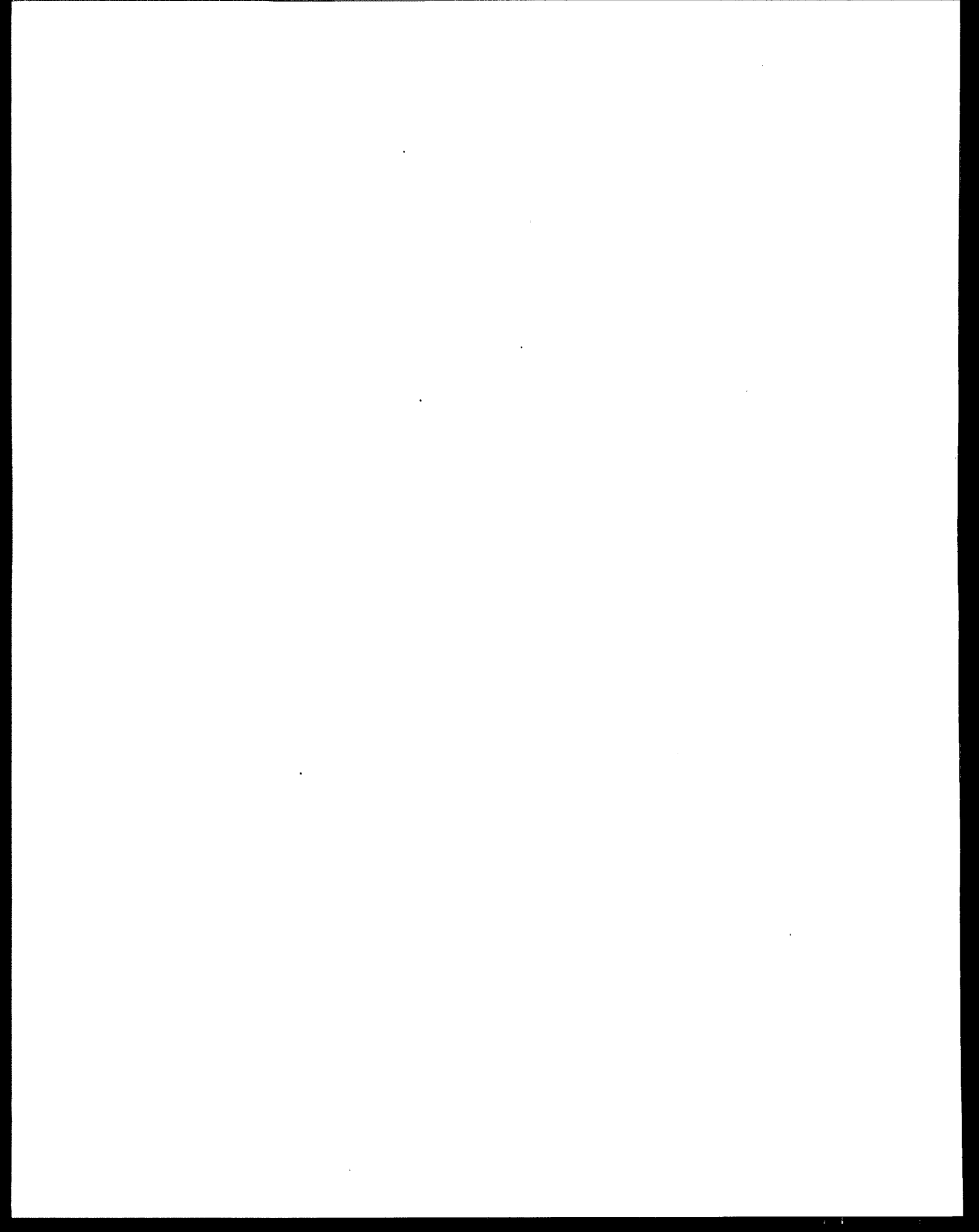
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# Executive Summary

## The National Biennial RCRA Hazardous Waste Report (Based on 1995 Data)





## EXECUTIVE SUMMARY

The United States Environmental Protection Agency (EPA), in cooperation with the States,<sup>1</sup> biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The purpose of *The National Biennial RCRA Hazardous Waste Report (Based on 1995 Data)* is to communicate the findings of EPA's 1995 Biennial Reporting System (BRS) data collection efforts to the public, government agencies, and the regulated community.<sup>2</sup> The Report consists of six volumes:

- o Executive Summary: An overview of national hazardous waste generation and management practices;
- o National Analysis: A detailed look at waste handling practices in the EPA Regions, the States, and at the largest facilities in the nation, including quantities of generation, management, shipments and receipts, and interstate imports and exports, as well as counts of generators and managers;
- o State Summary Analysis: A two-page overview of the generation and management practices of individual States;
- o State Detail Analysis: A detailed look at each State's waste handling practices, including overall totals for generation, management, and shipments and receipts, as well as totals for the largest fifty facilities;
- o List of Large Quantity Generators: Identifies every hazardous waste generator in the United States that reported itself to be a large quantity generator in 1995; and
- o List of Treatment, Storage, and Disposal Facilities: Identifies every hazardous waste manager in the United States that reported itself to be a treatment, storage, or disposal facility in 1995.

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<sup>1</sup>The term "State" includes the District of Columbia, Puerto Rico, Guam, the Navajo Nation, the Trust Territories, and the Virgin Islands, in addition to the 50 United States.

<sup>2</sup>Some respondents from the State of Georgia have submitted Confidential Business Information (CBI) pursuant to §40 CFR 260.2(b). While not included in any public BRS database, CBI has been incorporated into the Executive Summary and National Analysis volumes of this Report wherever possible. Where CBI has been omitted from these volumes, a footnote has been provided.

## **RCRA HAZARDOUS WASTE**

Throughout this Report, the term RCRA hazardous waste refers to solid waste assigned a Federal hazardous waste code and regulated by RCRA, either because it was managed in a unit subject to RCRA permitting standards or because it was shipped and subject to RCRA transportation requirements. Individual States may choose to regulate additional wastes not identified as hazardous by EPA. Hazardous wastes assigned only a State hazardous waste code are not included in this Report. Similarly, hazardous wastes managed only in units subject to State permitting standards, or wastes that are managed only in units exempt from RCRA permitting standards, are not included in this Report.

## **RCRA HAZARDOUS WASTE GENERATION**

RCRA hazardous waste generation information is obtained from data reported by RCRA large quantity generators (LQGs). The RCRA hazardous waste generation quantities in this Report are limited to generation quantities that are managed in units subject to RCRA permitting standards. All hazardous waste generation reported to be managed on-site in units exempt from RCRA permitting standards, such as treatment systems permitted by the National Pollutant Discharge Elimination System (NPDES), is excluded from the RCRA generation quantities provided in this Report. Although some off-site shipments of hazardous waste may ultimately be managed in units exempt from RCRA permitting standards, this determination cannot be made from information reported by the generator. Therefore, all hazardous waste generation shipped off-site is included in the RCRA generation quantities provided in this Report.

Hazardous waste generators are included in this Report if they identified themselves as an LQG. It is important to note that the LQGs identified in this Report have been included on the basis of the best available and most current information provided electronically to EPA by the States. Both EPA and the States have made significant efforts to ensure the accuracy of these data. However, the LQG counts may include some generators that, when determining whether they were LQGs, used a lower State-defined threshold for LQGs, counted wastes regulated only by their States, or counted wastes that are exempt from Federal regulation.

A generator was defined as a Federal large quantity generator in 1995 if it met or exceeded any one of the following Federal criteria:

- o The generator generated in any single month 1,000 kg (2,200 pounds or 1.1 tons) or more of RCRA hazardous waste; or
- o The generator generated in any single month, or accumulated at any time, 1 kg (2.2 pounds) of RCRA acute hazardous waste; or
- o The generator generated, or accumulated at any time, more than 100 kg (220 pounds) of spill cleanup material contaminated with RCRA acute hazardous waste.

In 1995, 20,873 LQGs produced 214 million tons of hazardous waste regulated by RCRA. This is a decrease of 3,489 LQGs and a decrease of 44 million tons of waste compared to 1993. As identified in Exhibit 1, the five (5) States whose LQGs generated the largest amount of hazardous waste were Texas (69 million tons), Tennessee (39 million tons), Louisiana (17 million tons), Michigan (13 million tons), and Illinois (13 million tons). Together, the LQGs in these States accounted for 70% of the national total waste generated.

Wastewater generation is identified in BRS by the use of certain form codes, or by waste management in units typically associated with wastewater management (i.e., management in aqueous treatment units, neutralization tanks, underground injection wells, or other wastewater management systems). See Chapter 1, Waste Generation, of the National Analysis, for a list of the form codes and system type codes used to identify wastewater. (A complete list of system type codes can be found in Appendix A of the National Analysis, and a complete list of form codes can be found in Appendix B of the National Analysis.) In 1995, wastewater generation accounted for 95% of the national generation total, while in 1993, wastewater generation accounted for 92% percent of the national generation total.

Overall, total hazardous waste generation decreased from 258 million tons in 1993 to 214 million tons in 1995. Wastewater generation decreased from 237 million tons in 1993 to 202 million tons in 1995, and non-wastewater generation decreased from 22 million tons in 1993 to over 11 million tons in 1995.

In comparing 1995 data with those of earlier Reports, it is important to note that many new wastes were captured by RCRA in 1990 with the promulgation of the Toxicity Characteristic (TC) Rule. The TC Rule added 25 new hazardous waste codes (D018 to D043) and required more stringent analytical tests for the presence of toxic constituents in waste. For 1995, these codes captured, at a minimum, 63 million tons of wastes not regulated before 1990. An additional 42 million tons were described by D018 to D043 when mixed with other waste codes. This suggests that, in 1995, the new toxicity characteristic wastes captured as much as 105 million tons of wastes not regulated before 1990. In contrast, the 1993 data reported as much as 135 million tons of waste not regulated before 1990.

## **RCRA HAZARDOUS WASTE MANAGEMENT**

RCRA hazardous waste management information is obtained from data reported by RCRA treatment, storage, or disposal facilities (TSDs). The RCRA hazardous waste management quantities in this Report are limited to waste that was received or generated by a reporting TSD and managed at the reporting TSD in treatment units subject to RCRA permitting standards. All hazardous wastes either received for transfer shipment or managed at a reporting TSD in units exempt from RCRA permitting standards, such as treatment systems permitted by the NPDES, are excluded from the RCRA management quantities provided in this Report.

Note that the total quantity of RCRA hazardous waste generation does not equal the total quantity of hazardous waste management. Some of the reasons for this variance include: off-year generation (generation that occurred at the end of a non-biennial reporting year, but was shipped off-site for management during a reporting year) and wastes received for management from generators in foreign countries.

In 1995, 1,983 TSDs subject to RCRA permitting standards managed 208 million tons of hazardous waste. This represents a 601 facility decrease in the number of TSDs and a 27 million ton decrease in the amount of waste managed as compared to 1993. As identified in Exhibit 2, the five (5) States whose TSDs managed the largest quantities of hazardous wastes were Texas (75 million tons), Tennessee (39 million tons), Louisiana (18 million tons), Michigan (14 million tons), and California (14 million tons). Together, the TSDs in these States accounted for 77% of the national total waste managed.

Wastewater management is identified in BRS by the use of certain form codes or by waste management in units typically associated with wastewater management (i.e., management in aqueous treatment units, neutralization tanks, underground injection wells, or other wastewater management systems). See Chapter 2, Waste Management, of the National Analysis, for a list of the form codes and system type codes used to identify wastewater. (A complete list of system type codes can be found in Appendix A of the National Analysis, and a complete list of form codes can be found in Appendix B of the National Analysis.) In 1995, wastewater management accounted for 95% of the national management total, while in 1993 wastewater management accounted for 94% of the national management total.

Overall, total hazardous waste management decreased from 235 million tons in 1993 to 208 million tons in 1995. Wastewater management decreased from 220 million tons in 1993 to 198 million tons in 1995, and non-wastewater management decreased from 15 million tons in 1993 to 10 million tons in 1995.

The majority (73%) of the waste managed in the nation was managed in aqueous treatment units. Aqueous treatment units consist of:

Aqueous Organic Treatment Units	117 million tons
Aqueous Organic and Inorganic Treatment Units	28 million tons
Aqueous Inorganic Treatment Units	8 million tons

Land disposal accounted for 12.3% of the national management total. Land disposal units include:

Deepwell/Underground Injection	24 million tons
Landfill	1 million tons
Surface Impoundment	575 thousand tons
Land Treatment/Application/Farming	11 thousand tons

Thermal treatment accounted for 3% of the national management total. Thermal treatment units are:

Incineration	4 million tons
Energy Recovery (Reuse as Fuel)	2 million tons

Recovery operations accounted for 1.8% of the national management total. Recovery operations include:

Fuel Blending	2 million tons
Metals Recovery (for Reuse)	610 thousand tons
Other Recovery	422 thousand tons
Solvents Recovery	356 thousand tons

The remaining management quantities (9.6%) were from other treatment and disposal units:

Other Treatment	18 million tons
Stabilization	1 million tons
Other Disposal (specified in comments)	663 thousand tons
Sludge Treatment	481 thousand tons

## **RCRA HAZARDOUS WASTE SHIPMENTS AND RECEIPTS**

RCRA hazardous waste shipment information is obtained from data reported by both RCRA LQGs and RCRA TSDs. RCRA hazardous waste shipment quantities include all RCRA waste shipments reported by RCRA LQGs and TSDs. Although some off-site shipments may ultimately be managed in treatment units exempt from RCRA permitting standards, this determination cannot be made from information reported by the shipper. Therefore, the shipment quantities provided in this Report may include some waste that is ultimately managed in units exempt from RCRA permitting standards. In some instances, reported waste shipments are actually the movement of wastes across contiguous physical locations that are regulated under different EPA identification numbers. These waste transfers are correctly reported as shipments and cannot be distinguished from transport shipments based on the information reported.

RCRA hazardous waste receipt information is obtained from data reported by RCRA TSDs. RCRA hazardous waste receipt quantities are limited to waste reported by a receiving TSD as either received for transfer or received and managed at the reporting TSD in units subject to RCRA permitting standards. Received wastes managed at the reporting TSD in units exempt from RCRA permitting standards, such as treatment systems permitted by the NPDES, are excluded from receipt quantities provided in this Report.

Limitations in the reported information prevents the direct comparison of shipment and receipt quantities. Hazardous waste shipment quantities may include hazardous waste shipments that are ultimately managed by the receiver in units exempt from RCRA permitting standards. Hazardous waste receipt quantities exclude waste managed in units exempt from RCRA permitting standards. Therefore, hazardous waste shipment quantities can be expected to exceed hazardous waste receipt quantities because exempt waste may be included in shipment quantities and excluded from receipt quantities. Exempt waste reporting will be eliminated beginning with the 1997 biennial reporting cycle. This change should mitigate this discrepancy in future reports.

RCRA hazardous waste exports are waste shipments where the destination is a different State from the State in which the waste was generated. Exports are calculated from information provided by waste shippers. RCRA hazardous waste imports are waste receipts where the waste originated in another State. RCRA hazardous waste imports are calculated from information provided by RCRA TSDs.

In 1995, 20,497 shippers reported shipping a total of 10.7 million tons of hazardous waste. This is a decrease of 3,467 shippers and a decrease of 6.7 million tons of hazardous waste that was shipped as compared to 1993. The States whose shippers reported shipping (in or out of State) the largest quantities of waste were Texas (2.4 million tons), California (1.3 million tons), Ohio (760 thousand tons), New York (650 thousand tons), and Michigan (510 thousand tons). Together the shippers in these States accounted for 53% of the total quantity of hazardous waste shipped nationwide.

Nationwide, of the 10.7 million tons of hazardous waste shipped, 5.3 million tons were **exported** to other States. This is a 1.5 million ton decrease compared with 1993. The States whose shippers exported the largest amount of waste were California (1.1 million tons), Ohio (330 thousand tons), Pennsylvania (280 thousand tons), Texas (240

thousand tons), and Illinois (230 thousand tons). Together the exports in these States accounted for 41 % of the national total of hazardous waste exports.

In 1995, 644 RCRA TSDs reported receiving 9.3 million tons of hazardous waste. This is a decrease of 95 TSDs and an increase of 360 thousand tons of hazardous waste compared with 1993. The States whose receivers reported receiving the largest quantities of waste, from both in or out of State, were Michigan (1.2 million tons), New Jersey (1.2 million tons), Texas (970 thousand tons), Ohio (700 thousand tons), and Nevada (650 thousand tons). Together, the receivers in these States accounted for 50% of the national total of waste receipts.

Nationwide, of the 9.3 million tons of hazardous waste receipts, 5.9 million tons were imported from other States. This is an increase of 1.7 million tons compared with 1993. The States whose receivers reported importing the largest amount of waste were New Jersey (1.1 million tons), Michigan (820 thousand tons), Nevada (650 thousand tons), Ohio (440 thousand tons), and Texas (280 thousand tons). Together the receivers in these States accounted for 56% of the national total of waste imports.

Exhibit 1 Quantity of RCRA Hazardous Waste Generated and Number of Hazardous Waste Generators, by State, 1995

STATE	HAZARDOUS WASTE QUANTITY			LARGE QUANTITY GENERATORS		
	RANK	TONS GENERATED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
ALABAMA	17	1,409,582	0.7	24	279	1.3
ALASKA	51	3,432	0.0	43	64	0.3
ARIZONA	41	66,865	0.0	29	199	1.0
ARKANSAS	20	992,794	0.5	28	204	1.0
CALIFORNIA	6	11,109,924	5.2	2	1,640	7.9
COLORADO	36	169,554	0.1	32	156	0.7
CONNECTICUT	32	295,928	0.1	18	395	1.9
DELAWARE	44	22,263	0.0	43	64	0.3
DISTRICT OF COLUMBIA	54	764	0.0	49	18	0.1
FLORIDA	31	368,904	0.2	17	418	2.0
GEORGIA	28	459,543	0.2	16	430	2.1
GUAM	55	299	0.0	53	13	0.1
HAWAII	24	592,900	0.3	45	53	0.3
IDAHO	18	1,209,841	0.6	46	52	0.2
ILLINOIS	5	12,756,271	6.0	6	1,156	5.5
INDIANA	14	1,733,026	0.8	10	609	2.9
IOWA	42	39,329	0.0	30	170	0.8
KANSAS	15	1,722,380	0.8	27	210	1.0
KENTUCKY	19	1,149,881	0.5	15	440	2.1
LOUISIANA	3	17,460,601	8.2	21	359	1.7
MAINE	45	19,459	0.0	34	144	0.7
MARYLAND	30	448,707	0.2	25	221	1.1
MASSACHUSETTS	23	610,135	0.3	13	476	2.3
MICHIGAN	4	13,446,389	6.3	9	718	3.4
MINNESOTA	39	77,720	0.0	23	284	1.4
MISSISSIPPI	16	1,579,260	0.7	33	152	0.7
MISSOURI	27	508,963	0.2	22	354	1.7
MONTANA	50	7,668	0.0	46	52	0.2
NAVAJO NATION	56	195	0.0	54	11	0.1
NEBRASKA	37	99,702	0.0	40	86	0.4
NEVADA	48	11,354	0.0	41	80	0.4
NEW HAMPSHIRE	46	15,169	0.0	35	130	0.6
NEW JERSEY	7	10,342,432	4.8	5	1,178	5.6
NEW MEXICO	35	204,494	0.1	48	44	0.2
NEW YORK	11	2,306,232	1.1	1	2,144	10.3
NORTH CAROLINA	33	286,339	0.1	11	587	2.8
NORTH DAKOTA	25	520,226	0.2	52	16	0.1
OHIO	13	1,823,547	0.9	3	1,373	6.6
OKLAHOMA	26	511,918	0.2	31	168	0.8
OREGON	40	68,187	0.0	26	220	1.1
PENNSYLVANIA	9	6,446,730	3.0	7	1,134	5.4
PUERTO RICO	21	900,567	0.4	39	88	0.4
RHODE ISLAND	43	25,428	0.0	37	112	0.5
SOUTH CAROLINA	34	261,015	0.1	19	371	1.8
SOUTH DAKOTA	53	1,119	0.0	50	17	0.1
TENNESSEE	2	38,686,622	18.1	14	467	2.2
TEXAS	1	68,513,285	32.0	4	1,329	6.4
TRUST TERRITORIES	47	15,134	0.0	55	3	0.0
UTAH	29	456,847	0.2	38	101	0.5
VERMONT	49	10,497	0.0	42	66	0.3
VIRGIN ISLANDS	52	3,329	0.0	56	1	0.0
VIRGINIA	38	98,678	0.0	19	371	1.8
WASHINGTON	10	3,088,487	1.4	8	748	3.6
WEST VIRGINIA	8	8,489,828	4.0	36	117	0.6
WISCONSIN	22	664,609	0.3	12	558	2.7
WYOMING	12	1,972,177	0.9	50	17	0.1
CBI DATA	N/A	5,977	N/A	N/A	6	N/A
TOTAL		214,092,505	100.0		20,873	100.0

Note: Columns may not sum due to rounding.  
Percentages do not include CBI data.

**National Biennial RCRA Hazardous Waste Report: Based on 1995 Data**

**Exhibit 2 Quantity of RCRA Hazardous Waste Managed and Number of TSDs, by State, 1995**

STATE	HAZARDOUS WASTE QUANTITY <sup>1</sup>			TSD FACILITIES		
	RANK	TONS MANAGED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
ALABAMA	16	1,247,637	0.6	18	42	2.1
ALASKA	35	141,610	0.1	43	9	0.5
ARIZONA	43	11,029	0.0	28	26	1.3
ARKANSAS	18	1,000,465	0.5	36	17	0.9
CALIFORNIA	5	13,631,078	6.5	2	136	6.9
COLORADO	30	191,047	0.1	20	36	1.8
CONNECTICUT	33	154,729	0.1	17	43	2.2
DELAWARE	46	2,004	0.0	48	5	0.3
DISTRICT OF COLUMBIA	54	0	0.0	53	1	0.1
FLORIDA	32	161,763	0.1	11	56	2.8
GEORGIA	26	348,359	0.2	13	51	2.6
GUAM	53	0	0.0	51	2	0.1
HAWAII	49	476	0.0	47	6	0.3
IDAHO	17	1,240,434	0.6	41	10	0.5
ILLINOIS	9	3,274,425	1.6	4	107	5.4
INDIANA	14	1,486,318	0.7	5	76	3.8
IOWA	42	12,061	0.0	27	28	1.4
KANSAS	11	1,761,658	0.8	14	50	2.5
KENTUCKY	37	123,709	0.1	19	40	2.0
LOUISIANA	3	17,633,877	8.5	15	49	2.5
MAINE	47	1,780	0.0	35	18	0.9
MARYLAND	27	201,744	0.1	31	22	1.1
MASSACHUSETTS	44	7,288	0.0	21	34	1.7
MICHIGAN	4	14,381,917	6.9	3	112	5.7
MINNESOTA	34	153,657	0.1	25	29	1.5
MISSISSIPPI	15	1,446,886	0.7	34	19	1.0
MISSOURI	25	437,962	0.2	10	68	3.4
MONTANA	48	1,368	0.0	43	9	0.5
NAVAJO NATION	56	0	0.0	56	0	0.0
NEBRASKA	38	113,395	0.1	38	14	0.7
NEVADA	20	650,032	0.3	37	15	0.8
NEW HAMPSHIRE	54	0	0.0	53	1	0.1
NEW JERSEY	6	10,979,933	5.3	11	56	2.8
NEW MEXICO	31	188,444	0.1	38	14	0.7
NEW YORK	23	509,446	0.2	7	70	3.5
NORTH CAROLINA	28	199,439	0.1	8	69	3.5
NORTH DAKOTA	22	518,043	0.2	45	7	0.4
OHIO	12	1,754,399	0.8	6	74	3.7
OKLAHOMA	21	563,381	0.3	22	31	1.6
OREGON	36	137,302	0.1	40	11	0.6
PENNSYLVANIA	8	6,314,049	3.0	8	69	3.5
PUERTO RICO	19	836,505	0.4	33	20	1.0
RHODE ISLAND	40	29,806	0.0	41	10	0.5
SOUTH CAROLINA	29	191,309	0.1	28	26	1.3
SOUTH DAKOTA	51	1	0.0	50	3	0.2
TENNESSEE	2	38,675,221	18.6	25	29	1.5
TEXAS	1	75,074,857	36.0	1	192	9.7
TRUST TERRITORIES	45	2,980	0.0	51	2	0.1
UTAH	24	461,970	0.2	32	21	1.1
VERMONT	52	0	0.0	45	7	0.4
VIRGIN ISLANDS	50	20	0.0	53	1	0.1
VIRGINIA	39	51,995	0.0	22	31	1.6
WASHINGTON	13	1,577,079	0.8	16	47	2.4
WEST VIRGINIA	7	8,395,116	4.0	28	26	1.3
WISCONSIN	41	17,492	0.0	24	30	1.5
WYOMING	10	1,970,452	0.9	48	5	0.3
CBI DATA	N/A	4,088	N/A	N/A	1	N/A
TOTAL		208,272,032	100.0		1,983	100.0

<sup>1</sup>Quantity managed only by storage is excluded.

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

## **WHERE TO OBTAIN ADDITIONAL INFORMATION**

All volumes of *The National Biennial RCRA Hazardous Waste Report* (Based on 1995 Data), as well as the 1995 Biennial Reporting System (BRS) database, can be obtained via the Internet at: "<http://www.epa.gov/epaoswer/hazwaste/data/>" or they can be purchased from the National Technical Information Service (NTIS) at (703) 487-4650.

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# **National Analysis**

## **The National Biennial RCRA Hazardous Waste Report (Based on 1995 Data)**

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## National Biennial RCRA Hazardous Waste Report

The United States Environmental Protection Agency (EPA), in cooperation with individual States,<sup>1</sup> biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The purpose of this Report is to communicate the findings of EPA's 1995 Biennial Reporting System (BRS) data collection efforts to the public, government agencies, and the regulated community.<sup>2</sup>

### 1.0 WASTE GENERATION

This section presents a series of exhibits describing RCRA hazardous waste generation in 1995. For a complete description of what is included in this Report, please see the Executive Summary sections, "RCRA Hazardous Waste" and "RCRA Hazardous Waste Generation."

Nationwide, 20,873 large quantity generators (LQG) produced 214 million tons<sup>3</sup> of hazardous wastes regulated by RCRA. This represents a decrease of 3,489 LQGs and a decrease of 44 million tons of hazardous waste compared to 1993. Exhibits 1.1, 1.2, and 1.3 present the quantity of RCRA hazardous waste generated and number of LQGs in each EPA Region<sup>4</sup> in 1995. LQGs located in three Regions produced 76% of the 214 million tons generated nationwide. LQGs in Region 6 generated 88 million tons, LQGs in Region 4 generated 44 million tons, and LQGs in Region 5 generated 31 million tons. The EPA Regions with the largest numbers of LQGs were Region 5 (4,698), Region 2 (3,411), and Region 4 (3,144). The LQGs in these three (3) Regions accounted for 54% of the total number of LQGs.

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<sup>1</sup>The term "State" includes the District of Columbia, Puerto Rico, Guam, the Navajo Nation, the Trust Territories, and the Virgin Islands.

<sup>2</sup>Some respondents from the State of Georgia have submitted Confidential Business Information (CBI) pursuant to §40 CFR 260.2(b). While not included in any public BRS database, CBI has been incorporated into the Executive Summary and National Analysis volumes of this Report wherever possible. Where CBI has been omitted from these volumes, a footnote has been provided.

<sup>3</sup>1 Ton = 2,000 pounds.

<sup>4</sup>See Appendix C for information on which States are in each EPA Region.

*National Biennial RCRA Hazardous Waste Report: Based on 1995 Data*

**Exhibit 1.1** Number and Percentage of RCRA Hazardous Waste Generators and Total RCRA Hazardous Waste Quantity Generated, by EPA Region, 1995

EPA REGION	HAZARDOUS WASTE QUANTITY		LARGE QUANTITY GENERATORS	
	TONS GENERATED	PERCENTAGE	NUMBER	PERCENTAGE
1	976,616	0.5	1,323	6.3
2	13,552,560	6.3	3,411	16.3
3	15,506,970	7.2	1,925	9.2
4	44,201,147	20.6	3,144	15.1
5	30,501,562	14.2	4,698	22.5
6	87,683,092	41.0	2,104	10.1
7	2,370,374	1.1	820	3.9
8	3,127,590	1.5	359	1.7
9	11,796,670	5.5	1,999	9.6
10	4,369,946	2.0	1,084	5.2
CBI DATA	5,977	N/A	6	N/A
<b>TOTAL</b>	<b>214,092,505</b>	<b>100.0</b>	<b>20,873</b>	<b>100.0</b>

**Exhibit 1.2** Number and Percentage of RCRA Hazardous Waste Generators and Total RCRA Hazardous Waste Quantity Generated in Each EPA Region, by Highest Quantity Generated, 1995

EPA REGION	HAZARDOUS WASTE QUANTITY		LARGE QUANTITY GENERATORS	
	TONS GENERATED	PERCENTAGE	NUMBER	PERCENTAGE
6	87,683,092	41.0	2,104	10.1
4	44,201,147	20.6	3,144	15.1
5	30,501,562	14.2	4,698	22.5
3	15,506,970	7.2	1,925	9.2
2	13,552,560	6.3	3,411	16.3
9	11,796,670	5.5	1,999	9.6
10	4,369,946	2.0	1,084	5.2
8	3,127,590	1.5	359	1.7
7	2,370,374	1.1	820	3.9
1	976,616	0.5	1,323	6.3
CBI DATA	5,977	N/A	6	N/A
<b>TOTAL</b>	<b>214,092,505</b>	<b>100.0</b>	<b>20,873</b>	<b>100.0</b>

**Note:** Columns for these two exhibits may not sum due to rounding. Percentages do not include CBI data.

**Exhibit 1.3**      **Number and Percentage of RCRA Hazardous Waste Generators and Total RCRA Hazardous Waste Quantity Generated in Each EPA Region, by Highest Number of Generators, 1995**

EPA REGION	LARGE QUANTITY GENERATORS		HAZARDOUS WASTE QUANTITY	
	NUMBER	PERCENTAGE	TONS GENERATED	PERCENTAGE
5	4,698	22.5	30,501,562	14.2
2	3,411	16.3	13,552,560	6.3
4	3,144	15.1	44,201,147	20.6
6	2,104	10.1	87,683,092	41.0
9	1,999	9.6	11,796,670	5.5
3	1,925	9.2	15,506,970	7.2
1	1,323	6.3	976,616	0.5
10	1,084	5.2	4,369,946	2.0
7	820	3.9	2,370,374	1.1
8	359	1.7	3,127,590	1.5
CBI DATA	6	N/A	5,977	N/A
<b>TOTAL</b>	<b>20,873</b>	<b>100.0</b>	<b>214,092,505</b>	<b>100.0</b>

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

The LQGs in Region 6 generated the largest amount of hazardous waste (88 million tons or 41%) while the Region ranked fourth in number of LQGs (2,104). Region 5 had the highest number of LQGs (4,698), and the LQGs in Region 5 ranked third in the amount of hazardous waste generated (31 million tons or 14%). Region 8 had the smallest number of LQGs (359), and the LQGs in Region 1 generated the least amount of hazardous waste (977 thousand tons).

As shown in Exhibits 1.4, 1.5, and 1.6, the five (5) States whose LQGs generated the largest amount of hazardous waste were Texas (69 million tons), Tennessee (39 million tons), Louisiana (17 million tons), Michigan (13 million tons), and Illinois (13 million tons). Together, the LQGs in these States accounted for 70% of the national total quantity generated.

The States with the most LQGs were New York (2,144), California (1,640), Ohio (1,373), Texas (1,329), and New Jersey (1,178). The LQGs in these States accounted for 37% of the total number of LQGs.

As shown in Exhibit 1.7, the largest 50 generators nationwide account for 83% (178 million tons) of the national total. Large generators within the five (5) largest generating States (Texas, Tennessee, Louisiana, Michigan, and Illinois) accounted for the majority of each State's generation total. Of the 50 generators, 20 are located in Texas. These 20 generators accounted for 91% of Texas' total hazardous waste generation. One (1) Tennessee site, Tennessee Eastman Co., accounted for 99% of Tennessee's total. In Louisiana, seven (7) generators accounted for 81% of the State's total. Three (3) generators in Michigan accounted for 85% of the State's total. Finally, three (3) generators accounted for 81% of Illinois' total hazardous waste generation.

Exhibit 1.4 Quantity of RCRA Hazardous Waste Generated and Number of Hazardous Waste Generators, by State, 1995

STATE	HAZARDOUS WASTE QUANTITY			LARGE QUANTITY GENERATORS		
	RANK	TONS GENERATED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
ALABAMA	17	1,409,582	0.7	24	279	1.3
ALASKA	51	3,432	0.0	43	64	0.3
ARIZONA	41	66,865	0.0	29	199	1.0
ARKANSAS	20	992,794	0.5	28	204	1.0
CALIFORNIA	6	11,109,924	5.2	2	1,640	7.9
COLORADO	36	169,554	0.1	32	156	0.7
CONNECTICUT	32	295,928	0.1	18	395	1.9
DELAWARE	44	22,263	0.0	43	64	0.3
DISTRICT OF COLUMBIA	54	764	0.0	49	18	0.1
FLORIDA	31	368,904	0.2	17	418	2.0
GEORGIA	28	459,543	0.2	16	430	2.1
GUAM	55	299	0.0	53	13	0.1
HAWAII	24	592,900	0.3	45	53	0.3
IDAHO	18	1,209,841	0.6	46	52	0.2
ILLINOIS	5	12,756,271	6.0	6	1,156	5.5
INDIANA	14	1,733,026	0.8	10	609	2.9
IOWA	42	39,329	0.0	30	170	0.8
KANSAS	15	1,722,380	0.8	27	210	1.0
KENTUCKY	19	1,149,881	0.5	15	440	2.1
LOUISIANA	3	17,460,601	8.2	21	359	1.7
MAINE	45	19,459	0.0	34	144	0.7
MARYLAND	30	448,707	0.2	25	221	1.1
MASSACHUSETTS	23	610,135	0.3	13	476	2.3
MICHIGAN	4	13,446,389	6.3	9	718	3.4
MINNESOTA	39	77,720	0.0	23	284	1.4
MISSISSIPPI	16	1,579,260	0.7	33	152	0.7
MISSOURI	27	508,963	0.2	22	354	1.7
MONTANA	50	7,668	0.0	46	52	0.2
NAVAJO NATION	56	195	0.0	54	11	0.1
NEBRASKA	37	99,702	0.0	40	86	0.4
NEVADA	48	11,354	0.0	41	80	0.4
NEW HAMPSHIRE	46	15,169	0.0	35	130	0.6
NEW JERSEY	7	10,342,432	4.8	5	1,178	5.6
NEW MEXICO	35	204,494	0.1	48	44	0.2
NEW YORK	11	2,306,232	1.1	1	2,144	10.3
NORTH CAROLINA	33	286,339	0.1	11	587	2.8
NORTH DAKOTA	25	520,226	0.2	52	16	0.1
OHIO	13	1,823,547	0.9	3	1,373	6.6
OKLAHOMA	26	511,918	0.2	31	168	0.8
OREGON	40	68,187	0.0	26	220	1.1
PENNSYLVANIA	9	6,446,730	3.0	7	1,134	5.4
PUERTO RICO	21	900,567	0.4	39	88	0.4
RHODE ISLAND	43	25,428	0.0	37	112	0.5
SOUTH CAROLINA	34	261,015	0.1	19	371	1.8
SOUTH DAKOTA	53	1,119	0.0	50	17	0.1
TENNESSEE	2	38,686,622	18.1	14	467	2.2
TEXAS	1	68,513,285	32.0	4	1,329	6.4
TRUST TERRITORIES	47	15,134	0.0	55	3	0.0
UTAH	29	456,847	0.2	38	101	0.5
VERMONT	49	10,497	0.0	42	66	0.3
VIRGIN ISLANDS	52	3,329	0.0	56	1	0.0
VIRGINIA	38	98,678	0.0	19	371	1.8
WASHINGTON	10	3,088,487	1.4	8	748	3.6
WEST VIRGINIA	8	8,489,828	4.0	36	117	0.6
WISCONSIN	22	664,609	0.3	12	558	2.7
WYOMING	12	1,972,177	0.9	50	17	0.1
CBI DATA	N/A	5,977	N/A	N/A	6	N/A
TOTAL		214,092,505	100.0		20,873	100.0

Note: Columns may not sum due to rounding.  
Percentages do not include CBI data.

*National Biennial RCRA Hazardous Waste Report: Based on 1995 Data*

**Exhibit 1.5 Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Generated and Number of Hazardous Waste Generators, 1995**

STATE	HAZARDOUS WASTE QUANTITY			LARGE QUANTITY GENERATORS		
	RANK	TONS GENERATED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
TEXAS	1	68,513,285	32.0	4	1,329	6.4
TENNESSEE	2	38,686,622	18.1	14	467	2.2
LOUISIANA	3	17,460,601	8.2	21	359	1.7
MICHIGAN	4	13,446,389	6.3	9	718	3.4
ILLINOIS	5	12,756,271	6.0	6	1,156	5.5
CALIFORNIA	6	11,109,924	5.2	2	1,640	7.9
NEW JERSEY	7	10,342,432	4.8	5	1,178	5.6
WEST VIRGINIA	8	8,489,828	4.0	36	117	0.6
PENNSYLVANIA	9	6,446,730	3.0	7	1,134	5.4
WASHINGTON	10	3,088,487	1.4	8	748	3.6
NEW YORK	11	2,306,232	1.1	1	2,144	10.3
WYOMING	12	1,972,177	0.9	50	17	0.1
OHIO	13	1,823,547	0.9	3	1,373	6.6
INDIANA	14	1,733,026	0.8	10	609	2.9
KANSAS	15	1,722,380	0.8	27	210	1.0
MISSISSIPPI	16	1,579,260	0.7	33	152	0.7
ALABAMA	17	1,409,582	0.7	24	279	1.3
IDAHO	18	1,209,841	0.6	46	52	0.2
KENTUCKY	19	1,149,881	0.5	15	440	2.1
ARKANSAS	20	992,794	0.5	28	204	1.0
PUERTO RICO	21	900,567	0.4	39	88	0.4
WISCONSIN	22	664,609	0.3	12	558	2.7
MASSACHUSETTS	23	610,135	0.3	13	476	2.3
HAWAII	24	592,900	0.3	45	53	0.3
NORTH DAKOTA	25	520,226	0.2	52	16	0.1
OKLAHOMA	26	511,918	0.2	31	168	0.8
MISSOURI	27	508,963	0.2	22	354	1.7
GEORGIA	28	459,543	0.2	16	430	2.1
UTAH	29	456,847	0.2	38	101	0.5
MARYLAND	30	448,707	0.2	25	221	1.1
FLORIDA	31	368,904	0.2	17	418	2.0
CONNECTICUT	32	295,928	0.1	18	395	1.9
NORTH CAROLINA	33	286,339	0.1	11	587	2.8
SOUTH CAROLINA	34	261,015	0.1	19	371	1.8
NEW MEXICO	35	204,494	0.1	48	44	0.2
COLORADO	36	169,554	0.1	32	156	0.7
NEBRASKA	37	99,702	0.0	40	86	0.4
VIRGINIA	38	98,678	0.0	19	371	1.8
MINNESOTA	39	77,720	0.0	23	284	1.4
OREGON	40	68,187	0.0	26	220	1.1
ARIZONA	41	66,865	0.0	29	199	1.0
IOWA	42	39,329	0.0	30	170	0.8
RHODE ISLAND	43	25,428	0.0	37	112	0.5
DELAWARE	44	22,263	0.0	43	64	0.3
MAINE	45	19,459	0.0	34	144	0.7
NEW HAMPSHIRE	46	15,169	0.0	35	130	0.6
TRUST TERRITORIES	47	15,134	0.0	55	3	0.0
NEVADA	48	11,354	0.0	41	80	0.4
VERMONT	49	10,497	0.0	42	66	0.3
MONTANA	50	7,668	0.0	46	52	0.2
ALASKA	51	3,432	0.0	43	64	0.3
VIRGIN ISLANDS	52	3,329	0.0	56	1	0.0
SOUTH DAKOTA	53	1,119	0.0	50	17	0.1
DISTRICT OF COLUMBIA	54	764	0.0	49	18	0.1
GUAM	55	299	0.0	53	13	0.1
NAVAJO NATION	56	195	0.0	54	11	0.1
CBI DATA	N/A	5,977	N/A	N/A	6	N/A
<b>TOTAL</b>		<b>214,092,505</b>	<b>100.0</b>		<b>20,873</b>	<b>100.0</b>

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

**Exhibit 1.6 Rank Ordering of States Based on Number of Hazardous Waste Generators and Quantity of RCRA Hazardous Waste Generated, 1995**

STATE	LARGE QUANTITY GENERATORS			HAZARDOUS WASTE QUANTITY		
	RANK	NUMBER	PERCENTAGE	RANK	TONS GENERATED	PERCENTAGE
NEW YORK	1	2,144	10.3	11	2,306,232	1.1
CALIFORNIA	2	1,640	7.9	6	11,109,924	5.2
OHIO	3	1,373	6.6	13	1,823,547	0.9
TEXAS	4	1,329	6.4	1	68,513,285	32.0
NEW JERSEY	5	1,178	5.6	7	10,342,432	4.8
ILLINOIS	6	1,156	5.5	5	12,756,271	6.0
PENNSYLVANIA	7	1,134	5.4	9	6,446,730	3.0
WASHINGTON	8	748	3.6	10	3,088,487	1.4
MICHIGAN	9	718	3.4	4	13,446,389	6.3
INDIANA	10	609	2.9	14	1,733,026	0.8
NORTH CAROLINA	11	587	2.8	33	286,339	0.1
WISCONSIN	12	558	2.7	22	664,609	0.3
MASSACHUSETTS	13	476	2.3	23	610,135	0.3
TENNESSEE	14	467	2.2	2	38,686,622	18.1
KENTUCKY	15	440	2.1	19	1,149,881	0.5
GEORGIA	16	430	2.1	28	459,543	0.2
FLORIDA	17	418	2.0	31	368,904	0.2
CONNECTICUT	18	395	1.9	32	295,928	0.1
SOUTH CAROLINA	19	371	1.8	34	261,015	0.1
VIRGINIA	19	371	1.8	38	98,678	0.0
LOUISIANA	21	359	1.7	3	17,460,601	8.2
MISSOURI	22	354	1.7	27	508,963	0.2
MINNESOTA	23	284	1.4	39	77,720	0.0
ALABAMA	24	279	1.3	17	1,409,582	0.7
MARYLAND	25	221	1.1	30	448,707	0.2
OREGON	26	220	1.1	40	68,187	0.0
KANSAS	27	210	1.0	15	1,722,380	0.8
ARKANSAS	28	204	1.0	20	992,794	0.5
ARIZONA	29	199	1.0	41	66,865	0.0
IOWA	30	170	0.8	42	39,329	0.0
OKLAHOMA	31	168	0.8	26	511,918	0.2
COLORADO	32	156	0.7	36	169,554	0.1
MISSISSIPPI	33	152	0.7	16	1,579,260	0.7
MAINE	34	144	0.7	45	19,459	0.0
NEW HAMPSHIRE	35	130	0.6	46	15,169	0.0
WEST VIRGINIA	36	117	0.6	8	8,489,828	4.0
RHODE ISLAND	37	112	0.5	43	25,428	0.0
UTAH	38	101	0.5	29	456,847	0.2
PUERTO RICO	39	88	0.4	21	900,567	0.4
NEBRASKA	40	86	0.4	37	99,702	0.0
NEVADA	41	80	0.4	48	11,354	0.0
VERMONT	42	66	0.3	49	10,497	0.0
ALASKA	43	64	0.3	51	3,432	0.0
DELAWARE	43	64	0.3	44	22,263	0.0
HAWAII	45	53	0.3	24	592,900	0.3
IDAHO	46	52	0.2	18	1,209,841	0.6
MONTANA	46	52	0.2	50	7,668	0.0
NEW MEXICO	48	44	0.2	35	204,494	0.1
DISTRICT OF COLUMBIA	49	18	0.1	54	764	0.0
SOUTH DAKOTA	50	17	0.1	53	1,119	0.0
WYOMING	50	17	0.1	12	1,972,177	0.9
NORTH DAKOTA	52	16	0.1	25	520,226	0.2
GUAM	53	13	0.1	55	299	0.0
NAVAJO NATION	54	11	0.1	56	195	0.0
TRUST TERRITORIES	55	3	0.0	47	15,134	0.0
VIRGIN ISLANDS	56	1	0.0	52	3,329	0.0
CBI DATA	N/A	6	N/A	N/A	5,977	N/A
TOTAL		20,873	100.0		214,092,505	100.0

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

# National Biennial RCRA Hazardous Waste Report: Based on 1995 Data

Exhibit 1.7

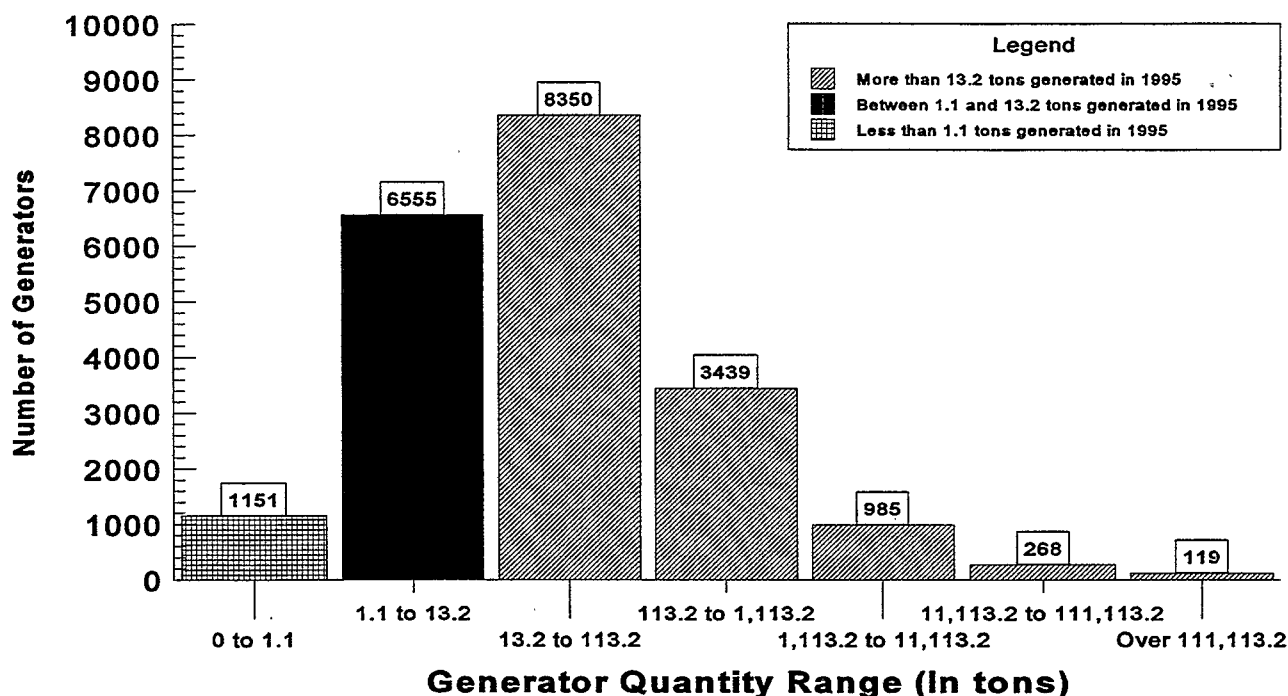
Fifty Largest RCRA Hazardous Waste Generators in the U.S., 1995

RANK	EPA ID	NAME	CITY	TONS GENERATED
1	TND003376928	TENN EASTMAN DIVISION OF EASTMAN CHEMICA	KINGSPORT, TN	38,171,574
2	TXD008080533	AMOCO OIL COMPANY	TEXAS CITY, TX	17,778,362
3	NJD002385730	E I DUPONT DE NEMOURS & CO INC	DEEPWATER, NJ	9,775,554
4	MID000724724	DOW CHEMICAL CO-MIDLAND PLANT SITE	MIDLAND, MI	9,637,185
5	ILD080012305	SHELL WOOD RIVER REFINING CO	ROXANA, IL	8,627,306
6	TXD048210645	PHILLIPS 66 COMPANY	OLD OCEAN, TX	8,615,870
7	CAD009164021	SHELL OIL CO	MARTINEZ, CA	8,507,324
8	WVD005005509	RHONE-POULENC INSTITUTE PLANT	INSTITUTE, WV	7,470,621
9	PAD071612683	BP OIL CO MARCUS HOOK REFINERY	MARCUS HOOK, PA	4,906,135
10	TXD008123317	DU PONT DE NEMOURS & CO., E.I.	VICTORIA, TX	4,503,653
11	TXD001700806	MONSANTO COMPANY	ALVIN, TX	4,069,312
12	LAD041581422	UNION CARBIDE CORP. TAFT PLANT	TAFT, LA	3,564,281
13	TXD008091290	CROWN CENTRAL PETROLEUM CORPORATION	PASADENA, TX	3,143,961
14	LAD056024391	BP OIL COMPANY- ALLIANCE REFINERY	BELLE CHASSE, LA	3,136,990
15	TXD008132268	COASTAL REFINING & MARKETING, INC.	CORPUS CHRISTI, TX	2,822,547
16	TXD007330202	TEXAS EASTMAN DIVISION	LONGVIEW, TX	2,757,804
17	TXD008092793	THE DOW CHEMICAL COMPANY, TEXAS OPERATIO	FREEPORT, TX	2,477,825
18	TXD055141378	ROLLINS ENVIRONMENTAL SERVICES (TX), INC	DEER PARK, TX	2,216,925
19	LAD008187080	DOW CHEMICAL COMPANY LOUISIANA DIVISION	PLAQUEMINE, LA	2,115,656
20	TXD000017756	THE DOW CHEMICAL COMPANY	LA PORTE, TX	1,811,186
21	LAD008175390	CYTEC INDUSTRIES INC.	WAGGAMAN, LA	1,743,006
22	TXD083472266	ARCO CHEMICAL COMPANY	CHANNELVIEW, TX	1,704,484
23	TXD990757486	AIR PRODUCTS, INCORPORATED	PASADENA, TX	1,632,732
24	TXD008081101	E.I. DUPONT DE NEMOURS & COMPANY	BEAUMONT, TX	1,583,717
25	TXD067285973	SHELL OIL COMPANY	DEER PARK, TX	1,562,033
26	KSD007482029	VULCAN MATERIALS COMPANY	WICHITA, KS	1,484,817
27	LAD008213191	RUBICON INC	GEISMAR, LA	1,484,310
28	TXD000449694	MOBIL CHEMICAL COMPANY	BEAUMONT, TX	1,442,126
29	WYD079959185	SINCLAIR OIL CORPORATION	SINCLAIR, WY	1,315,106
30	LAD010395127	ROLLINS ENVIRONMENTAL SERVICES (LA) INC.	BATON ROUGE, LA	1,272,394
31	TXD078432457	HOECHST CELANESE CHEM. GROUP	PASADENA, TX	1,057,685
32	OHD042157644	BP CHEMICALS INC	LIMA, OH	993,049
33	ILD064403199	MOBIL OIL CORP	JOLIET, IL	960,344
34	MID005358130	TOTAL PETROLEUM INC. ALMA REFINERY	ALMA, MI	937,950
35	MSD096046792	E.I. DUPONT DE NEMOURS & CO.	PASS CHRISTIAN, MS	909,267
36	CAD008302903	CHEMICAL WASTE MANAGEMENT AZUSA FACILITY	AZUSA, CA	901,460
37	TXD000751172	VISTRON CORPORATION	PORT LAVACA, TX	899,885
38	NYD075796037	LORAL DEFENSE SYSTEMS EAST	GREAT NECK, NY	898,055
39	WAD041337130	BOEING - AUBURN	AUBURN, WA	867,048
40	ALD001221902	CIBA-GEIGY CORPORATION	MCINTOSH, AL	854,169
41	TXD008079642	E.I. DUPONT DE NEMOURS & COMPANY	ORANGE, TX	831,019
42	LAD001700756	MONSANTO COMPANY LULING PLANT	LULING, LA	816,789
43	MID981197254	AMERICAN BUMPER & MANUFACTURING CO	IONIA, MI	789,722
44	TXD058275769	LYONDELL PETROCHEMICAL COMPANY	CHANNELVIEW, TX	784,766
45	IDD070929518	FMC CORP PHOSPHORUS CHEMICALS GROUP	POCATELLO, ID	775,621
46	PRD090074071	PUERTO RICO SUN OIL CO.	YABUCOA, PR	746,639
47	ARD043195429	GREAT LAKES CHEMICAL CORP MAIN	EL DORADO, AR	745,527
48	TXD066349770	TYLER PIPE INDUSTRIES, INC.	TYLER, TX	726,737
49	ILD005092572	NALCO CHEMICAL CO	BEDFORD PARK, IL	721,791
50	WVD004341491	CYTEC INDUSTRIES	WILLOW ISLAND, WV	717,406
TOTAL				178,269,725

Note: Column may not sum due to rounding.

Exhibit 1.8

Number of Large Quantity Generators by Generator Quantity Range, 1995\*



\* CBI data excluded from Exhibit.

As shown in Exhibit 1.8, in 1995 there were 13,161 generators that generated more than 13.2 tons, 6,555 generators that generated between 1.1 and 13.2 tons, and 1,151 generators that generated less than 1.1 tons. Forty percent (40%) of the LQGs (8,350) generated between 13.2 and 113.2 tons, which is the range displayed in Exhibit 1.8 with the highest distribution. The range with the second highest distribution is that between 1.1 and 13.2 tons, with 6,555 generators. Together, these two ranges account for 71% of the total number of LQGs. Although most LQGs generate between 13.2 and 113.2 tons, the fifty largest RCRA hazardous waste generators, listed in Exhibit 1.7, all generate over 111,113.2 tons.

Nationwide, wastewater generation accounted for 95% of the national generation total, while in 1993, wastewater generation accounted for 92% of the national generation total.<sup>1</sup> Exhibit 1.9 presents the quantities of non-wastewater and wastewater generation and their respective percentages by State. The five (5) States whose LQGs generated the largest amount of hazardous wastewater were Texas (67 million tons), Tennessee (38 million tons), Louisiana (17 million tons), Michigan (13 million tons), and California (11 million tons). The five (5) States whose LQGs generated the largest amount of hazardous non-wastewater were Illinois (2.3 million tons), Texas (1.9 million tons), Louisiana (560 thousand tons), Michigan (550 thousand tons), and Ohio (520 thousand tons).

Most of the waste generated is wastewater, and most of the wastewater is generated by a relatively small number of generators. Exhibit 1.10 shows the 50 largest wastewater generators in the United States. Many of the LQGs in Exhibit 1.10 are also listed in Exhibit 1.7. The wastewater generated by the 50 largest wastewater generators (176 million tons) accounted for 87% of the national total for wastewater generation and 82% of the total national hazardous waste generation.

Overall, total hazardous waste generation decreased from 258 million tons in 1993 to 214 million tons in 1995. Wastewater generation decreased from 237 million tons in 1993 to 202 million tons in 1995, and non-wastewater generation decreased from 22 million tons in 1993 to 12 million tons in 1995.

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<sup>1</sup>A waste is considered wastewater if the BRS form code is B101, B102, B105, or B110-116, or the BRS system type code is M071-079, M081-085, M089, M091-094, M099, M121-125, M129, or M134-136. See Appendix A for further information on BRS System Type Codes and Appendix B for further information on BRS Form Codes.

Exhibit 1.9

Quantity of Non-Wastewater, Quantity of Wastewater, and Total Quantity of RCRA Hazardous Waste Generated by State, 1995

STATE	NON-WASTEWATER QUANTITY		WASTEWATER QUANTITY		TOTAL QUANTITY
	TONS GENERATED	PERCENTAGE	TONS GENERATED	PERCENTAGE	
ALABAMA	279,133	19.8	1,130,449	80.2	1,409,582
ALASKA	2,835	82.6	597	17.4	3,432
ARIZONA	41,262	61.7	25,602	38.3	66,865
ARKANSAS	201,078	20.3	791,715	79.7	992,794
CALIFORNIA	501,879	4.5	10,608,045	95.5	11,109,924
COLORADO	106,102	62.6	63,451	37.4	169,554
CONNECTICUT	73,083	24.7	222,845	75.3	295,928
DELAWARE	19,705	88.5	2,558	11.5	22,263
DISTRICT OF COLUMBIA	657	86.0	107	14.0	764
FLORIDA	76,775	20.8	292,129	79.2	368,904
GEORGIA	166,315	36.2	293,228	63.8	459,543
GUAM	285	95.3	14	4.7	299
HAWAII	2,923	0.5	589,977	99.5	592,900
IDAHO	509,688	42.1	700,154	57.9	1,209,841
ILLINOIS	2,263,469	17.7	10,492,802	82.3	12,756,271
INDIANA	508,347	29.3	1,224,679	70.7	1,733,026
IOWA	24,907	63.3	14,423	36.7	39,329
KANSAS	61,394	3.6	1,660,987	96.4	1,722,380
KENTUCKY	203,250	17.7	946,631	82.3	1,149,881
LOUISIANA	563,548	3.2	16,897,053	96.8	17,460,601
MAINE	5,033	25.9	14,426	74.1	19,459
MARYLAND	31,551	7.0	417,156	93.0	448,707
MASSACHUSETTS	326,280	53.5	283,855	46.5	610,135
MICHIGAN	549,971	4.1	12,896,418	95.9	13,446,389
MINNESOTA	56,748	73.0	20,972	27.0	77,720
MISSISSIPPI	39,273	2.5	1,539,988	97.5	1,579,260
MISSOURI	98,764	19.4	410,199	80.6	508,963
MONTANA	5,843	76.2	1,824	23.8	7,668
NAVAJO NATION	169	86.8	26	13.2	195
NEBRASKA	13,232	13.3	86,470	86.7	99,702
NEVADA	6,148	54.1	5,206	45.9	11,354
NEW HAMPSHIRE	10,628	70.1	4,541	29.9	15,169
NEW JERSEY	397,886	3.8	9,944,546	96.2	10,342,432
NEW MEXICO	7,350	3.6	197,144	96.4	204,494
NEW YORK	304,604	13.2	2,001,628	86.8	2,306,232
NORTH CAROLINA	77,242	27.0	209,098	73.0	286,339
NORTH DAKOTA	2,066	0.4	518,160	99.6	520,226
OHIO	517,064	28.4	1,306,483	71.6	1,823,547
OKLAHOMA	35,550	6.9	476,368	93.1	511,918
OREGON	46,434	68.1	21,753	31.9	68,187
PENNSYLVANIA	393,132	6.1	6,053,598	93.9	6,446,730
PUERTO RICO	58,209	6.5	842,358	93.5	900,567
RHODE ISLAND	8,250	32.4	17,178	67.6	25,428
SOUTH CAROLINA	22,737	8.7	238,277	91.3	261,015
SOUTH DAKOTA	1,068	95.4	51	4.6	1,119
TENNESSEE	319,802	0.8	38,366,820	99.2	38,686,622
TEXAS	1,918,671	2.8	66,594,614	97.2	68,513,285
TRUST TERRITORIES	4,701	31.1	10,433	68.9	15,134
UTAH	70,583	15.5	386,264	84.5	456,847
VERMONT	9,797	93.3	700	6.7	10,497
VIRGIN ISLANDS	2,219	66.7	1,110	33.3	3,329
VIRGINIA	80,261	81.3	18,417	18.7	98,678
WASHINGTON	136,224	4.4	2,952,263	95.6	3,088,487
WEST VIRGINIA	114,518	1.3	8,375,310	98.7	8,489,828
WISCONSIN	420,829	63.3	243,780	36.7	664,609
WYOMING	1,542	0.1	1,970,636	99.9	1,972,177
CBI DATA	5,702	N/A	275	N/A	5,977
<b>TOTAL</b>	<b>11,706,712</b>	<b>5.5</b>	<b>202,385,793</b>	<b>94.5</b>	<b>214,092,505</b>

Note: Columns may not sum due to rounding.  
Percentages do not include CBI data.

# National Biennial RCRA Hazardous Waste Report: Based on 1995 Data

Exhibit 1.10 Fifty Largest RCRA Hazardous Wastewater Generators in the U.S., 1995

RANK	EPA ID	NAME	CITY	TONS WASTEWATER GENERATED
1	TND003376928	TENN EASTMAN DIVISION OF EASTMAN CHEMICA	KINGSPORT, TN	37,950,469
2	TXD008080533	AMOCO OIL COMPANY	TEXAS CITY, TX	17,575,026
3	NJD002385730	E I DUPONT DE NEMOURS & CO INC	DEEPWATER, NJ	9,721,623
4	MID000724724	DOW CHEMICAL CO-MIDLAND PLANT SITE	MIDLAND, MI	9,500,546
5	TXD048210645	PHILLIPS 66 COMPANY	OLD OCEAN, TX	8,612,458
6	CAD009164021	SHELL OIL CO	MARTINEZ, CA	8,498,058
7	ILD080012305	SHELL WOOD RIVER REFINING CO	ROXANA, IL	8,349,626
8	WVD005005509	RHONE-POULENC INSTITUTE PLANT	INSTITUTE, WV	7,446,690
9	PAD071612683	BP OIL CO MARCUS HOOK REFINERY	MARCUS HOOK, PA	4,900,125
10	TXD008123317	DU PONT DE NEMOURS & CO., E.I.	VICTORIA, TX	4,358,774
11	TXD001700806	MONSANTO COMPANY	ALVIN, TX	4,064,874
12	LAD041581422	UNION CARBIDE CORP. TAFT PLANT	TAFT, LA	3,555,339
13	TXD008091290	CROWN CENTRAL PETROLEUM CORPORATION	PASADENA, TX	3,143,932
14	LAD056024391	BP OIL COMPANY- ALLIANCE REFINERY	BELLE CHASSE, LA	3,135,000
15	TXD008132268	COASTAL REFINING & MARKETING, INC.	CORPUS CHRISTI, TX	2,773,626
16	TXD007330202	TEXAS EASTMAN DIVISION	LONGVIEW, TX	2,706,421
17	TXD008092793	THE DOW CHEMICAL COMPANY, TEXAS OPERATIO	FREEPORT, TX	2,338,594
18	TXD055141378	ROLLINS ENVIRONMENTAL SERVICES (TX), INC	DEER PARK, TX	2,146,039
19	LAD008187080	DOW CHEMICAL COMPANY LOUISIANA DIVISION	PLAQUEMINE, LA	2,076,408
20	TXD000017756	THE DOW CHEMICAL COMPANY	LA PORTE, TX	1,809,441
21	LAD008175390	CYTEC INDUSTRIES INC.	WAGGAMAN, LA	1,742,901
22	TXD083472266	ARCO CHEMICAL COMPANY	CHANNELVIEW, TX	1,650,235
23	TXD990757486	AIR PRODUCTS, INCORPORATED	PASADENA, TX	1,629,607
24	TXD008081101	E.I. DUPONT DE NEMOURS & COMPANY	BEAUMONT, TX	1,578,738
25	TXD067285973	SHELL OIL COMPANY	DEER PARK, TX	1,538,462
26	KSD007482029	VULCAN MATERIALS COMPANY	WICHITA, KS	1,483,832
27	LAD008213191	RUBICON INC	GEISMAR, LA	1,454,503
28	TXD000449694	MOBIL CHEMICAL COMPANY	BEAUMONT, TX	1,441,575
29	WYD079959185	SINCLAIR OIL CORPORATION	SINCLAIR, WY	1,315,096
30	LAD010395127	ROLLINS ENVIRONMENTAL SERVICES (LA) INC.	BATON ROUGE, LA	1,267,206
31	TXD078432457	HOECHST CELANESE CHEM. GROUP	PASADENA, TX	1,029,403
32	OHD042157644	BP CHEMICALS INC	LIMA, OH	991,819
33	MID005358130	TOTAL PETROLEUM INC. ALMA REFINERY	ALMA, MI	937,777
34	MSD096046792	E.I. DUPONT DE NEMOURS & CO.	PASS CHRISTIAN, MS	909,235
35	NYD075796037	LORAL DEFENSE SYSTEMS EAST	GREAT NECK, NY	898,039
36	TXD000751172	VISTRON CORPORATION	PORT LAVACA, TX	888,251
37	CAD008302903	CHEMICAL WASTE MANAGEMENT AZUSA FACILITY	AZUSA, CA	877,738
38	WAD041337130	BOEING - AUBURN	AUBURN, WA	865,704
39	ALD001221902	CIBA-GEIGY CORPORATION	MCINTOSH, AL	827,335
40	LAD001700756	MONSANTO COMPANY LULING PLANT	LULING, LA	816,381
41	MID981197254	AMERICAN BUMPER & MANUFACTURING CO	IONIA, MI	789,058
42	TXD058275769	LYONDELL PETROCHEMICAL COMPANY	CHANNELVIEW, TX	760,880
43	PRD090074071	PUERTO RICO SUN OIL CO.	YABUCOA, PR	745,221
44	ARD043195429	GREAT LAKES CHEMICAL CORP MAIN	EL DORADO, AR	743,861
45	ILD005092572	NALCO CHEMICAL CO	BEDFORD PARK, IL	721,734
46	TXD066349770	TYLER PIPE INDUSTRIES, INC.	TYLER, TX	718,278
47	KYD985072008	WESTLAKE MONOMERS CORPORATION	CALVERT CITY, KY	716,212
48	TXD008079642	E.I. DUPONT DE NEMOURS & COMPANY	ORANGE, TX	709,446
49	PAD002334753	OCCIDENTAL CHEMICAL CORP	POTTSTOWN, PA	705,341
50	WVD004341491	CYTEC INDUSTRIES	WILLOW ISLAND, WV	696,564
TOTAL				176,113,501

Note: Column may not sum due to rounding.

Hazardous waste is distinguished according to its designation as a characteristic or listed waste. Characteristic and listed wastes are specifically described in 40 CFR<sup>1</sup> 261, and a list of waste codes is provided as Appendix D of this Report.

The term "characteristic waste" refers to any solid waste that exhibits the characteristic of ignitability (D001), corrosivity (D002), reactivity (D003), or that contains toxic constituents in excess of Federal standards (D004 to D043).

An ignitable waste is a solid waste that exhibits any of the following properties:

- o A liquid, except aqueous solutions containing less than 24 percent alcohol, with a flash point less than 60 degrees Celsius (140 degrees Fahrenheit).
- o A nonliquid capable, under normal conditions, of spontaneous and sustained combustion.
- o An ignitable compressed gas as defined by Department of Transportation (DOT) regulations.
- o An oxidizer per DOT regulations.

A corrosive waste is a solid waste that exhibits the following properties:

- o An aqueous material with pH less than or equal to 2, or greater than or equal to 12.5.
- o A liquid that corrodes steel at a rate greater than 1/4 inch per year at a temperature of 55 degrees Celsius (130 degrees Fahrenheit).

A reactive waste is a solid waste that exhibits the following properties:

- o Normally unstable and reacts violently without detonating.
- o Reacts violently with water.
- o Forms an explosive mixture with water.
- o Contains cyanide or sulfide and generates toxic gases, vapors, or fumes at a pH of between 2 and 12.5.

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<sup>1</sup>Code of Federal Regulations.

- o Capable of detonation if heated under confinement or subjected to strong initiating source.
- o Capable of detonation at standard temperature and pressure.
- o Listed by DOT as Class A or B explosive.

Wastes with the toxicity characteristic are identified through failure of the Toxicity Characteristic Leaching Procedure Test (TCLP). A solid waste exhibits the toxicity characteristic if, using the TCLP or an equivalent method, the extract from a representative sample of the waste contains any of the contaminants D004 to D043 at a concentration equal to or greater than the value described in 40 CFR 261.24.

The term "listed waste" (F, K, P, and U codes) refers to waste that EPA has identified as hazardous as a result of its investigations of particular industries or because EPA has specifically recognized a commercial chemical waste's toxicity. A solid waste is a "listed" hazardous waste if it is named on one of three lists developed by EPA:

- 1) Non-specific source wastes ('F' wastes): These are generic wastes, commonly produced by manufacturing and industrial processes. Examples from this list include spent halogenated solvents used in degreasing, and wastewater treatment sludge from electroplating processes, as well as dioxin wastes, most of which are acutely hazardous wastes due to the danger they present to human health and the environment.
- 2) Specific source wastes ('K' wastes): This list consists of wastes from specifically identified industries such as wood preserving, petroleum refining, and organic chemical manufacturing. These wastes typically include sludges, still bottoms, wastewater, spent catalysts, and residues, (e.g., wastewater treatment sludge from pigment production).
- 3) Commercial chemical products ('P' and 'U' wastes): The third list consists of specific commercial chemical products, or manufacturing chemical intermediates. This list includes chemicals such as chloroform and creosote, acids such as sulfuric acid and hydrochloric acid, and pesticides such as DDT and kepone. The 'U' wastes include toxic chemicals while 'P' waste listings are reserved for acutely toxic chemicals.

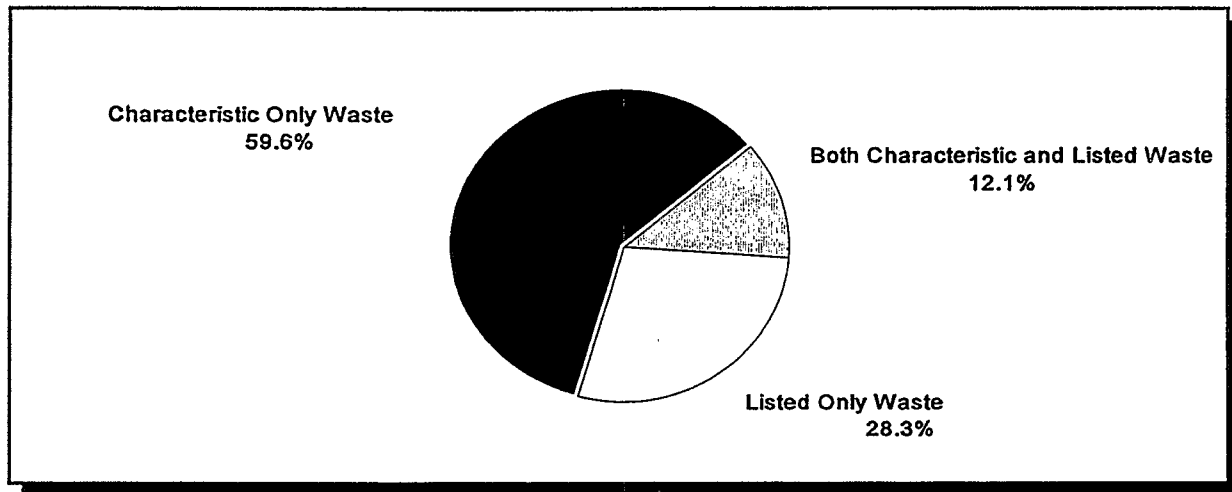
Exhibits 1.11, 1.12, and 1.13 show the portions of the national generation total of 214 million tons that were characteristic, listed, or a mixture of characteristic and listed wastes. Characteristic wastes accounted for 60% (128 million tons) of the 1995 national total. This portion reflects a decrease from 63% (162 million tons) of the 1993 national total. Listed-only wastes increased their share of the national total from 9% (23 million tons) in 1993 to 28% (61 million tons) in 1995. Wastes that are mixtures of characteristic and listed wastes have decreased their portion of the national total from 28% (74 million tons) in 1993 to 12% (26 million tons) in 1995.

It is important to note changes with respect to the wastes that were newly regulated by the Toxicity Characteristic (TC) Rule promulgated in 1990. As shown in Exhibit 1.12, 63 million tons of waste were identified by these 25 new waste codes (D018 to D043), indicating that, at a minimum, the TC Rule captured 63 million tons of wastes not regulated before 1990. Exhibit 1.13 shows an additional 29 million tons of waste described by D018 to D043 and other characteristic codes. Another 14 million tons were described by D018 to D043 and other listed waste codes. While it is not possible to calculate exactly the amount of waste newly regulated by the TC Rule and the amount regulated prior to 1990, it is estimated that as much as 105 million tons may have been captured in 1995 by new toxicity characteristic waste listings. In contrast, the 1993 data reported as much as 135 million tons of waste not regulated before 1990.

In conclusion, the amount of hazardous waste generated in 1995 was between 109 and 151 million tons without these newly regulated TC wastes. This compares to a total of 198 million tons generated in 1989 before promulgation of the TC Rule.

# National Biennial RCRA Hazardous Waste Report: Based on 1995 Data

**Exhibit 1.11 Percentages of National Generation Total That Were Characteristic, Listed, or Both Characteristic and Listed Waste, 1995\***



\*CBI data excluded from Exhibit.

**Exhibit 1.12 Tons of Generated Waste That Were Only Characteristic Waste, Only Listed Waste, or Both Characteristic and Listed Waste, 1995\***

ONLY CHARACTERISTIC WASTES		ONLY LISTED WASTES		BOTH A CHARACTERISTIC AND A LISTED WASTE	
ONLY IGNITABLE	987,142	ONLY AN F CODE	47,386,577		
ONLY CORROSIVE	23,059,189	ONLY A K CODE	6,566,039		
ONLY REACTIVE	651,350	ONLY A P CODE	113,934		
ONLY D004-17	8,181,062	ONLY A U CODE	2,111,049		
ONLY D018-43	63,128,736				
HAS MORE THAN ONE CHARACTERISTIC CODE	31,549,822	HAS MORE THAN ONE LISTED CODE	4,453,511		
TOTAL	127,557,301	TOTAL	60,631,110	TOTAL CHAR AND LISTED	25,893,796

**Note:** All quantities are in tons.

\*CBI data excluded from Exhibit.

Exhibit 1.13

Tons of Generated Wastes with Multiple Characteristics, That Were Multiply Listed, or Both, 1995\*

ONLY CHARACTERISTIC WASTES BUT WITH MULTIPLE CHARACTERISTICS		ONLY LISTED WASTES BUT MULTIPLY LISTED		BOTH CHARACTERISTIC AND LISTED WASTES <sup>1</sup>	
HAS IGNITABLE CODE	15,024,901			IGN. W/ AT LEAST 1 LSTD	3,901,527
HAS CORROSIVE CODE	25,001,907			CORR. W/ AT LEAST 1 LSTD	16,752,117
HAS REACTIVE CODE	8,701,114			REACT. W/ AT LEAST 1 LSTD	2,210,232
HAS D004-D017 CODE	5,417,155			D004-17 W/ AT LEAST 1 LSTD	8,268,572
HAS D018-D043 CODE	28,511,231			D018-43 W/ AT LEAST 1 LSTD	13,838,524
		HAS AN F CODE	4,007,810	F WASTE W/ AT LEAST 1 CHAR	21,889,157
		HAS A K CODE	3,777,152	K WASTE W/ AT LEAST 1 CHAR	17,795,373
		HAS A P CODE	733,731	P WASTE W/ AT LEAST 1 CHAR	4,410,605
		HAS A U CODE	1,175,341	U WASTE W/ AT LEAST 1 CHAR	16,550,913
<b>TOTAL</b>	<b>31,549,822</b>	<b>TOTAL</b>	<b>4,453,511</b>	<b>TOTAL</b>	<b>25,893,796</b>

<sup>1</sup> Listed wastes with ignitable, corrosive, reactive, D004-17 (Toxic), or D018-43 (Toxic) characteristics, respectively may have other characteristics as well. Similarly, characteristic wastes that are also F, K, P, or U listed wastes respectively may be other listed wastes as well.

\* CBI data excluded from Exhibit.

**Note:** All quantities are in tons.  
Columns do not sum to total because wastes may be included in more than one category.

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## **2.0 WASTE MANAGEMENT**

This section presents a series of exhibits describing the management of RCRA hazardous waste. For a complete description of what is included in this Report, please see the Executive Summary sections, "RCRA Hazardous Waste" and "RCRA Hazardous Waste Management."

Nationwide, a total of 1,983 facilities reported that they managed 208 million tons of hazardous waste in treatment, storage, or disposal (TSD) units subject to RCRA permitting standards. Storage facilities account for 1,083 of these facilities, leaving 900 facilities that treated or disposed of 208 million tons of hazardous waste. This represents a 601 facility decrease in the total number of TSDs from 1993, and a 27 million ton decrease from 1993 quantities.

Exhibits 2.1, 2.2, and 2.3 present the quantity of RCRA hazardous waste managed and the number of TSDs in each EPA Region<sup>1</sup> in 1995. TSDs located in three (3) Regions accounted for 76% of the national total for waste management. These three (3) Regions were Region 6 (94 million tons), Region 4 (42 million tons), and Region 5 (21 million tons).

The EPA Regions where the largest amount of hazardous waste was managed also had the largest number of TSDs. The three (3) Regions with the largest number of TSDs were Region 5 (428), Region 4 (332), and Region 6 (303). Collectively, the TSDs in these three (3) Regions accounted for 54% of the total number of TSDs nationwide.

In summary, the TSDs in Region 6 managed the largest amount of waste (94 million tons, or 45% of the national total), while the Region ranked third in the number of TSDs (303). Region 5 had the highest number of TSDs (428), and the TSDs in Region 5 ranked third in the amount of waste managed (21 million tons, or 10% of the national total). Region 10 had the fewest number of TSDs (77), and the TSDs in Region 1 managed the least amount of waste (194 thousand tons).

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<sup>1</sup>See Appendix C for information on which States are in each EPA Region.

***National Biennial RCRA Hazardous Waste Report: Based on 1995 Data***

**Exhibit 2.1**      **Number and Percentage of RCRA TSD Facilities and Total RCRA Hazardous Waste Quantity Managed, by EPA Region, 1995**

EPA REGION	HAZARDOUS WASTE QUANTITY <sup>1</sup>		TSD FACILITIES	
	TONS MANAGED	PERCENTAGE	NUMBER	PERCENTAGE
1	193,603	0.1	113	5.7
2	12,325,904	5.9	147	7.4
3	14,964,908	7.2	154	7.8
4	42,394,321	20.4	332	16.8
5	21,068,208	10.1	428	21.6
6	94,461,025	45.4	303	15.3
7	2,325,076	1.1	160	8.1
8	3,142,881	1.5	81	4.1
9	14,295,594	6.9	187	9.4
10	3,096,424	1.5	77	3.9
CBI DATA	4,088	N/A	1	N/A
<b>TOTAL</b>	<b>208,272,032</b>	<b>100.0</b>	<b>1,983</b>	<b>100.0</b>

**Exhibit 2.2**      **Number and Percentage of RCRA TSD Facilities and Total RCRA Hazardous Waste Quantity Managed, by Management Quantity, 1995**

EPA REGION	HAZARDOUS WASTE QUANTITY <sup>1</sup>		TSD FACILITIES	
	TONS MANAGED	PERCENTAGE	NUMBER	PERCENTAGE
6	94,461,025	45.4	303	15.3
4	42,394,321	20.4	332	16.8
5	21,068,208	10.1	428	21.6
3	14,964,908	7.2	154	7.8
9	14,295,594	6.9	187	9.4
2	12,325,904	5.9	147	7.4
8	3,142,881	1.5	81	4.1
10	3,096,424	1.5	77	3.9
7	2,325,076	1.1	160	8.1
1	193,603	0.1	113	5.7
CBI DATA	4,088	N/A	1	N/A
<b>TOTAL</b>	<b>208,272,032</b>	<b>100.0</b>	<b>1,983</b>	<b>100.0</b>

<sup>1</sup>Quantity managed only by storage is excluded.

**Note:**      Columns for these two exhibits may not sum due to rounding.  
Percentages do not include CBI data.

Exhibit 2.3

Number and Percentage of RCRA TSD Facilities and Total RCRA Hazardous Waste Quantity Managed in Each EPA Region, by Highest Number of TSD Facilities, 1995

EPA REGION	TSD FACILITIES		HAZARDOUS WASTE QUANTITY <sup>1</sup>	
	NUMBER	PERCENTAGE	TONS MANAGED	PERCENTAGE
5	428	21.6	21,068,208	10.1
4	332	16.8	42,394,321	20.4
6	303	15.3	94,461,025	45.4
9	187	9.4	14,295,594	6.9
7	160	8.1	2,325,076	1.1
3	154	7.8	14,964,908	7.2
2	147	7.4	12,325,904	5.9
1	113	5.7	193,603	0.1
8	81	4.1	3,142,881	1.5
10	77	3.9	3,096,424	1.5
CBI DATA	1	N/A	4,088	N/A
<b>TOTAL</b>	<b>1,983</b>	<b>100.0</b>	<b>208,272,032</b>	<b>100.0</b>

<sup>1</sup>Quantity managed only by storage is excluded.

**Note:** Columns for these two exhibits may not sum due to rounding.  
Percentages do not include CBI data.

Exhibits 2.4, 2.5, and 2.6 present the quantity of RCRA hazardous waste managed and the number of TSDs in each State. The four (4) States with the largest amount of hazardous waste generation were also the four (4) States with the largest amount of hazardous waste management. TSDs in Texas managed the largest amount of waste (75 million tons), followed by Tennessee (39 million tons), Louisiana (18 million tons), Michigan (14 million tons), and California (14 million tons). Together the TSDs in these States accounted for 77% of the national management total.

Texas reported the most TSDs (192), followed by California (136), Michigan (112), Illinois (107), and Indiana (76). These States accounted for 31% of the total number of TSDs. There were no facilities in the District of Columbia and New Hampshire that reported treating or disposing waste in units subject to RCRA permitting standards, although these States did have facilities that reported operating permitted storage facilities. There were no facilities in the Navajo Nation that reported treating, disposing, or storing waste in units subject to RCRA permitting standards.

Exhibit 2.7 presents the 50 largest RCRA hazardous waste management facilities in the United States. Collectively, these TSDs accounted for 89% of the national management total. Tennessee Eastman in Kingsport, TN, which was the largest generator, was also the largest TSD (managing 38 million tons of waste).

Large TSDs within the five (5) largest States (Texas, Tennessee, Louisiana, Michigan, and California) accounted for the majority of the States' management totals. A total of 21 of the 50 largest TSDs were in Texas. These 21 TSDs accounted for 94% of Texas' total hazardous waste management. One (1) Tennessee TSD, Tennessee Eastman Co., accounted for 99% of Tennessee's total. Seven (7) Louisiana TSDs accounted for 87% of the State's total. In Michigan, three (3) TSDs accounted for 87% of the State's total. Finally, two (2) TSDs accounted for 91% of California's total hazardous waste management.

Nationwide, wastewater management accounted for 95% of the national management total, while in 1993 wastewater management accounted for 94% of the

national management total.<sup>1</sup> Exhibit 2.8 presents the quantities of non-wastewater and wastewater management and their respective percentages by State. The five (5) States whose TSDs managed the largest amount of hazardous wastewater were Texas (73 million tons), Tennessee (38 million tons), Louisiana (17 million tons), California (13 million tons), and Michigan (13 million tons). The five (5) States whose TSDs managed the largest amount of hazardous non-wastewater were Texas (1.7 million tons), Michigan (1.2 million tons), New Jersey (1.2 million tons), Indiana (690 thousand tons), and Idaho (540 thousand tons).

Most of the waste managed nationally is wastewater, and most of the wastewater is managed by a relatively small number of TSDs. Exhibit 2.9 shows the 50 largest wastewater managers in the United States. Many of the TSDs in Exhibit 2.9 are also listed in Exhibit 2.7. The wastewater managed by the 50 largest wastewater managers (183 million tons) accounted for 93% of the national total for wastewater management and 88% of the total national hazardous waste management.

Overall, total hazardous waste management decreased from 235 million tons in 1993 to 208 million tons in 1995. Wastewater management also decreased from 220 million tons in 1993 to 198 million tons in 1995. Non-wastewater management decreased from 15 million tons in 1993 to 10 million tons in 1995.

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<sup>1</sup>A waste is considered wastewater if the BRS form code is B101, B102, B105, or B110-116, or the BRS system type code is M071-079, M081-085, M089, M091-094, M099, M121-125, M129, or M134-136. See Appendix A for further information on BRS System Type Codes and Appendix B for further information on BRS Form Codes.

**National Biennial RCRA Hazardous Waste Report: Based on 1995 Data**

**Exhibit 2.4 Quantity of RCRA Hazardous Waste Managed and Number of RCRA TSD Facilities, by State, 1995**

STATE	HAZARDOUS WASTE QUANTITY <sup>1</sup>			TSD FACILITIES		
	RANK	TONS MANAGED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
ALABAMA	16	1,247,637	0.6	18	42	2.1
ALASKA	35	141,610	0.1	43	9	0.5
ARIZONA	43	11,029	0.0	28	26	1.3
ARKANSAS	18	1,000,465	0.5	36	17	0.9
CALIFORNIA	5	13,631,078	6.5	2	136	6.9
COLORADO *	30	191,047	0.1	20	36	1.8
CONNECTICUT	33	154,729	0.1	17	43	2.2
DELAWARE	46	2,004	0.0	48	5	0.3
DISTRICT OF COLUMBIA	54	0	0.0	53	1	0.1
FLORIDA	32	161,763	0.1	11	56	2.8
GEORGIA	26	348,359	0.2	13	51	2.6
GUAM	53	0	0.0	51	2	0.1
HAWAII	49	476	0.0	47	6	0.3
IDAHO	17	1,240,434	0.6	41	10	0.5
ILLINOIS	9	3,274,425	1.6	4	107	5.4
INDIANA	14	1,486,318	0.7	5	76	3.8
IOWA	42	12,061	0.0	27	28	1.4
KANSAS	11	1,761,658	0.8	14	50	2.5
KENTUCKY	37	123,709	0.1	19	40	2.0
LOUISIANA	3	17,633,877	8.5	15	49	2.5
MAINE	47	1,780	0.0	35	18	0.9
MARYLAND	27	201,744	0.1	31	22	1.1
MASSACHUSETTS	44	7,288	0.0	21	34	1.7
MICHIGAN	4	14,381,917	6.9	3	112	5.7
MINNESOTA	34	153,657	0.1	25	29	1.5
MISSISSIPPI	15	1,446,886	0.7	34	19	1.0
MISSOURI	25	437,962	0.2	10	68	3.4
MONTANA	48	1,368	0.0	43	9	0.5
NAVAJO NATION	54	0	0.0	54	0	0.0
NEBRASKA	38	113,395	0.1	38	14	0.7
NEVADA	20	650,032	0.3	37	15	0.8
NEW HAMPSHIRE	54	0	0.0	53	1	0.1
NEW JERSEY	6	10,979,933	5.3	11	56	2.8
NEW MEXICO	31	188,444	0.1	38	14	0.7
NEW YORK	23	509,446	0.2	7	70	3.5
NORTH CAROLINA	28	199,439	0.1	8	69	3.5
NORTH DAKOTA	22	518,043	0.2	45	7	0.4
OHIO	12	1,754,399	0.8	6	74	3.7
OKLAHOMA	21	563,381	0.3	22	31	1.6
OREGON	36	137,302	0.1	40	11	0.6
PENNSYLVANIA	8	6,314,049	3.0	8	69	3.5
PUERTO RICO	19	836,505	0.4	33	20	1.0
RHODE ISLAND	40	29,806	0.0	41	10	0.5
SOUTH CAROLINA	29	191,309	0.1	28	26	1.3
SOUTH DAKOTA	51	1	0.0	50	3	0.2
TENNESSEE	2	38,675,221	18.6	25	29	1.5
TEXAS	1	75,074,857	36.0	1	192	9.7
TRUST TERRITORIES	45	2,980	0.0	51	2	0.1
UTAH	24	461,970	0.2	32	21	1.1
VERMONT	52	0	0.0	45	7	0.4
VIRGIN ISLANDS	50	20	0.0	53	1	0.1
VIRGINIA	39	51,995	0.0	22	31	1.6
WASHINGTON	13	1,577,079	0.8	16	47	2.4
WEST VIRGINIA	7	8,395,116	4.0	28	26	1.3
WISCONSIN	41	17,492	0.0	24	30	1.5
WYOMING	10	1,970,452	0.9	48	5	0.3
CBI DATA	N/A	4,088	N/A	N/A	1	N/A
TOTAL		208,272,032	100.0		1,983	100.0

<sup>1</sup>Quantity managed only by storage is excluded.

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

Exhibit 2.5

Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Managed and Number of RCRA TSD Facilities, 1995

STATE	HAZARDOUS WASTE QUANTITY <sup>1</sup>			TSD FACILITIES		
	RANK	TONS MANAGED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
TEXAS	1	75,074,857	36.0	1	192	9.7
TENNESSEE	2	38,675,221	18.6	25	29	1.5
LOUISIANA	3	17,633,877	8.5	15	49	2.5
MICHIGAN	4	14,381,917	6.9	3	112	5.7
CALIFORNIA	5	13,631,078	6.5	2	136	6.9
NEW JERSEY	6	10,979,933	5.3	11	56	2.8
WEST VIRGINIA	7	8,395,116	4.0	28	26	1.3
PENNSYLVANIA	8	6,314,049	3.0	8	69	3.5
ILLINOIS	9	3,274,425	1.6	4	107	5.4
WYOMING	10	1,970,452	0.9	48	5	0.3
KANSAS	11	1,761,658	0.8	14	50	2.5
OHIO	12	1,754,399	0.8	6	74	3.7
WASHINGTON	13	1,577,079	0.8	16	47	2.4
INDIANA	14	1,486,318	0.7	5	76	3.8
MISSISSIPPI	15	1,446,886	0.7	34	19	1.0
ALABAMA	16	1,247,637	0.6	18	42	2.1
IDAHO	17	1,240,434	0.6	41	10	0.5
ARKANSAS	18	1,000,465	0.5	36	17	0.9
PUERTO RICO	19	836,505	0.4	33	20	1.0
NEVADA	20	650,032	0.3	37	15	0.8
OKLAHOMA	21	563,381	0.3	22	31	1.6
NORTH DAKOTA	22	518,043	0.2	45	7	0.4
NEW YORK	23	509,446	0.2	7	70	3.5
UTAH	24	461,970	0.2	32	21	1.1
MISSOURI	25	437,962	0.2	10	68	3.4
GEORGIA	26	348,359	0.2	13	51	2.6
MARYLAND	27	201,744	0.1	31	22	1.1
NORTH CAROLINA	28	199,439	0.1	8	69	3.5
SOUTH CAROLINA	29	191,309	0.1	28	26	1.3
COLORADO	30	191,047	0.1	20	36	1.8
NEW MEXICO	31	188,444	0.1	38	14	0.7
FLORIDA	32	161,763	0.1	11	56	2.8
CONNECTICUT	33	154,729	0.1	17	43	2.2
MINNESOTA	34	153,657	0.1	25	29	1.5
ALASKA	35	141,610	0.1	43	9	0.5
OREGON	36	137,302	0.1	40	11	0.6
KENTUCKY	37	123,709	0.1	19	40	2.0
NEBRASKA	38	113,395	0.1	38	14	0.7
VIRGINIA	39	51,995	0.0	22	31	1.6
RHODE ISLAND	40	29,806	0.0	41	10	0.5
WISCONSIN	41	17,492	0.0	24	30	1.5
IOWA	42	12,061	0.0	27	28	1.4
ARIZONA	43	11,029	0.0	28	26	1.3
MASSACHUSETTS	44	7,288	0.0	21	34	1.7
TRUST TERRITORIES	45	2,980	0.0	51	2	0.1
DELAWARE	46	2,004	0.0	48	5	0.3
MAINE	47	1,780	0.0	35	18	0.9
MONTANA	48	1,368	0.0	43	9	0.5
HAWAII	49	476	0.0	47	6	0.3
VIRGIN ISLANDS	50	20	0.0	53	1	0.1
SOUTH DAKOTA	51	1	0.0	50	3	0.2
VERMONT	52	0	0.0	45	7	0.4
GUAM	53	0	0.0	51	2	0.1
DISTRICT OF COLUMBIA	54	0	0.0	53	1	0.1
NAVAJO NATION	54	0	0.0	54	0	0.0
NEW HAMPSHIRE	54	0	0.0	53	1	0.1
CBI DATA	N/A	4,088	N/A	N/A	1	N/A
TOTAL		208,272,032	100.0		1,983	100.0

<sup>1</sup>Quantity managed only by storage is excluded.

Note: Columns may not sum due to rounding.  
Percentages do not include CBI data.

# National Biennial RCRA Hazardous Waste Report: Based on 1995 Data

Exhibit 2.6

Rank Ordering of States Based on Number of RCRA TSD Facilities and Quantity of RCRA Hazardous Waste Managed, 1995

STATE	TSD FACILITIES			HAZARDOUS WASTE QUANTITY <sup>1</sup>		
	RANK	NUMBER	PERCENTAGE	RANK	TONS MANAGED	PERCENTAGE
TEXAS	1	192	9.7	1	75,074,857	36.0
CALIFORNIA	2	136	6.9	5	13,631,078	6.5
MICHIGAN	3	112	5.7	4	14,381,917	6.9
ILLINOIS	4	107	5.4	9	3,274,425	1.6
INDIANA	5	76	3.8	14	1,486,318	0.7
OHIO	6	74	3.7	12	1,754,399	0.8
NEW YORK	7	70	3.5	23	509,446	0.2
NORTH CAROLINA	8	69	3.5	28	199,439	0.1
PENNSYLVANIA	8	69	3.5	8	6,314,049	3.0
MISSOURI	10	68	3.4	25	437,962	0.2
FLORIDA	11	56	2.8	32	161,763	0.1
NEW JERSEY	11	56	2.8	6	10,979,933	5.3
GEORGIA	13	51	2.6	26	348,359	0.2
KANSAS	14	50	2.5	11	1,761,658	0.8
LOUISIANA	15	49	2.5	3	17,633,877	8.5
WASHINGTON	16	47	2.4	13	1,577,079	0.8
CONNECTICUT	17	43	2.2	33	154,729	0.1
ALABAMA	18	42	2.1	16	1,247,637	0.6
KENTUCKY	19	40	2.0	37	123,709	0.1
COLORADO	20	36	1.8	30	191,047	0.1
MASSACHUSETTS	21	34	1.7	44	7,288	0.0
OKLAHOMA	22	31	1.6	21	563,381	0.3
VIRGINIA	22	31	1.6	39	51,995	0.0
WISCONSIN	24	30	1.5	41	17,492	0.0
MINNESOTA	25	29	1.5	34	153,657	0.1
TENNESSEE	25	29	1.5	2	38,675,221	18.6
IOWA	27	28	1.4	42	12,061	0.0
ARIZONA	28	26	1.3	43	11,029	0.0
SOUTH CAROLINA	28	26	1.3	29	191,309	0.1
WEST VIRGINIA	28	26	1.3	7	8,395,116	4.0
MARYLAND	31	22	1.1	27	201,744	0.1
UTAH	32	21	1.1	24	461,970	0.2
PUERTO RICO	33	20	1.0	19	836,505	0.4
MISSISSIPPI	34	19	1.0	15	1,446,886	0.7
MAINE	35	18	0.9	47	1,780	0.0
ARKANSAS	36	17	0.9	18	1,000,465	0.5
NEVADA	37	15	0.8	20	650,032	0.3
NEBRASKA	38	14	0.7	38	113,395	0.1
NEW MEXICO	38	14	0.7	31	188,444	0.1
OREGON	40	11	0.6	36	137,302	0.1
IDAHO	41	10	0.5	17	1,240,434	0.6
RHODE ISLAND	41	10	0.5	40	29,806	0.0
ALASKA	43	9	0.5	35	141,610	0.1
MONTANA	43	9	0.5	48	1,368	0.0
NORTH DAKOTA	45	7	0.4	22	518,043	0.2
VERMONT	45	7	0.4	52	0	0.0
HAWAII	47	6	0.3	49	476	0.0
DELAWARE	48	5	0.3	46	2,004	0.0
WYOMING	48	5	0.3	10	1,970,452	0.9
SOUTH DAKOTA	50	3	0.2	51	1	0.0
GUAM	51	2	0.1	53	0	0.0
TRUST TERRITORIES	51	2	0.1	45	2,980	0.0
DISTRICT OF COLUMBIA	53	1	0.1	54	0	0.0
NEW HAMPSHIRE	53	1	0.1	54	0	0.0
VIRGIN ISLANDS	53	1	0.1	50	20	0.0
NAVAJO NATION	54	0	0.0	54	0	0.0
CBI DATA	N/A	1	N/A	N/A	4,088	N/A
<b>TOTAL</b>		<b>1,983</b>	<b>100.0</b>		<b>208,272,032</b>	<b>100.0</b>

<sup>1</sup>Quantity managed only by storage is excluded.

Note: Columns may not sum due to rounding.  
Percentages do not include CBI data.

Exhibit 2.7

Fifty Largest RCRA Hazardous Waste Managers in the U.S., 1995

RANK	EPA ID	NAME	CITY	TONS MANAGED <sup>1</sup>
1	TND003376928	TENN EASTMAN DIVISION OF EASTMAN CHEMICAL	KINGSPORT, TN	38,173,230
2	TXD008080533	AMOCO OIL COMPANY	TEXAS CITY, TX	17,832,856
3	MID000724724	DOW CHEMICAL CO-MIDLAND PLANT SITE	MIDLAND, MI	10,949,187
4	NJD002385730	E I DUPONT DE NEMOURS & CO INC	DEEPWATER, NJ	9,824,888
5	TXD048210645	PHILLIPS 66 COMPANY	OLD OCEAN, TX	8,618,146
6	CAD009164021	SHELL OIL CO	MARTINEZ, CA	8,504,969
7	WVD005005509	RHONE-POULENC INSTITUTE PLANT	INSTITUTE, WV	7,463,796
8	TXD008091290	CROWN CENTRAL PETROLEUM CORPORATION	PASADENA, TX	6,287,860
9	PAD071612683	BP OIL CO MARCUS HOOK REFINERY	MARCUS HOOK, PA	4,904,668
10	TXD008123317	DU PONT DE NEMOURS & CO., E.I.	VICTORIA, TX	4,503,554
11	TXD001700806	MONSANTO COMPANY	ALVIN, TX	4,069,017
12	CAD093365435	ROCKWELL ROCKETDYNE SSFL	SIMI HILLS, CA	3,922,575
13	LAD041581422	UNION CARBIDE CORP. TAFT PLANT	TAFT, LA	3,563,283
14	LAD008175390	CYTEC INDUSTRIES INC.	WAGGAMAN, LA	3,485,802
15	LAD056024391	BP OIL COMPANY- ALLIANCE REFINERY	BELLE CHASSE, LA	3,135,000
16	TXD007330202	TEXAS EASTMAN DIVISION	LONGVIEW, TX	3,116,827
17	TXD067285973	SHELL OIL COMPANY	DEER PARK, TX	3,082,260
18	TXD058275769	LYONDELL PETROCHEMICAL COMPANY	CHANNELVIEW, TX	2,819,562
19	TXD008132268	COASTAL REFINING & MARKETING, INC.	CORPUS CHRISTI, TX	2,798,345
20	ILD080012305	SHELL WOOD RIVER REFINING CO	ROXANA, IL	2,746,874
21	TXD008092793	THE DOW CHEMICAL COMPANY, TEXAS OPERATION	FREEPORT, TX	2,451,493
22	TXD055141378	ROLLINS ENVIRONMENTAL SERVICES (TX), INC	DEER PARK, TX	2,289,945
23	LAD008187080	DOW CHEMICAL COMPANY LOUISIANA DIVISION	PLAQUEMINE, LA	2,116,213
24	TXD083472266	ARCO CHEMICAL COMPANY	CHANNELVIEW, TX	1,908,689
25	TXD000017756	THE DOW CHEMICAL COMPANY	LA PORTE, TX	1,813,544
26	KSD007482029	VULCAN MATERIALS COMPANY	WICHITA, KS	1,634,328
27	TXD008081101	E.I. DUPONT DE NEMOURS & COMPANY	BEAUMONT, TX	1,580,625
28	TXD008079527	STERLING CHEMICALS, INC.	TEXAS CITY, TX	1,509,291
29	TXD000449694	MOBIL CHEMICAL COMPANY	BEAUMONT, TX	1,441,471
30	WYD079959185	SINCLAIR OIL CORPORATION	SINCLAIR, WY	1,315,096
31	LAD010395127	ROLLINS ENVIRONMENTAL SERVICES (LA) INC.	BATON ROUGE, LA	1,301,012
32	TXD000461533	UNION CARBIDE CORPORATION	TEXAS CITY, TX	1,086,438
33	TXD078432457	HOECHST CELANESE CHEM. GROUP	PASADENA, TX	1,044,163
34	NJD981133150	REPUBLIC ENVIRONMENTAL RECYCLING INC	CLAYTON, NJ	1,011,707
35	LAD001890367	E.I. DUPONT DE NEMOURS & CO., INC.	LAPLACE, LA	1,005,850
36	OHD042157644	BP CHEMICALS INC	LIMA, OH	992,634
37	MID005358130	TOTAL PETROLEUM INC. ALMA REFINERY	ALMA, MI	937,562
38	MSD096046792	E.I. DUPONT DE NEMOURS & CO.	PASS CHRISTIAN, MS	909,502
39	TXD000751172	VISTRON CORPORATION	PORT LAVACA, TX	899,150
40	WAD041337130	BOEING - AUBURN	AUBURN, WA	866,370
41	ALD001221902	CIBA-GEIGY CORPORATION	MCINTOSH, AL	848,441
42	TXD008079642	E.I. DUPONT DE NEMOURS & COMPANY	ORANGE, TX	836,294
43	LAD001700756	MONSANTO COMPANY LULING PLANT	LULING, LA	816,339
44	IDD070929518	FMC CORP PHOSPHORUS CHEMICALS GROUP	POCATELLO, ID	775,575
45	PRD090074071	PUERTO RICO SUN OIL CO.	YABUCOA, PR	746,144
46	ARD043195429	GREAT LAKES CHEMICAL CORP MAIN	EL DORADO, AR	743,764
47	TXD066349770	TYLER PIPE INDUSTRIES, INC.	TYLER, TX	723,360
48	WVD004341491	CYTEC INDUSTRIES	WILLOW ISLAND, WV	714,080
49	PAD002334753	OCCIDENTAL CHEMICAL CORP	POTTSTOWN, PA	705,340
50	MID082767591	QUANEX CORPORATION, MI SEAMLESS	SOUTH LYON, MI	655,963
TOTAL				185,483,083

<sup>1</sup>Quantity managed only by storage is excluded.

Note: Columns may not sum due to rounding.

***National Biennial RCRA Hazardous Waste Report: Based on 1995 Data***

**Exhibit 2.8**      **Quantity of Non-Wastewater, Quantity of Wastewater, and Total Quantity of RCRA Hazardous Waste Managed, by State, 1995**

STATE	NON-WASTEWATER QUANTITY <sup>1</sup>		WASTEWATER QUANTITY <sup>1</sup>		TOTAL QUANTITY <sup>1</sup>
	TONS MANAGED	PERCENTAGE	TONS MANAGED	PERCENTAGE	
ALABAMA	307,433	24.6	940,204	75.4	1,247,637
ALASKA	0	0.0	141,610	100.0	141,610
ARIZONA	2,409	21.8	8,619	78.2	11,029
ARKANSAS	221,517	22.1	778,948	77.9	1,000,465
CALIFORNIA	288,028	2.1	13,343,050	97.9	13,631,078
COLORADO	102,522	53.7	88,525	46.3	191,047
CONNECTICUT	26,414	17.1	128,314	82.9	154,729
DELAWARE	1,992	99.4	12	0.6	2,004
DISTRICT OF COLUMBIA	0	0.0	0	0.0	0
FLORIDA	27,318	16.9	134,445	83.1	161,763
GEORGIA	73,428	21.1	274,930	78.9	348,359
GUAM	0	0.0	0	100.0	0
HAWAII	476	100.0	0	0.0	476
IDAHO	539,567	43.5	700,867	56.5	1,240,434
ILLINOIS	340,869	10.4	2,933,556	89.6	3,274,425
INDIANA	691,119	46.5	795,199	53.5	1,486,318
IOWA	7,184	59.6	4,877	40.4	12,061
KANSAS	104,155	5.9	1,657,503	94.1	1,761,658
KENTUCKY	117,312	94.8	6,397	5.2	123,709
LOUISIANA	519,765	2.9	17,114,113	97.1	17,633,877
MAINE	361	20.3	1,419	79.7	1,780
MARYLAND	4,264	2.1	197,480	97.9	201,744
MASSACHUSETTS	5,439	74.6	1,849	25.4	7,288
MICHIGAN	1,218,812	8.5	13,163,105	91.5	14,381,917
MINNESOTA	94,592	61.6	59,065	38.4	153,657
MISSISSIPPI	23,877	1.7	1,423,010	98.3	1,446,886
MISSOURI	232,335	53.0	205,627	47.0	437,962
MONTANA	308	22.5	1,060	77.5	1,368
NAVAJO NATION	0	0.0	0	0.0	0
NEBRASKA	31,267	27.6	82,128	72.4	113,395
NEVADA	95,662	14.7	554,370	85.3	650,032
NEW HAMPSHIRE	0	0.0	0	0.0	0
NEW JERSEY	1,173,120	10.7	9,806,813	89.3	10,979,933
NEW MEXICO	6	0.0	188,438	100.0	188,444
NEW YORK	322,312	63.3	187,134	36.7	509,446
NORTH CAROLINA	22,132	11.1	177,306	88.9	199,439
NORTH DAKOTA	13	0.0	518,030	100.0	518,043
OHIO	509,850	29.1	1,244,549	70.9	1,754,399
OKLAHOMA	131,435	23.3	431,945	76.7	563,381
OREGON	131,843	96.0	5,459	4.0	137,302
PENNSYLVANIA	319,677	5.1	5,994,372	94.9	6,314,049
PUERTO RICO	40,384	4.8	796,121	95.2	836,505
RHODE ISLAND	16,058	53.9	13,748	46.1	29,806
SOUTH CAROLINA	180,290	94.2	11,018	5.8	191,309
SOUTH DAKOTA	1	100.0	0	0.0	1
TENNESSEE	307,666	0.8	38,367,555	99.2	38,675,221
TEXAS	1,728,086	2.3	73,346,771	97.7	75,074,857
TRUST TERRITORIES	2,980	100.0	0	0.0	2,980
UTAH	95,258	20.6	366,711	79.4	461,970
VERMONT	0	100.0	0	0.0	0
VIRGIN ISLANDS	20	100.0	0	0.0	20
VIRGINIA	51,185	98.4	810	1.6	51,995
WASHINGTON	20,972	1.3	1,556,107	98.7	1,577,079
WEST VIRGINIA	76,894	0.9	8,318,222	99.1	8,395,116
WISCONSIN	1,879	10.7	15,613	89.3	17,492
WYOMING	0	0.0	1,970,452	100.0	1,970,452
CBI DATA	4,049	N/A	40	N/A	4,088
<b>TOTAL</b>	<b>10,214,536</b>	<b>4.9</b>	<b>198,057,497</b>	<b>95.1</b>	<b>208,272,032</b>

<sup>1</sup>Quantity managed only by storage is excluded.

**Note:**      Columns may not sum due to rounding.  
                  Percentages do not include CBI data.

Exhibit 2.9

Fifty Largest RCRA Hazardous Wastewater Managers in the U.S., 1995

RANK	EPA ID	NAME	CITY	TONS WASTEWATER MANAGED <sup>1</sup>
1	TND003376928	TENN EASTMAN DIVISION OF EASTMAN CHEMICA	KINGSFORT, TN	37,954,152
2	TXD008080533	AMOCO OIL COMPANY	TEXAS CITY, TX	17,722,074
3	MID000724724	DOW CHEMICAL CO-MIDLAND PLANT SITE	MIDLAND, MI	10,808,668
4	NJD002385730	E I DUPONT DE NEMOURS & CO INC	DEEPWATER, NJ	9,776,664
5	TXD048210645	PHILLIPS 66 COMPANY	OLD OCEAN, TX	8,615,707
6	CAD009164021	SHELL OIL CO	MARTINEZ, CA	8,498,058
7	WVD005005509	RHONE-POULENC INSTITUTE PLANT	INSTITUTE, WV	7,440,545
8	TXD008091290	CROWN CENTRAL PETROLEUM CORPORATION	PASADENA, TX	6,287,860
9	PAD071612683	BP OIL CO MARCUS HOOK REFINERY	MARCUS HOOK, PA	4,900,014
10	TXD008123317	DU PONT DE NEMOURS & CO., E.I.	VICTORIA, TX	4,358,843
11	TXD001700806	MONSANTO COMPANY	ALVIN, TX	4,064,862
12	CAD093365435	ROCKWELL ROCKETDYNE SSFL	SIMI HILLS, CA	3,922,575
13	LAD041581422	UNION CARBIDE CORP. TAFT PLANT	TAFT, LA	3,555,336
14	LAD008175390	CYTEC INDUSTRIES INC.	WAGGAMAN, LA	3,485,802
15	LAD056024391	BP OIL COMPANY- ALLIANCE REFINERY	BELLE CHASSE, LA	3,135,000
16	TXD067285973	SHELL OIL COMPANY	DEER PARK, TX	3,069,505
17	TXD007330202	TEXAS EASTMAN DIVISION	LONGVIEW, TX	3,065,954
18	TXD058275769	LYONDELL PETROCHEMICAL COMPANY	CHANNELVIEW, TX	2,799,434
19	TXD008132268	COASTAL REFINING & MARKETING, INC.	CORPUS CHRISTI, TX	2,773,434
20	ILD080012305	SHELL WOOD RIVER REFINING CO	ROXANA, IL	2,746,874
21	TXD008092793	THE DOW CHEMICAL COMPANY, TEXAS OPERATIO	FREEPORT, TX	2,310,451
22	TXD055141378	ROLLINS ENVIRONMENTAL SERVICES (TX), INC	DEER PARK, TX	2,150,848
23	LAD008187080	DOW CHEMICAL COMPANY LOUISIANA DIVISION	PLAQUEMINE, LA	2,076,499
24	TXD000017756	THE DOW CHEMICAL COMPANY	LA PORTE, TX	1,812,961
25	TXD083472266	ARCO CHEMICAL COMPANY	CHANNELVIEW, TX	1,808,517
26	KSD007482029	VULCAN MATERIALS COMPANY	WICHITA, KS	1,633,468
27	TXD008081101	E.I. DUPONT DE NEMOURS & COMPANY	BEAUMONT, TX	1,579,234
28	TXD008079527	STERLING CHEMICALS, INC.	TEXAS CITY, TX	1,487,363
29	TXD000449694	MOBIL CHEMICAL COMPANY	BEAUMONT, TX	1,441,471
30	WYD079959185	SINCLAIR OIL CORPORATION	SINCLAIR, WY	1,315,096
31	LAD010395127	ROLLINS ENVIRONMENTAL SERVICES (LA) INC.	BATON ROUGE, LA	1,270,017
32	TXD000461533	UNION CARBIDE CORPORATION	TEXAS CITY, TX	1,070,745
33	TXD078432457	HOECHST CELANESE CHEM. GROUP	PASADENA, TX	1,016,426
34	OHD042157644	BP CHEMICALS INC	LIMA, OH	991,819
35	LAD001890367	E.I. DUPONT DE NEMOURS & CO., INC.	LAPLACE, LA	989,041
36	MID005358130	TOTAL PETROLEUM INC. ALMA REFINERY	ALMA, MI	937,472
37	MSD096046792	E.I. DUPONT DE NEMOURS & CO.	PASS CHRISTIAN, MS	909,502
38	TXD000751172	VISTRON CORPORATION	PORT LAVACA, TX	888,251
39	WAD041337130	BOEING - AUBURN	AUBURN, WA	866,217
40	ALD001221902	CIBA-GEIGY CORPORATION	MCINTOSH, AL	827,335
41	LAD001700756	MONSANTO COMPANY LULING PLANT	LULING, LA	816,339
42	PRD090074071	PUERTO RICO SUN OIL CO.	YABUCOA, PR	745,221
43	ARD043195429	GREAT LAKES CHEMICAL CORP MAIN	EL DORADO, AR	743,764
44	TXD066349770	TYLER PIPE INDUSTRIES, INC.	TYLER, TX	717,303
45	TXD008079642	E.I. DUPONT DE NEMOURS & COMPANY	ORANGE, TX	709,159
46	PAD002334753	OCCIDENTAL CHEMICAL CORP	POTTSTOWN, PA	705,340
47	WVD004341491	CYTEC INDUSTRIES	WILLOW ISLAND, WV	696,556
48	MID082767591	QUANEX CORPORATION, MI SEAMLESS	SOUTH LYON, MI	655,963
49	WYD048743009	LITTLE AMERICA REFINING CO	CASPER, WY	655,356
50	WAD009242314	OCC TACOMA INC	TACOMA, WA	616,111
TOTAL				183,425,207

<sup>1</sup>Quantity managed only by storage is excluded.

Note: Columns may not sum due to rounding.

Exhibits 2.10, 2.11, and 2.12 present the quantity of RCRA hazardous waste managed by various management methods. The majority (73%) of the waste managed in the nation was managed in aqueous treatment units. Aqueous treatment units consist of:

Aqueous Organic Treatment Units	117 million tons
Aqueous Organic and Inorganic Treatment Units	28 million tons
Aqueous Inorganic Treatment Units	8 million tons

Land disposal units accounted for 12.3% of the national management total. Land disposal units include:

Deepwell/Underground Injection	24 million tons
Landfill	1 million tons
Surface Impoundment	575 thousand tons
Land Treatment/Application/Farming	11 thousand tons

Thermal treatment accounted for 3% of the national management total. Thermal treatment units are:

Incineration	4 million tons
Energy Recovery (Reuse as Fuel)	2 million tons

Recovery operations accounted for 1.8% of the national management total. Recovery operations include:

Fuel Blending	2 million tons
Metals Recovery (for Reuse)	610 thousand tons
Other Recovery	422 thousand tons
Solvents Recovery	356 thousand tons

The remaining management quantities (9.6%) were from other treatment and disposal units:

Other Treatment	18 million tons
Stabilization	1 million tons
Other Disposal (specified in comments)	663 thousand tons
Sludge Treatment	481 thousand tons

Exhibit 2.10 Quantity of RCRA Hazardous Waste Managed, by Management Method, 1995\*

MANAGEMENT METHOD	SYSTEM TYPE CODE	TONS MANAGED <sup>1</sup>	PERCENTAGE OF QUANTITY	NUMBER OF FACILITIES <sup>2,3</sup>	PERCENTAGE OF FACILITIES <sup>3</sup>
METALS RECOVERY (FOR REUSE)	M011-M019	609,719	0.3	71	7.9
SOLVENTS RECOVERY	M021-M029	356,118	0.2	164	18.2
OTHER RECOVERY	M031-M039	422,306	0.2	62	6.9
INCINERATION	M041-M049	4,299,711	2.1	166	18.4
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1,914,539	0.9	125	13.9
FUEL BLENDING	M061	2,441,279	1.2	100	11.1
AQUEOUS INORGANIC TREATMENT	M071-M079	8,366,570	4.0	145	16.1
AQUEOUS ORGANIC TREATMENT	M081-M089	116,541,660	56.0	106	11.8
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	27,657,712	13.3	30	3.3
SLUDGE TREATMENT	M101-M109	481,445	0.2	30	3.3
STABILIZATION	M111-M119	1,017,905	0.5	85	9.4
OTHER TREATMENT	M121-M129	17,904,562	8.6	320	35.6
LAND TREATMENT / APPLICATION / FARMING	M131	10,618	0.0	10	1.1
LANDFILL	M132	1,248,630	0.6	68	7.6
SURFACE IMPOUNDMENT	M133	575,246	0.3	7	0.8
DEEPWELL / UNDERGROUND INJECTION	M134	23,756,840	11.4	38	4.2
OTHER DISPOSAL SPECIFIED IN COMMENTS	M137	663,064	0.3	31	3.4
UNKNOWN SYSTEM DUE TO INVALID CODE	UNKNOWN--	20	0.0	1	0.1
<b>TOTAL</b>		<b>208,267,945</b>	<b>100.0</b>	<b>900</b>	

<sup>1</sup>Quantity managed only by storage is excluded.

<sup>2</sup>Facilities with only storage units are excluded.

<sup>3</sup>Column may not sum because facilities may have multiple handling methods.

\* CBI data excluded from Exhibit.

**Note:** Columns may not sum due to rounding.

***National Biennial RCRA Hazardous Waste Report: Based on 1995 Data***

Exhibit 2.11 Management Method, by Quantity of RCRA Hazardous Waste Managed, 1995\*

MANAGEMENT METHOD	SYSTEM TYPE CODE	TONS MANAGED <sup>1</sup>	PERCENTAGE OF QUANTITY	NUMBER OF FACILITIES <sup>2,3</sup>	PERCENTAGE OF FACILITIES <sup>3</sup>
AQUEOUS ORGANIC TREATMENT	M081-M089	116,541,660	56.0	106	11.8
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	27,657,712	13.3	30	3.3
DEEPWELL / UNDERGROUND INJECTION	M134	23,756,840	11.4	38	4.2
OTHER TREATMENT	M121-M129	17,904,562	8.6	320	35.6
AQUEOUS INORGANIC TREATMENT	M071-M079	8,366,570	4.0	145	16.1
INCINERATION	M041-M049	4,299,711	2.1	166	18.4
FUEL BLENDING	M061	2,441,279	1.2	100	11.1
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1,914,539	0.9	125	13.9
LANDFILL	M132	1,248,630	0.6	68	7.6
STABILIZATION	M111-M119	1,017,905	0.5	85	9.4
OTHER DISPOSAL SPECIFIED IN COMMENTS	M137	663,064	0.3	31	3.4
METALS RECOVERY (FOR REUSE)	M011-M019	609,719	0.3	71	7.9
SURFACE IMPOUNDMENT	M133	575,246	0.3	7	0.8
SLUDGE TREATMENT	M101-M109	481,445	0.2	30	3.3
OTHER RECOVERY	M031-M039	422,306	0.2	62	6.9
SOLVENTS RECOVERY	M021-M029	356,118	0.2	164	18.2
LAND TREATMENT / APPLICATION / FARMING	M131	10,618	0.0	10	1.1
UNKNOWN SYSTEM DUE TO INVALID CODE	UNKNOWN--	20	0.0	1	0.1
<b>TOTAL</b>		<b>208,267,945</b>	<b>100.0</b>	<b>900</b>	

<sup>1</sup>Quantity managed only by storage is excluded.

<sup>2</sup>Facilities with only storage units are excluded.

<sup>3</sup>Column may not sum because facilities may have multiple handling methods.

\* CBI data excluded from Exhibit.

**Note:** Columns may not sum due to rounding.

Exhibit 2.12

Management Method and Quantity of RCRA Hazardous Waste Managed, by Number of Facilities, 1995 \*

MANAGEMENT METHOD	SYSTEM TYPE CODE	TONS MANAGED <sup>1</sup>	PERCENTAGE OF QUANTITY	NUMBER OF FACILITIES <sup>2,3</sup>	PERCENTAGE OF FACILITIES <sup>3</sup>
OTHER TREATMENT	M121-M129	17,904,562	8.6	320	35.6
INCINERATION	M041-M049	4,299,711	2.1	166	18.4
SOLVENTS RECOVERY	M021-M029	356,118	0.2	164	18.2
AQUEOUS INORGANIC TREATMENT	M071-M079	8,366,570	4.0	145	16.1
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1,914,539	0.9	125	13.9
AQUEOUS ORGANIC TREATMENT	M081-M089	116,541,660	56.0	106	11.8
FUEL BLENDING	M061	2,441,279	1.2	100	11.1
STABILIZATION	M111-M119	1,017,905	0.5	85	9.4
METALS RECOVERY (FOR REUSE)	M011-M019	609,719	0.3	71	7.9
LANDFILL	M132	1,248,630	0.6	68	7.6
OTHER RECOVERY	M031-M039	422,306	0.2	62	6.9
DEEPWELL / UNDERGROUND INJECTION	M134	23,756,840	11.4	38	4.2
OTHER DISPOSAL SPECIFIED IN COMMENTS	M137	663,064	0.3	31	3.4
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	27,657,712	13.3	30	3.3
SLUDGE TREATMENT	M101-M109	481,445	0.2	30	3.3
LAND TREATMENT / APPLICATION / FARMING	M131	10,618	0.0	10	1.1
SURFACE IMPOUNDMENT	M133	575,246	0.3	7	0.8
UNKNOWN SYSTEM DUE TO INVALID CODE	UNKNOWN--	20	0.0	1	0.1
<b>TOTAL</b>		<b>208,267,945</b>	<b>100.0</b>	<b>900</b>	

<sup>1</sup>Quantity managed only by storage is excluded.<sup>2</sup>Facilities with only storage units are excluded.<sup>3</sup>Column may not sum because facilities may have multiple handling methods.

\* CBI data excluded from Exhibit.

**Note:** Columns may not sum due to rounding.

Exhibits 2.13, 2.14, and 2.15 present the quantity of RCRA hazardous waste managed in various treatment and disposal units, limited to waste received from off-site in 1995. For wastes received from off-site, the predominant management methods were fuel blending, energy recovery, and landfill. The national total for hazardous waste received from off-site and managed on-site in treatment and disposal units was 8.7 million tons. This is 4% of the national management total.

Recovery operations accounted for 35.7% of the national management total for waste received from off-site and managed on-site. Recovery operations include:

Fuel Blending	2 million tons
Metals Recovery (for Reuse)	398 thousand tons
Solvents Recovery	291 thousand tons
Other Recovery	68 thousand tons

Thermal treatment accounted for 18.9% of the national management total for waste received from off-site and managed on-site. Thermal treatment units are:

Energy Recovery (Reuse as Fuel)	1 million tons
Incineration	645 thousand tons

Land disposal units accounted for 16.5% of the national management total for waste received from off-site and managed on-site. Land disposal units include:

Landfill	812 thousand tons
Deepwell/Underground Injection	623 thousand tons

Aqueous treatment accounted for 10.4% of the national management total for waste received from off-site and managed on-site. Aqueous treatment units consist of:

Aqueous Inorganic Treatment Units	588 thousand tons
Aqueous Organic Treatment Units	208 thousand tons
Aqueous Organic and Inorganic Treatment Units	107 thousand tons

The remaining management quantities (18.6%) for waste received from off-site and managed on-site were from other treatment and disposal units:

Stabilization	804 thousand tons
Other Treatment	798 thousand tons
Other Disposal (specified in comments)	16 thousand tons
Sludge Treatment	3 thousand tons

A comparison between the management profile for all wastes and those received from off-site shows that wastes managed off-site are managed differently. Most wastes managed on-site were managed by aqueous treatment. The majority of wastes received from off-site were managed by recovery, thermal treatment, or land disposal.

***National Biennial RCRA Hazardous Waste Report: Based on 1995 Data***

Exhibit 2.13

**Quantity of RCRA Hazardous Waste Managed, by Management Method, Limited to Waste Received from Off-Site, 1995<sup>\*</sup>**

MANAGEMENT METHOD	SYSTEM TYPE CODE	TONS MANAGED <sup>1</sup>	PERCENTAGE OF QUANTITY	NUMBER OF FACILITIES <sup>2,3</sup>	PERCENTAGE OF FACILITIES <sup>3</sup>
METALS RECOVERY (FOR REUSE)	M011-M019	397,861	4.6	50	12.6
SOLVENTS RECOVERY	M021-M029	291,180	3.3	67	16.9
OTHER RECOVERY	M031-M039	68,499	0.8	36	9.1
INCINERATION	M041-M049	645,471	7.4	72	18.1
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1,005,767	11.5	51	12.8
FUEL BLENDING	M061	2,354,669	27.0	91	22.9
AQUEOUS INORGANIC TREATMENT	M071-M079	587,800	6.7	50	12.6
AQUEOUS ORGANIC TREATMENT	M081-M089	207,757	2.4	28	7.1
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	107,334	1.2	16	4.0
SLUDGE TREATMENT	M101-M109	2,808	0.0	13	3.3
STABILIZATION	M111-M119	804,011	9.2	47	11.8
OTHER TREATMENT	M121-M129	798,111	9.2	124	31.2
LAND TREATMENT / APPLICATION / FARMING	M131	353	0.0	3	0.8
LANDFILL	M132	812,237	9.3	36	9.1
DEEPWELL / UNDERGROUND INJECTION	M134	622,887	7.1	12	3.0
OTHER DISPOSAL SPECIFIED IN COMMENTS	M137	15,641	0.2	13	3.3
<b>TOTAL</b>		<b>8,722,387</b>	<b>100.0</b>	<b>732</b>	

<sup>1</sup>Quantity managed only by storage is excluded.

<sup>2</sup>Facilities with only storage units are excluded.

<sup>3</sup>Column may not sum because facilities may have multiple handling methods.

\* CBI data excluded from Exhibit.

**Note:** Columns may not sum due to rounding.

Exhibit 2.14

Management Method, by Quantity of RCRA Hazardous Waste Managed, Limited to Waste Received from Off-Site, 1995

MANAGEMENT METHOD	SYSTEM TYPE CODE	TONS MANAGED <sup>1</sup>	PERCENTAGE OF QUANTITY	NUMBER OF FACILITIES <sup>2,3</sup>	PERCENTAGE OF FACILITIES <sup>3</sup>
FUEL BLENDING	M061	2,354,669	27.0	91	22.9
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1,005,767	11.5	51	12.8
LANDFILL	M132	812,237	9.3	36	9.1
STABILIZATION	M111-M119	804,011	9.2	47	11.8
OTHER TREATMENT	M121-M129	798,111	9.2	124	31.2
INCINERATION	M041-M049	645,471	7.4	72	18.1
DEEPWELL / UNDERGROUND INJECTION	M134	622,887	7.1	12	3.0
AQUEOUS INORGANIC TREATMENT	M071-M079	587,800	6.7	50	12.6
METALS RECOVERY (FOR REUSE)	M011-M019	397,861	4.6	50	12.6
SOLVENTS RECOVERY	M021-M029	291,180	3.3	67	16.9
AQUEOUS ORGANIC TREATMENT	M081-M089	207,757	2.4	28	7.1
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	107,334	1.2	16	4.0
OTHER RECOVERY	M031-M039	68,499	0.8	36	9.1
OTHER DISPOSAL SPECIFIED IN COMMENTS	M137	15,641	0.2	13	3.3
SLUDGE TREATMENT	M101-M109	2,808	0.0	13	3.3
LAND TREATMENT / APPLICATION / FARMING	M131	353	0.0	3	0.8
<b>TOTAL</b>		<b>8,722,387</b>	<b>100.0</b>	<b>732</b>	

<sup>1</sup>Quantity managed only by storage is excluded.<sup>2</sup>Facilities with only storage units are excluded.<sup>3</sup>Column may not sum because facilities may have multiple handling methods.

\* CBI data excluded from Exhibit.

**Note:** Columns may not sum due to rounding.

**National Biennial RCRA Hazardous Waste Report: Based on 1995 Data**

**Exhibit 2.15      Management Method and Quantity of RCRA Hazardous Waste Managed, by Number of Facilities, Limited to Waste Received from Off-Site, 1995**

MANAGEMENT METHOD	SYSTEM TYPE CODE	TONS MANAGED <sup>1</sup>	PERCENTAGE OF QUANTITY	NUMBER OF FACILITIES <sup>2,3</sup>	PERCENTAGE OF FACILITIES <sup>3</sup>
OTHER TREATMENT	M121-M129	798,111	9.2	124	31.2
FUEL BLENDING	M061	2,354,669	27.0	91	22.9
INCINERATION	M041-M049	645,471	7.4	72	18.1
SOLVENTS RECOVERY	M021-M029	291,180	3.3	67	16.9
ENERGY RECOVERY (REUSE AS FUEL)	M051-M059	1,005,767	11.5	51	12.8
METALS RECOVERY (FOR REUSE)	M011-M019	397,861	4.6	50	12.6
AQUEOUS INORGANIC TREATMENT	M071-M079	587,800	6.7	50	12.6
STABILIZATION	M111-M119	804,011	9.2	47	11.8
OTHER RECOVERY	M031-M039	68,499	0.8	36	9.1
LANDFILL	M132	812,237	9.3	36	9.1
AQUEOUS ORGANIC TREATMENT	M081-M089	207,757	2.4	28	7.1
AQUEOUS ORGANIC AND INORGANIC TREATMENT	M091-M099	107,334	1.2	16	4.0
SLUDGE TREATMENT	M101-M109	2,808	0.0	13	3.3
OTHER DISPOSAL SPECIFIED IN COMMENTS	M137	15,641	0.2	13	3.3
DEEPWELL / UNDERGROUND INJECTION	M134	622,887	7.1	12	3.0
LAND TREATMENT / APPLICATION / FARMING	M131	353	0.0	3	0.8
<b>TOTAL</b>		<b>8,722,387</b>	<b>100.0</b>	<b>732</b>	

<sup>1</sup>Quantity managed only by storage is excluded.

<sup>2</sup>Facilities with only storage units are excluded.

<sup>3</sup>Column may not sum because facilities may have multiple handling methods.

\* CBI data excluded from Exhibit.

**Note:** Columns may not sum due to rounding.

### **3.0 SHIPMENTS AND RECEIPTS**

This section presents a series of exhibits describing RCRA hazardous waste shipments and receipts in 1995. For a complete description of what is included in this Report, please see the Executive Summary sections, "RCRA Hazardous Waste" and "RCRA Hazardous Waste Shipments and Receipts."

In 1995, 20,497 shippers<sup>1</sup> reported shipping 10.7 million tons of RCRA hazardous waste. This is a decrease of 3,467 shippers and a decrease of 6.7 million tons of hazardous waste compared to 1993. Exhibits 3.1, 3.2, and 3.3 present the quantity of waste shipped and the number of shippers in each EPA Region<sup>2</sup> in 1995. Shippers located in Region 6 reported shipping the largest amount of waste (2.9 million tons). Region 5 reported the largest number of shippers (4,655). Shippers located in Region 8 reported shipping the least amount of waste (155 thousand tons). Region 8 also reported the smallest number of shippers (353).

Nationwide, 644 RCRA treatment, storage, or disposal facilities (TSDs) reported receiving 9.3 million tons of waste in 1995. This is a decrease of 95 TSDs and an increase of 360 thousand tons of hazardous waste compared to 1993. Exhibits 3.4, 3.5, and 3.6 present the quantity of waste received and the number of TSDs that received waste in each EPA Region in 1995. Receivers in Region 5 reported receiving the largest quantity of waste (2.9 million tons), and Region 5 also reported the largest number of receivers (127). Receivers in Region 1 reported receiving the least amount of waste (127 thousand tons), and Region 10 reported the smallest number of receivers (23).

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<sup>1</sup>The term "shipment" is intended to refer to the physical transfer of waste from one facility to another. In some cases, however, shipments occur between facilities that neighbor each other and are under the same corporate name. In these instances, EPA may have assigned unique EPA ID numbers to separate industrial sites within the same plant. The resulting shipments may merely be movement of wastes from one portion of the plant to another.

<sup>2</sup>See Appendix C for information on which States are in each EPA Region.

**National Biennial RCRA Hazardous Waste Report: Based on 1995 Data**

**Exhibit 3.1** Number and Percentage of Hazardous Waste Shippers and Total RCRA Hazardous Waste Quantity Shipped, by EPA Region, 1995

EPA REGION	HAZARDOUS WASTE QUANTITY		SHIPPERS	
	TONS SHIPPED	PERCENTAGE	NUMBER	PERCENTAGE
1	270,026	2.5	1,313	6.4
2	1,032,494	9.7	3,291	16.1
3	789,849	7.4	1,920	9.4
4	1,091,796	10.2	3,072	15.0
5	2,341,573	22.0	4,655	22.7
6	2,943,125	27.6	2,074	10.1
7	424,962	4.0	815	4.0
8	154,584	1.5	353	1.7
9	1,386,288	13.0	1,979	9.7
10	225,509	2.1	1,019	5.0
CBI DATA	15,602	N/A	6	N/A
<b>TOTAL</b>	<b>10,675,806</b>	<b>100.0</b>	<b>20,497</b>	<b>100.0</b>

**Exhibit 3.2** Number and Percentage of Hazardous Waste Shippers and Total Quantity of RCRA Hazardous Waste Shipped by Region, by the Total Quantity of Waste Shipped, 1995

EPA REGION	HAZARDOUS WASTE QUANTITY		SHIPPERS	
	TONS SHIPPED	PERCENTAGE	NUMBER	PERCENTAGE
6	2,943,125	27.6	2,074	10.1
5	2,341,573	22.0	4,655	22.7
9	1,386,288	13.0	1,979	9.7
4	1,091,796	10.2	3,072	15.0
2	1,032,494	9.7	3,291	16.1
3	789,849	7.4	1,920	9.4
7	424,962	4.0	815	4.0
1	270,026	2.5	1,313	6.4
10	225,509	2.1	1,019	5.0
8	154,584	1.5	353	1.7
CBI DATA	15,602	N/A	6	N/A
<b>TOTAL</b>	<b>10,675,806</b>	<b>100.0</b>	<b>20,497</b>	<b>100.0</b>

**Note:** Columns for these two exhibits may not sum due to rounding. Percentages do not include CBI data.

Exhibit 3.3

Number and Percentage of Hazardous Waste Shippers and Total Quantity of RCRA Hazardous Waste Shipped by Region, by Highest Number of Shippers, 1995

EPA REGION	SHIPPERS		HAZARDOUS WASTE QUANTITY	
	NUMBER	PERCENTAGE	TONS SHIPPED	PERCENTAGE
5	4,655	22.7	2,341,573	22.0
2	3,291	16.1	1,032,494	9.7
4	3,072	15.0	1,091,796	10.2
6	2,074	10.1	2,943,125	27.6
9	1,979	9.7	1,386,288	13.0
3	1,920	9.4	789,849	7.4
1	1,313	6.4	270,026	2.5
10	1,019	5.0	225,509	2.1
7	815	4.0	424,962	4.0
8	353	1.7	154,584	1.5
CBI DATA	6	N/A	15,602	N/A
<b>TOTAL</b>	<b>20,497</b>	<b>100.0</b>	<b>10,675,806</b>	<b>100.0</b>

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

***National Biennial RCRA Hazardous Waste Report: Based on 1995 Data***

**Exhibit 3.4**      **Number and Percentage of Hazardous Waste Receivers and Total Quantity of RCRA Hazardous Waste Received, by EPA Region, 1995**

EPA REGION	HAZARDOUS WASTE QUANTITY		RECEIVING FACILITIES	
	TONS RECEIVED	PERCENTAGE	NUMBER	PERCENTAGE
1	126,713	1.4	37	5.8
2	1,424,702	15.3	46	7.2
3	492,816	5.3	62	9.6
4	772,736	8.3	111	17.3
5	2,919,242	31.4	127	19.8
6	1,610,617	17.3	110	17.1
7	513,289	5.5	40	6.2
8	127,589	1.4	30	4.7
9	1,141,160	12.3	57	8.9
10	181,442	1.9	23	3.6
CBI DATA	4,066	N/A	1	N/A
<b>TOTAL</b>	<b>9,314,372</b>	<b>100.0</b>	<b>644</b>	<b>100.0</b>

**Exhibit 3.5**      **Number and Percentage of Hazardous Waste Receivers and Total Quantity of RCRA Hazardous Waste Received by Region, by the Total Quantity of Waste Received, 1995**

EPA REGION	HAZARDOUS WASTE QUANTITY		RECEIVING FACILITIES	
	TONS RECEIVED	PERCENTAGE	NUMBER	PERCENTAGE
5	2,919,242	31.4	127	19.8
6	1,610,617	17.3	110	17.1
2	1,424,702	15.3	46	7.2
9	1,141,160	12.3	57	8.9
4	772,736	8.3	111	17.3
7	513,289	5.5	40	6.2
3	492,816	5.3	62	9.6
10	181,442	1.9	23	3.6
8	127,589	1.4	30	4.7
1	126,713	1.4	37	5.8
CBI DATA	4,066	N/A	1	N/A
<b>TOTAL</b>	<b>9,314,372</b>	<b>100.0</b>	<b>644</b>	<b>100.0</b>

**Note:** Columns for these two exhibits may not sum due to rounding. Percentages do not include CBI data.

**Exhibit 3.6**      **Number and Percentage of Hazardous Waste Receivers and Total Quantity of RCRA Hazardous Waste Received by Region, by the Number of Receiving Facilities, 1995**

EPA REGION	RECEIVING FACILITIES		HAZARDOUS WASTE QUANTITY	
	NUMBER	PERCENTAGE	TONS RECEIVED	PERCENTAGE
5	127	19.8	2,919,242	31.4
4	111	17.3	772,736	8.3
6	110	17.1	1,610,617	17.3
3	62	9.6	492,816	5.3
9	57	8.9	1,141,160	12.3
2	46	7.2	1,424,702	15.3
7	40	6.2	513,289	5.5
1	37	5.8	126,713	1.4
8	30	4.7	127,589	1.4
10	23	3.6	181,442	1.9
CBI DATA	1	N/A	4,066	N/A
<b>TOTAL</b>	<b>644</b>	<b>100.0</b>	<b>9,314,372</b>	<b>100.0</b>

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

Exhibits 3.7, 3.8, and 3.9 present the quantity of waste shipped and the number of shippers in each State. The States whose shippers reported shipping (in or out of State) the largest quantities of waste were Texas (2.4 million tons), California (1.3 million tons), Ohio (760 thousand tons), New York (650 thousand tons), and Michigan (510 thousand tons). Together, the shippers in these States accounted for 53% of the total quantity of hazardous waste shipped nationwide.

**National Biennial RCRA Hazardous Waste Report: Based on 1995 Data**

**Exhibit 3.7**

**Quantity of RCRA Hazardous Waste Shipped and Number of Hazardous Waste Shippers, by State, 1995**

STATE	HAZARDOUS WASTE QUANTITY			SHIPPERS		
	RANK	TONS SHIPPED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
ALABAMA	14	205,124	1.9	24	277	1.4
ALASKA	46	4,104	0.0	44	63	0.3
ARIZONA	34	51,662	0.5	29	195	1.0
ARKANSAS	11	228,239	2.1	28	202	1.0
CALIFORNIA	2	1,320,813	12.4	2	1,631	8.0
COLORADO	29	76,141	0.7	32	155	0.8
CONNECTICUT	22	102,363	1.0	18	394	1.9
DELAWARE	37	19,832	0.2	43	64	0.3
DISTRICT OF COLUMBIA	54	767	0.0	49	18	0.1
FLORIDA	27	77,904	0.7	16	421	2.1
GEORGIA	19	134,995	1.3	17	402	2.0
GUAM	55	698	0.0	53	13	0.1
HAWAII	47	3,978	0.0	46	49	0.2
IDAHO	49	3,071	0.0	46	49	0.2
ILLINOIS	8	404,939	3.8	6	1,155	5.6
INDIANA	7	449,484	4.2	10	608	3.0
IOWA	33	52,622	0.5	30	170	0.8
KANSAS	15	197,172	1.8	27	206	1.0
KENTUCKY	12	221,863	2.1	15	434	2.1
LOUISIANA	10	247,120	2.3	20	357	1.7
MAINE	45	6,258	0.1	33	150	0.7
MARYLAND	24	94,392	0.9	25	221	1.1
MASSACHUSETTS	20	121,911	1.1	13	475	2.3
MICHIGAN	5	513,056	4.8	8	718	3.5
MINNESOTA	28	76,784	0.7	23	280	1.4
MISSISSIPPI	36	39,143	0.4	34	149	0.7
MISSOURI	17	157,214	1.5	20	357	1.7
MONTANA	44	7,231	0.1	45	50	0.2
NAVAJO NATION	56	185	0.0	54	10	0.0
NEBRASKA	38	17,954	0.2	40	82	0.4
NEVADA	43	7,491	0.1	41	78	0.4
NEW HAMPSHIRE	39	14,250	0.1	35	127	0.6
NEW JERSEY	9	312,289	2.9	5	1,160	5.7
NEW MEXICO	42	7,631	0.1	48	43	0.2
NEW YORK	4	647,137	6.1	1	2,042	10.0
NORTH CAROLINA	25	93,784	0.9	11	580	2.8
NORTH DAKOTA	50	2,326	0.0	51	16	0.1
OHIO	3	756,843	7.1	3	1,368	6.7
OKLAHOMA	32	63,688	0.6	31	166	0.8
OREGON	35	43,332	0.4	26	210	1.0
PENNSYLVANIA	6	488,670	4.6	7	1,133	5.5
PUERTO RICO	30	69,860	0.7	39	88	0.4
RHODE ISLAND	40	13,810	0.1	37	102	0.5
SOUTH CAROLINA	13	216,908	2.0	20	357	1.7
SOUTH DAKOTA	53	1,114	0.0	51	16	0.1
TENNESSEE	23	102,075	1.0	14	452	2.2
TEXAS	1	2,396,447	22.5	4	1,306	6.4
TRUST TERRITORIES	52	1,462	0.0	55	3	0.0
UTAH	31	66,118	0.6	38	99	0.5
VERMONT	41	11,433	0.1	42	65	0.3
VIRGIN ISLANDS	48	3,208	0.0	56	1	0.0
VIRGINIA	21	102,660	1.0	19	369	1.8
WASHINGTON	16	175,003	1.6	9	697	3.4
WEST VIRGINIA	26	83,527	0.8	36	115	0.6
WISCONSIN	18	140,467	1.3	12	526	2.6
WYOMING	51	1,655	0.0	50	17	0.1
CBI DATA	N/A	15,602	N/A	N/A	6	N/A
TOTAL		10,675,806	100.0		20,497	100.0

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

Exhibit 3.8

Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Shipped and Number of Hazardous Waste Shippers, 1995

STATE	HAZARDOUS WASTE QUANTITY			SHIPPERS		
	RANK	TONS SHIPPED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
TEXAS	1	2,396,447	22.5	4	1,306	6.4
CALIFORNIA	2	1,320,813	12.4	2	1,631	8.0
OHIO	3	756,843	7.1	3	1,368	6.7
NEW YORK	4	647,137	6.1	1	2,042	10.0
MICHIGAN	5	513,056	4.8	8	718	3.5
PENNSYLVANIA	6	488,670	4.6	7	1,133	5.5
INDIANA	7	449,484	4.2	10	608	3.0
ILLINOIS	8	404,939	3.8	6	1,155	5.6
NEW JERSEY	9	312,289	2.9	5	1,160	5.7
LOUISIANA	10	247,120	2.3	20	357	1.7
ARKANSAS	11	228,239	2.1	28	202	1.0
KENTUCKY	12	221,863	2.1	15	434	2.1
SOUTH CAROLINA	13	216,908	2.0	20	357	1.7
ALABAMA	14	205,124	1.9	24	277	1.4
KANSAS	15	197,172	1.8	27	206	1.0
WASHINGTON	16	175,003	1.6	9	697	3.4
MISSOURI	17	157,214	1.5	20	357	1.7
WISCONSIN	18	140,467	1.3	12	526	2.6
GEORGIA	19	134,995	1.3	17	402	2.0
MASSACHUSETTS	20	121,911	1.1	13	475	2.3
VIRGINIA	21	102,660	1.0	19	369	1.8
CONNECTICUT	22	102,363	1.0	18	394	1.9
TENNESSEE	23	102,075	1.0	14	452	2.2
MARYLAND	24	94,392	0.9	25	221	1.1
NORTH CAROLINA	25	93,784	0.9	11	580	2.8
WEST VIRGINIA	26	83,527	0.8	36	115	0.6
FLORIDA	27	77,904	0.7	16	421	2.1
MINNESOTA	28	76,784	0.7	23	280	1.4
COLORADO	29	76,141	0.7	32	155	0.8
PUERTO RICO	30	69,860	0.7	39	88	0.4
UTAH	31	66,118	0.6	38	99	0.5
OKLAHOMA	32	63,688	0.6	31	166	0.8
IOWA	33	52,622	0.5	30	170	0.8
ARIZONA	34	51,662	0.5	29	195	1.0
OREGON	35	43,332	0.4	26	210	1.0
MISSISSIPPI	36	39,143	0.4	34	149	0.7
DELAWARE	37	19,832	0.2	43	64	0.3
NEBRASKA	38	17,954	0.2	40	82	0.4
NEW HAMPSHIRE	39	14,250	0.1	35	127	0.6
RHODE ISLAND	40	13,810	0.1	37	102	0.5
VERMONT	41	11,433	0.1	42	65	0.3
NEW MEXICO	42	7,631	0.1	48	43	0.2
NEVADA	43	7,491	0.1	41	78	0.4
MONTANA	44	7,231	0.1	45	50	0.2
MAINE	45	6,258	0.1	33	150	0.7
ALASKA	46	4,104	0.0	44	63	0.3
HAWAII	47	3,978	0.0	46	49	0.2
VIRGIN ISLANDS	48	3,208	0.0	56	1	0.0
IDAHO	49	3,071	0.0	46	49	0.2
NORTH DAKOTA	50	2,326	0.0	51	16	0.1
WYOMING	51	1,655	0.0	50	17	0.1
TRUST TERRITORIES	52	1,462	0.0	55	3	0.0
SOUTH DAKOTA	53	1,114	0.0	51	16	0.1
DISTRICT OF COLUMBIA	54	767	0.0	49	18	0.1
GUAM	55	698	0.0	53	13	0.1
NAVAJO NATION	56	185	0.0	54	10	0.0
CBI DATA	N/A	15,602	N/A	N/A	6	N/A
TOTAL		10,675,806	100.0		20,497	100.0

Note: Columns may not sum due to rounding.  
Percentages do not include CBI data.

***National Biennial RCRA Hazardous Waste Report: Based on 1995 Data***

**Exhibit 3.9 Rank Ordering of States Based on Number of Hazardous Waste Shippers and Quantity of RCRA Hazardous Waste Shipped, 1995**

STATE	SHIPPERS			HAZARDOUS WASTE QUANTITY		
	RANK	NUMBER	PERCENTAGE	RANK	TONS SHIPPED	PERCENTAGE
NEW YORK	1	2,042	10.0	4	647,137	6.1
CALIFORNIA	2	1,631	8.0	2	1,320,813	12.4
OHIO	3	1,368	6.7	3	756,843	7.1
TEXAS	4	1,306	6.4	1	2,396,447	22.5
NEW JERSEY	5	1,160	5.7	9	312,289	2.9
ILLINOIS	6	1,155	5.6	8	404,939	3.8
PENNSYLVANIA	7	1,133	5.5	6	488,670	4.6
MICHIGAN	8	718	3.5	5	513,056	4.8
WASHINGTON	9	697	3.4	16	175,003	1.6
INDIANA	10	608	3.0	7	449,484	4.2
NORTH CAROLINA	11	580	2.8	25	93,784	0.9
WISCONSIN	12	526	2.6	18	140,467	1.3
MASSACHUSETTS	13	475	2.3	20	121,911	1.1
TENNESSEE	14	452	2.2	23	102,075	1.0
KENTUCKY	15	434	2.1	12	221,863	2.1
FLORIDA	16	421	2.1	27	77,904	0.7
GEORGIA	17	402	2.0	19	134,995	1.3
CONNECTICUT	18	394	1.9	22	102,363	1.0
VIRGINIA	19	369	1.8	21	102,660	1.0
LOUISIANA	20	357	1.7	10	247,120	2.3
SOUTH CAROLINA	20	357	1.7	13	216,908	2.0
MISSOURI	20	357	1.7	17	157,214	1.5
MINNESOTA	23	280	1.4	28	76,784	0.7
ALABAMA	24	277	1.4	14	205,124	1.9
MARYLAND	25	221	1.1	24	94,392	0.9
OREGON	26	210	1.0	35	43,332	0.4
KANSAS	27	206	1.0	15	197,172	1.8
ARKANSAS	28	202	1.0	11	228,239	2.1
ARIZONA	29	195	1.0	34	51,662	0.5
IOWA	30	170	0.8	33	52,622	0.5
OKLAHOMA	31	166	0.8	32	63,688	0.6
COLORADO	32	155	0.8	29	76,141	0.7
MAINE	33	150	0.7	45	6,258	0.1
MISSISSIPPI	34	149	0.7	36	39,143	0.4
NEW HAMPSHIRE	35	127	0.6	39	14,250	0.1
WEST VIRGINIA	36	115	0.6	26	83,527	0.8
RHODE ISLAND	37	102	0.5	40	13,810	0.1
UTAH	38	99	0.5	31	66,118	0.6
PUERTO RICO	39	88	0.4	30	69,860	0.7
NEBRASKA	40	82	0.4	38	17,954	0.2
NEVADA	41	78	0.4	43	7,491	0.1
VERMONT	42	65	0.3	41	11,433	0.1
DELAWARE	43	64	0.3	37	19,832	0.2
ALASKA	44	63	0.3	46	4,104	0.0
MONTANA	45	50	0.2	44	7,231	0.1
HAWAII	46	49	0.2	47	3,978	0.0
IDAHO	46	49	0.2	49	3,071	0.0
NEW MEXICO	48	43	0.2	42	7,631	0.1
DISTRICT OF COLUMBIA	49	18	0.1	54	767	0.0
WYOMING	50	17	0.1	51	1,655	0.0
NORTH DAKOTA	51	16	0.1	50	2,326	0.0
SOUTH DAKOTA	51	16	0.1	53	1,114	0.0
GUAM	53	13	0.1	55	698	0.0
NAVAJO NATION	54	10	0.0	56	185	0.0
TRUST TERRITORIES	55	3	0.0	52	1,462	0.0
VIRGIN ISLANDS	56	1	0.0	48	3,208	0.0
CBI DATA	N/A	6	N/A	N/A	15,602	N/A
<b>TOTAL</b>		<b>20,497</b>	<b>100.0</b>		<b>10,675,806</b>	<b>100.0</b>

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

Exhibits 3.10, 3.11, and 3.12 present the quantity of waste received and the number of TSDs receiving waste in each State. The States whose receivers reported receiving the largest quantities of waste, from both in and out of State, were Michigan (1.2 million tons), New Jersey (1.2 million tons), Texas (970 thousand tons), Ohio (700 thousand tons), and Nevada (650 thousand tons). Together, the receivers in these States accounted for 50% of the national total of waste receipts. Six (6) States reported they did not have any TSDs that received hazardous waste. These States were the District of Columbia, Navajo Nation, New Hampshire, Trust Territories, Virgin Islands, and Wyoming.

Exhibits presenting the amount of waste shipped (3.1, 3.2, 3.3, 3.7, 3.8, and 3.9) and exhibits presenting the amount of waste received (3.4, 3.5, 3.6, 3.10, 3.11, and 3.12) show a 1.4 million ton difference between the amount of waste reported shipped and the amount of waste reported received. See the Executive Summary section "RCRA Hazardous Waste Shipments and Receipts" for a discussion of possible reasons for the discrepancy between the amount of waste reported shipped and the amount of waste reported received.

Exhibits 3.13 and 3.14 present listings of the 50 largest shippers and receivers, respectively, in the nation. The largest 50 shippers account for 44% of the national total of waste shipped, and the 50 largest receivers account for 68% of the national total of waste received.

**National Biennial RCRA Hazardous Waste Report: Based on 1995 Data**

**Exhibit 3.10**      Quantity of RCRA Hazardous Waste Received and Number of Receivers, by State, 1995

STATE	HAZARDOUS WASTE QUANTITY			RECEIVING FACILITIES		
	RANK	TONS RECEIVED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
ALABAMA	16	193,028	2.1	17	13	2.0
ALASKA	48	282	0.0	40	3	0.0
ARIZONA	35	17,280	0.2	26	10	1.6
ARKANSAS	15	215,819	2.3	24	11	1.7
CALIFORNIA	7	472,102	5.1	2	39	6.1
COLORADO	28	44,348	0.5	31	8	1.2
CONNECTICUT	29	42,013	0.5	22	12	1.9
DELAWARE	42	1,431	0.0	49	1	0.2
DISTRICT OF COLUMBIA	51	0	0.0	51	0	0.0
FLORIDA	26	47,284	0.5	6	25	3.9
GEORGIA	34	28,598	0.3	15	15	2.3
GUAM	47	344	0.0	44	2	0.3
HAWAII	43	1,101	0.0	44	2	0.3
IDAHO	31	33,609	0.4	40	3	0.5
ILLINOIS	8	358,109	3.8	6	25	3.9
INDIANA	6	581,270	6.2	8	23	3.6
IOWA	39	3,789	0.0	32	7	1.1
KANSAS	12	248,329	2.7	24	11	1.7
KENTUCKY	19	122,863	1.3	17	13	2.0
LOUISIANA	10	289,874	3.1	12	17	2.6
MAINE	41	1,977	0.0	44	2	0.3
MARYLAND	23	52,457	0.6	32	7	1.1
MASSACHUSETTS	24	50,104	0.5	17	13	2.0
MICHIGAN	1	1,164,284	12.5	9	21	3.3
MINNESOTA	20	115,273	1.2	10	20	3.1
MISSISSIPPI	37	12,800	0.1	40	3	0.5
MISSOURI	13	228,614	2.5	13	16	2.5
MONTANA	50	3	0.0	44	2	0.3
NAVAJO NATION	51	0	0.0	51	0	0.0
NEBRASKA	32	32,557	0.3	34	6	0.9
NEVADA	5	650,333	7.0	37	4	0.6
NEW HAMPSHIRE	51	0	0.0	51	0	0.0
NEW JERSEY	2	1,161,663	12.5	17	13	2.0
NEW MEXICO	46	455	0.0	37	4	0.6
NEW YORK	14	224,905	2.4	4	30	4.7
NORTH CAROLINA	25	49,795	0.5	11	19	3.0
NORTH DAKOTA	45	801	0.0	36	5	0.8
OHIO	4	697,003	7.5	5	29	4.5
OKLAHOMA	17	138,537	1.5	26	10	1.6
OREGON	18	130,676	1.4	49	1	0.2
PENNSYLVANIA	9	357,339	3.8	3	32	5.0
PUERTO RICO	30	38,134	0.4	40	3	0.5
RHODE ISLAND	33	31,532	0.3	37	4	0.6
SOUTH CAROLINA	11	272,585	2.9	29	9	1.4
SOUTH DAKOTA	49	260	0.0	44	2	0.3
TENNESSEE	27	45,784	0.5	16	14	2.2
TEXAS	3	965,931	10.4	1	68	10.6
TRUST TERRITORIES	51	0	0.0	51	0	0.0
UTAH	21	82,178	0.9	17	13	2.0
VERMONT	44	1,086	0.0	34	6	0.9
VIRGIN ISLANDS	51	0	0.0	51	0	0.0
VIRGINIA	22	70,532	0.8	22	12	1.9
WASHINGTON	36	16,875	0.2	13	16	2.5
WEST VIRGINIA	38	11,057	0.1	26	10	1.6
WISCONSIN	40	3,303	0.0	29	9	1.4
WYOMING	51	0	0.0	51	0	0.0
CBI DATA	N/A	4,066	N/A	N/A	1	N/A
<b>TOTAL</b>		<b>9,314,372</b>	<b>100.0</b>		<b>644</b>	<b>100.0</b>

**Note:**    Columns may not sum due to rounding.  
              Percentages do not include CBI data.

Exhibit 3.11

Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Received and Number of Receivers, 1995

STATE	HAZARDOUS WASTE QUANTITY			RECEIVING FACILITIES		
	RANK	TONS RECEIVED	PERCENTAGE	RANK	NUMBER	PERCENTAGE
MICHIGAN	1	1,164,284	12.5	9	21	3.3
NEW JERSEY	2	1,161,663	12.5	17	13	2.0
TEXAS	3	965,931	10.4	1	68	10.6
OHIO	4	697,003	7.5	5	29	4.5
NEVADA	5	650,333	7	37	4	0.6
INDIANA	6	581,270	6.2	8	23	3.6
CALIFORNIA	7	472,102	5.1	2	39	6.1
ILLINOIS	8	358,109	3.8	6	25	3.9
PENNSYLVANIA	9	357,339	3.8	3	32	5.0
LOUISIANA	10	289,874	3.1	12	17	2.6
SOUTH CAROLINA	11	272,585	2.9	29	9	1.4
KANSAS	12	248,329	2.7	24	11	1.7
MISSOURI	13	228,614	2.5	13	16	2.5
NEW YORK	14	224,905	2.4	4	30	4.7
ARKANSAS	15	215,819	2.3	24	11	1.7
ALABAMA	16	193,028	2.1	17	13	2.0
OKLAHOMA	17	138,537	1.5	26	10	1.6
OREGON	18	130,676	1.4	49	1	0.2
KENTUCKY	19	122,863	1.3	17	13	2.0
MINNESOTA	20	115,273	1.2	10	20	3.1
UTAH	21	82,178	0.9	17	13	2.0
VIRGINIA	22	70,532	0.8	22	12	1.9
MARYLAND	23	52,457	0.6	32	7	1.1
MASSACHUSETTS	24	50,104	0.5	17	13	2.0
NORTH CAROLINA	25	49,795	0.5	11	19	3.0
FLORIDA	26	47,284	0.5	6	25	3.9
TENNESSEE	27	45,784	0.5	16	14	2.2
COLORADO	28	44,348	0.5	31	8	1.2
CONNECTICUT	29	42,013	0.5	22	12	1.9
PUERTO RICO	30	38,134	0.4	40	3	0.5
IDAHO	31	33,609	0.4	40	3	0.5
NEBRASKA	32	32,557	0.3	34	6	0.9
RHODE ISLAND	33	31,532	0.3	37	4	0.6
GEORGIA	34	28,598	0.3	15	15	2.3
ARIZONA	35	17,280	0.2	26	10	1.6
WASHINGTON	36	16,875	0.2	13	16	2.5
MISSISSIPPI	37	12,800	0.1	40	3	0.5
WEST VIRGINIA	38	11,057	0.1	26	10	1.6
IOWA	39	3,789	0.0	32	7	1.1
WISCONSIN	40	3,303	0.0	29	9	1.4
MAINE	41	1,977	0.0	44	2	0.3
DELAWARE	42	1,431	0.0	49	1	0.2
HAWAII	43	1,101	0.0	44	2	0.3
VERMONT	44	1,086	0.0	34	6	0.9
NORTH DAKOTA	45	801	0.0	36	5	0.8
NEW MEXICO	46	455	0.0	37	4	0.6
GUAM	47	344	0.0	44	2	0.3
ALASKA	48	282	0.0	40	3	0.5
SOUTH DAKOTA	49	260	0.0	44	2	0.3
MONTANA	50	3	0.0	44	2	0.3
DISTRICT OF COLUMBIA	51	0	0.0	51	0	0.0
NAVAJO NATION	51	0	0.0	51	0	0.0
NEW HAMPSHIRE	51	0	0.0	51	0	0.0
TRUST TERRITORIES	51	0	0.0	51	0	0.0
VIRGIN ISLANDS	51	0	0.0	51	0	0.0
WYOMING	51	0	0.0	51	0	0.0
CBI DATA	N/A	4,066	N/A	N/A	1	N/A
TOTAL		9,314,372	100.0		644	100.0

Note: Columns may not sum due to rounding.  
Percentages do not include CBI data.

*National Biennial RCRA Hazardous Waste Report: Based on 1995 Data*

**Exhibit 3.12 Rank Ordering of States Based on Number of Receiving Facilities and Quantity of RCRA Hazardous Waste Received, 1995**

STATE	RECEIVING FACILITIES			HAZARDOUS WASTE QUANTITY		
	RANK	NUMBER	PERCENTAGE	RANK	TONS RECEIVED	PERCENTAGE
TEXAS	1	68	10.6	3	965,931	10.4
CALIFORNIA	2	39	6.1	7	472,102	5.1
PENNSYLVANIA	3	32	5.0	9	357,339	3.8
NEW YORK	4	30	4.7	14	224,905	2.4
OHIO	5	29	4.5	4	697,003	7.5
ILLINOIS	6	25	3.9	8	358,109	3.8
FLORIDA	6	25	3.9	26	47,284	0.5
INDIANA	8	23	3.6	6	581,270	6.2
MICHIGAN	9	21	3.3	1	1,164,284	12.5
MINNESOTA	10	20	3.1	20	115,273	1.2
NORTH CAROLINA	11	19	3.0	25	49,795	0.5
LOUISIANA	12	17	2.6	10	289,874	3.1
MISSOURI	13	16	2.5	13	228,614	2.5
WASHINGTON	13	16	2.5	36	16,875	0.2
GEORGIA	15	15	2.3	34	28,598	0.3
TENNESSEE	16	14	2.2	27	45,784	0.5
NEW JERSEY	17	13	2.0	2	1,161,663	12.5
ALABAMA	17	13	2.0	16	193,028	2.1
KENTUCKY	17	13	2.0	19	122,863	1.3
UTAH	17	13	2.0	21	82,178	0.9
MASSACHUSETTS	17	13	2.0	24	50,104	0.5
VIRGINIA	22	12	1.9	22	70,532	0.8
CONNECTICUT	22	12	1.9	29	42,013	0.5
KANSAS	24	11	1.7	12	248,329	2.7
ARKANSAS	24	11	1.7	15	215,819	2.3
OKLAHOMA	26	10	1.6	17	138,537	1.5
ARIZONA	26	10	1.6	35	17,280	0.2
WEST VIRGINIA	26	10	1.6	38	11,057	0.1
SOUTH CAROLINA	29	9	1.4	11	272,585	2.9
WISCONSIN	29	9	1.4	40	3,303	0.0
COLORADO	31	8	1.2	28	44,348	0.5
MARYLAND	32	7	1.1	23	52,457	0.6
IOWA	32	7	1.1	39	3,789	0.0
NEBRASKA	34	6	0.9	32	32,557	0.3
VERMONT	34	6	0.9	44	1,086	0.0
NORTH DAKOTA	36	5	0.8	45	801	0.0
NEVADA	37	4	0.6	5	650,333	7.0
RHODE ISLAND	37	4	0.6	33	31,532	0.3
NEW MEXICO	37	4	0.6	46	455	0.0
PUERTO RICO	40	3	0.5	30	38,134	0.4
IDAHO	40	3	0.5	31	33,609	0.4
MISSISSIPPI	40	3	0.5	37	12,800	0.1
ALASKA	40	3	0.5	48	282	0.0
MAINE	44	2	0.3	41	1,977	0.0
HAWAII	44	2	0.3	43	1,101	0.0
GUAM	44	2	0.3	47	344	0.0
SOUTH DAKOTA	44	2	0.3	49	260	0.0
MONTANA	44	2	0.3	50	3	0.0
OREGON	49	1	0.2	18	130,676	1.4
DELAWARE	49	1	0.2	42	1,431	0.0
DISTRICT OF COLUMBIA	51	0	0.0	51	0	0.0
NAVAJO NATION	51	0	0.0	51	0	0.0
NEW HAMPSHIRE	51	0	0.0	51	0	0.0
TRUST TERRITORIES	51	0	0.0	51	0	0.0
VIRGIN ISLANDS	51	0	0.0	51	0	0.0
WYOMING	51	0	0.0	51	0	0.0
CBI DATA	N/A	1	N/A	N/A	4,066	N/A
<b>TOTAL</b>		<b>644</b>	<b>100.0</b>		<b>9,314,372</b>	<b>100.0</b>

**Note:** Columns may not sum due to rounding.  
Percentages do not include CBI data.

Exhibit 3.13

Fifty Largest RCRA Hazardous Waste Shippers in the U.S., 1995

RANK	EPA ID	NAME	CITY	TONS SHIPPED
1	CAD008302903	CHEMICAL WASTE MANAGEMENT AZUSA FACILITY	AZUSA, CA	902,332
2	TXD981911209	OCCIDENTAL CHEMICAL CORP.	DEER PARK, TX	766,625
3	TXD063085567	COASTAL REFINING & MARKETING, INC.	CORPUS CHRISTI, TX	405,675
4	NYD002126852	DELPHI HARRISON THERM SYS-W LOCKPORT CMP	LOCKPORT, NY	301,625
5	TXD102684370	BAYTANK (HOUSTON) INC.	SEABROOK, TX	155,033
6	TXD000807982	PAKTANK CORPORATION	DEER PARK, TX	153,002
7	NYD003930849	DISTILLATION PRODUCTS INDUSTRIES	ROCHESTER, NY	113,532
8	OHD076741149	SCM CHEMICALS INC	ASHTABULA, OH	96,847
9	KSD007249980	ELF ATOCHEM NORTH AMERICA INC	WICHITA, KS	86,978
10	IND005467618	ELKHART PLATING CORP.	ELKHART, IN	85,613
11	IND093219012	HERITAGE ENVIRONMENTAL SERVICES INC	INDIANAPOLIS, IN	79,346
12	MID980615298	PETRO-CHEM PROC. GRP., NORTRU INC	DETROIT, MI	76,576
13	KYD053348108	SAFETY-KLEEN CORP.	SMITHFIELD, KY	75,783
14	KSD980633259	SYSTECH ENVIRONMENTAL CORPORATION	FREDONIA, KS	64,357
15	TXD058275769	LYONDELL PETROCHEMICAL COMPANY	CHANNELVIEW, TX	61,638
16	SCD042627448	NIPA HARDWICKE INC	ELGIN, SC	59,701
17	TXD058265067	ARCO CHEMICAL COMPANY	PASADENA, TX	56,125
18	TXD000838896	CHEMICAL WASTE MANAGEMENT, INC.	PORT ARTHUR, TX	53,096
19	IND181157009	NUCOR STEEL	CRAWFORDSVILLE, IN	51,079
20	ARD981908890	NUCOR YAMATO STEEL	BLYTHEVILLE, AR	49,021
21	WID098547854	METRO RECYCLING AND DISPOSAL FACILITY	FRANKLIN, WI	48,124
22	ARD981057870	RINECO	BENTON, AR	48,059
23	TXD077603371	SAFETY-KLEEN CORP.	DENTON, TX	43,209
24	WAD990828642	GOLDENDALE ALUMINUM CO	GOLDENDALE, WA	42,819
25	OHD005048947	SYSTECH ENVIRONMENTAL CORP	PAULDING, OH	39,978
26	ARD069748192	ENSCO INC	EL DORADO, AR	39,128
27	ALD070513767	M & M CHEMICAL & EQUIPMENT COMPANY, INC.	ATTALLA, AL	38,020
28	WAD057311094	AMERICAN CROSSARM & CONDUIT	CHEHALIS, WA	35,657
29	MOD029729688	HOLNAM INC/SAFETY-KLEEN	CLARKSVILLE, MO	35,630
30	MID000820381	THE UPJOHN COMPANY	KALAMAZOO, MI	34,696
31	ILD980613913	SAFETY KLEEN ENVIROSYSTEMS CO	DOLTON, IL	34,268
32	OHD004228003	REPUBLIC ENG STEELS CANTON PLANT	CANTON, OH	34,174
33	LAD000777201	CHEMICAL WASTE MANAGEMENT	SULPHUR, LA	33,945
34	MDD980555189	CLEAN HARBORS OF BALTIMORE	BALTIMORE, MD	33,545
35	ARD983278243	NUCOR STEEL ARKANSAS	BLYTHEVILLE, AR	32,403
36	CAD982029225	PASMINCO INCORPORATED	TORRANCE, CA	32,302
37	NJD002182897	SAFETY KLEEN CORP	LINDEN, NJ	29,215
38	OH0000923441	JENNISON-WRIGHT SITE	TOLEDO, OH	28,675
39	MID005379706	FORD MOTOR COMPANY, WAYNE ASSY PL	WAYNE, MI	28,345
40	ALD981019045	SYSTECH ENVIRONMENTAL CORPORATION	DEMOPOLIS, AL	27,380
41	NYD980536288	DUPONT	NIAGARA FALLS, NY	27,081
42	ALD000622464	CHEMICAL WASTE MANAGEMENT, INC.	EMMELLE, AL	27,026
43	TXD069452340	TEXAS ECOLOGISTS, INC.	ROBSTOWN, TX	27,025
44	MID981200835	SYSTECH ENV. CORP. - LAFARGE CORP.	ALPENA, MI	26,275
45	OHD093945293	CWM RESOURCE RECOVERY INC	WEST CARROLLTON, OH	25,881
46	TXD078432457	HOECHST CELANESE CHEM. GROUP	PASADENA, TX	25,128
47	OHD048415665	ROSS INCINERATION SERVICES INC	GRAFTON, OH	25,089
48	NJD002454544	MARISOL INC	MIDDLESEX, NJ	24,648
49	OHD004281598	ARMCO INC. - ZANESVILLE OPERATIONS	ZANESVILLE, OH	24,515
50	PAD002326908	LUKENS INC COATESVILLE FAC	COATESVILLE, PA	24,382
TOTAL				4,670,606

Note: Column may not sum due to rounding.

# National Biennial RCRA Hazardous Waste Report: Based on 1995 Data

Exhibit 3.14

Fifty Largest RCRA Hazardous Waste Receivers in the U.S., 1995

RANK	EPA ID	NAME	CITY	TONS RECEIVED
1	NJD981133150	REPUBLIC ENVIRONMENTAL RECYCLING INC	CLAYTON, NJ	1,007,619
2	MID981200835	SYSTECH ENV. CORP. - LAFARGE CORP.	ALPENA, MI	611,070
3	NVT330010000	US ECOLOGY, INC.	BEATTY, NV	602,017
4	CAD097030993	NORRIS ENVIRONMENTAL SERVICES INC	VERNON, CA	247,228
5	KSD007482029	VULCAN MATERIALS COMPANY	WICHITA, KS	149,635
6	IND000199653	QUEMETCO, INC.	INDIANAPOLIS, IN	133,129
7	ORD089452353	CHEMICAL WASTE MANAGEMENT OF THE NW	ARLINGTON, OR	130,676
8	MID048090633	WAYNE DISPOSAL SITE #2 LANDFILL	BELLEVILLE, MI	126,995
9	TXD000719518	DISPOSAL SYSTEMS INC.	DEER PARK, TX	120,668
10	OHD045243706	ENVIROSAFE SERVICES OF OHIO INC	OREGON, OH	119,479
11	IND078911146	CHEMICAL WASTE MANAGEMENT	FORT WAYNE, IN	116,985
12	NYD049836679	CWM CHEMICAL SERVICES, INC.	MODEL CITY, NY	112,108
13	OKD065438376	U.S. POLLUTION CONTROL INC.	WAYNOKA, OK	111,319
14	OHD020273819	CHEMICAL WASTE MANAGEMENT INC	VICKERY, OH	108,004
15	LAD000777201	CHEMICAL WASTE MANAGEMENT	SULPHUR, LA	106,021
16	TXD083472266	ARCO CHEMICAL COMPANY	CHANNELVIEW, TX	98,184
17	MOD054018288	CONTINENTAL CEMENT CO	HANNIBAL, MO	95,941
18	MID000724831	MICHIGAN DISPOSAL WASTE TREATMENT PLANT	BELLEVILLE, MI	95,328
19	TXD000782698	EXXON COMPANY, U.S.A.	BAYTOWN, TX	95,006
20	MID980615298	PETRO-CHEM PROC. GRP., NORTRU INC	DETROIT, MI	91,577
21	IND005081542	ESSROC MATERIALS INC.	LAGANSPORT, IN	91,274
22	TXD007349327	TXI, INC.	MIDLOTHIAN, TX	90,658
23	IND093219012	HERITAGE ENVIRONMENTAL SERVICES INC	INDIANAPOLIS, IN	87,570
24	SCD003351699	GIANT CEMENT COMPANY	HARLEYVILLE, SC	86,599
25	TXD000838896	CHEMICAL WASTE MANAGEMENT, INC.	PORT ARTHUR, TX	83,669
26	ALD000622464	CHEMICAL WASTE MANAGEMENT, INC.	EMMELLE, AL	82,008
27	ILD000666206	ENVIRITE CORP	HARVEY, IL	81,942
28	SCD070375985	LAIDLAW ENV SVS OF SC INC	PINEWOOD, SC	77,127
29	LAD981057706	MARINE SHALE PROCESSORS, INC.	AMELIA, LA	75,662
30	PAD004835146	MILL SERVICE INC YUKON	YUKON, PA	75,580
31	MOD029729688	HOLNAM INC/SAFETY-KLEEN	CLARKSVILLE, MO	74,127
32	ARD006354161	REYNOLDS METALS CO GUM SPRINGS PLANT	GUM SPRINGS, AR	72,519
33	TXD055141378	ROLLINS ENVIRONMENTAL SERVICES (TX), INC	DEER PARK, TX	71,156
34	OHD004178612	RESEARCH OIL COMPANY	CLEVELAND, OH	70,809
35	PAD010154045	ENVIRITE CORP	YORK, PA	69,841
36	IND980503890	HERITAGE, ENVIRONMENTAL SERVICES, INC	ROACHDALE, IN	68,214
37	TXD097673149	EMPAK, INC.	DEER PARK, TX	67,096
38	ILD000805812	PEORIA DISPOSAL CO INC	PEORIA, IL	66,737
39	NJD002385730	E I DUPONT DE NEMOURS & CO INC	DEEPWATER, NJ	65,301
40	MND006148092	GOPHER RESOURCE CORPORATION	EAGAN, MN	64,433
41	NYD030485288	REVERE SMELTING & REFINING CORPORATION	MIDDLETOWN, NY	62,143
42	KYD053348108	SAFETY-KLEEN CORP.	SMITHFIELD, KY	60,319
43	ILD980613913	SAFETY KLEEN ENVIROSYSTEMS CO	DOLTON, IL	59,550
44	TXD077603371	SAFETY-KLEEN CORP.	DENTON, TX	58,540
45	MID980684088	SOLVENT DISTILLERS GRP./NORTRU, INC.	DETROIT, MI	56,524
46	PAD002389559	KEYSTONE CEMENT CO	BATH, PA	53,579
47	ARD981512270	ASH GROVE CEMENT COMPANY	FOREMAN, AR	52,472
48	NJD002182897	SAFETY KLEEN CORP	LINDEN, NJ	50,165
49	MOD050232560	RIVER CEMENT CO SELMA PLANT	FESTUS, MO	49,470
50	ARD069748192	ENSCO INC	EL DORADO, AR	48,233
TOTAL				6,352,306

Note: Column may not sum due to rounding.

## **4.0 IMPORTS AND EXPORTS**

Exhibits 4.1 and 4.2 present RCRA hazardous waste imports and exports, by EPA Region<sup>1</sup> and by State, respectively, in 1995. For a complete description of what is included in this Report, please see the Executive Summary sections, "RCRA Hazardous Waste" and "RCRA Hazardous Waste Shipments and Receipts." Only those quantities of waste that enter or leave the State are counted in this category.

Overall, in 1995, 5.9 million tons of RCRA hazardous waste were imported from other States. This is an increase of 1.7 million tons compared with 1993. In addition, 5.3 million tons of RCRA hazardous waste were exported to other States. This is a 1.5 million ton decrease compared with 1993.

Receivers located in Region 5 reported importing the largest quantity of waste (1.7 million tons) and shippers located in Region 9 reported exporting the largest quantity of waste (1.1 million tons). Receivers located in Region 1 reported importing the smallest quantity of waste (70 thousand tons). Shippers located in Region 8 reported exporting the smallest quantity of waste (112 thousand tons).

The five (5) States whose TSDs reported importing the most hazardous waste were New Jersey (1.1 million tons), Michigan (820 thousand tons), Nevada (650 thousand tons), Ohio (440 thousand tons), and Texas (280 thousand tons). Together the TSDs in these States accounted for 56% of the national total of waste imports. Nine (9) States reported they did not have any TSDs that imported waste in 1995. The States are Alaska, the District of Columbia, Guam, Montana, Navajo Nation, New Hampshire, Trust Territories, Virgin Islands, and Wyoming.

The States whose shippers exported the most hazardous waste were California (1.1 million tons), Ohio (330 thousand tons), Pennsylvania (280 thousand tons), Texas (240 thousand tons), and Illinois (230 thousand tons). Collectively, the exports in these five (5) States accounted for 41% of the national total of hazardous waste exports.

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<sup>1</sup>See Appendix C for information on which States are in each EPA Region.

***National Biennial RCRA Hazardous Waste Report: Based on 1995 Data***

**Exhibit 4.1 RCRA Hazardous Waste Imports and Exports, by EPA Region, 1995**

EPA REGION	IMPORTS (TONS)	EXPORTS (TONS)
1	69,745	220,322
2	1,211,589	395,747
3	298,250	523,514
4	513,227	771,012
5	1,713,944	1,109,016
6	819,492	657,774
7	314,548	207,071
8	91,832	111,882
9	734,618	1,132,275
10	155,681	173,842
CBI DATA	3,877	15,578
TOTAL	5,926,804	5,318,033

**Note:** Columns may not sum due to rounding.

Exhibit 4.2

RCRA Hazardous Waste Imports and Exports, by State, 1995

STATE	IMPORTS (TONS)	EXPORTS (TONS)
ALABAMA	124,536	127,102
ALASKA	0	3,872
ARIZONA	12,197	38,184
ARKANSAS	206,558	219,089
CALIFORNIA	73,792	1,082,408
COLORADO	39,464	70,062
CONNECTICUT	26,360	81,426
DELAWARE	1,223	19,438
DISTRICT OF COLUMBIA	0	767
FLORIDA	16,867	60,078
GEORGIA	14,092	123,385
GUAM	0	402
HAWAII	29	3,185
IDAHO	32,846	2,247
ILLINOIS	179,853	232,931
INDIANA	258,298	232,205
IOWA	1,816	51,728
KANSAS	89,496	36,795
KENTUCKY	87,682	188,344
LOUISIANA	207,501	148,087
MAINE	737	5,844
MARYLAND	45,445	91,351
MASSACHUSETTS	22,484	95,230
MICHIGAN	817,230	213,931
MINNESOTA	18,664	45,333
MISSISSIPPI	12,137	38,916
MISSOURI	191,789	100,733
MONTANA	0	7,231
NAVAJO NATION	0	185
NEBRASKA	31,447	17,814
NEVADA	648,600	6,450
NEW HAMPSHIRE	0	14,250
NEW JERSEY	1,111,244	191,726
NEW MEXICO	55	7,588
NEW YORK	100,299	161,118
NORTH CAROLINA	24,104	72,579
NORTH DAKOTA	361	2,181
OHIO	439,705	330,975
OKLAHOMA	121,115	46,626
OREGON	112,933	23,567
PENNSYLVANIA	217,703	276,868
PUERTO RICO	47	39,695
RHODE ISLAND	19,518	12,285
SOUTH CAROLINA	201,551	91,427
SOUTH DAKOTA	101	1,111
TENNESSEE	32,257	69,182
TEXAS	284,262	236,383
TRUST TERRITORIES	0	1,462
UTAH	51,907	29,642
VERMONT	646	11,288
VIRGIN ISLANDS	0	3,208
VIRGINIA	30,999	61,954
WASHINGTON	9,902	144,156
WEST VIRGINIA	2,881	73,136
WISCONSIN	194	53,641
WYOMING	0	1,655
CBI DATA	3,877	15,578
<b>TOTAL</b>	<b>5,926,804</b>	<b>5,318,033</b>

Note: Columns may not sum due to rounding.

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## **APPENDIX A**

### **BRS SYSTEM TYPE CODES**

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## BRS 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

Code    System type

### 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

### 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

## BRS SYSTEM TYPE CODES

(Continued)

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Code	System type
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### STABILIZATION

- M111 Stabilization/Chemical fixation using cementitious and/or pozzolanic materials
- M112 Other stabilization (Specify in Comments)
- M119 Stabilization - type unknown

### OTHER TREATMENT

- M121 Neutralization only
- M122 Evaporation only
- M123 Settling/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 B**

### **BRS FORM CODES**

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# BRS FORM CODES

Code	System type	Code	System type
<b>LAB PACKS</b>			
<b>LAB PACKS</b> - Lab packs of mixed wastes, chemicals, lab wastes		B205	Oil-water emulsion or mixture
B001	Lab packs of old chemicals only	B206	Waste oil
B002	Lab packs of debris only	B207	Concentrated aqueous solution of other organics
B003	Mixed lab packs	B208	Concentrated phenolics
B004	Lab packs containing acute hazardous wastes	B209	Organic paint, ink, lacquer, or varnish
B009	Other lab packs (Specify in Comments)	B210	Adhesives or epoxies
		B211	Paint thinner or petroleum distillates
		B212	Reactive or polymerizable organic liquid
		B219	Other organic liquids (Specify in Comments)
<b>LIQUIDS</b>		<b>SOLIDS</b>	
<b>INORGANIC LIQUIDS</b> - Waste that is primarily inorganic and highly fluid (e.g., aqueous), with low suspended inorganic solids and low organic content		<b>INORGANIC SOLIDS</b> - Waste that is primarily inorganic and solid, with low organic content and low-to-moderate water content; not pumpable	
B101	Aqueous waste with low solvents	B301	Soil contaminated with organics
B102	Aqueous waste with low other toxic organics	B302	Soil contaminated with inorganics only
B103	Spent acid with metals	B303	Ash, slag, or other residue from incineration of wastes
B104	Spent acid without metals	B304	Other "dry" ash, slag, or thermal residue
B105	Acidic aqueous waste	B305	"Dry" lime or metal hydroxide solids chemically "fixed"
B106	Caustic solution with metals but no cyanides	B306	"Dry" lime or metal hydroxide solids not "fixed"
B107	Caustic solution with metals and cyanides	B307	Metal scale, filings, or scrap
B108	Caustic solution with cyanides but no metals	B308	Empty or crushed metal drums or containers
B109	Spent caustic	B309	Batteries or battery parts, casings, cores
B110	Caustic aqueous waste	B310	Spent solid filters or adsorbents
B111	Aqueous waste with reactive sulfides	B311	Asbestos solids and debris
B112	Aqueous waste with other reactives (e.g., explosives)	B312	Metal-cyanide salts/chemicals
B113	Other aqueous waste with high dissolved solids	B313	Reactive cyanide salts/chemicals
B114	Other aqueous waste with low dissolved solids	B314	Reactive sulfide salts/chemicals
B115	Scrubber water	B315	Other reactive salts/chemicals
B116	Leachate	B316	Other metal salts/chemicals
B117	Waste liquid mercury	B319	Other waste inorganic solids (Specify in Comments)
B119	Other inorganic liquids (Specify in Comments)		
<b>ORGANIC LIQUIDS</b> - Waste that is primarily organic and is highly fluid, with low inorganic solids content and low-to-moderate water content		<b>ORGANIC SOLIDS</b> - Waste that is primarily organic and solid, with low-to-moderate inorganic content and water content; not pumpable	
B201	Concentrated solvent-water solution	B401	Halogenated pesticide solid
B202	Halogenated (e.g., chlorinated) solvent	B402	Nonhalogenated pesticide solid
B203	Nonhalogenated solvent	B403	Solid resins or polymerized organics
B204	Halogenated/nonhalogenated solvent mixture	B404	Spent carbon
		B405	Reactive organic solid
		B406	Empty fiber or plastic containers

## BRS FORM CODES

(Continued)

Code	System type	Code	System type
B407	Other halogenated organic solids (Specify in Comments)	B608	Sewage or other untreated biological sludge
B409	Other nonhalogenated organic solids (Specify in Comments)	B609	Other organic sludges (Specify in Comments)
<b>SLUDGES</b>		<b>GASES</b>	
<b>INORGANIC SLUDGES</b> - Waste that is primarily inorganic, with moderate-to-high water content and low organic content, and pumpable		<b>INORGANIC GASES</b> - Waste that is primarily inorganic with a low organic content and is a gas at atmospheric pressure	
B501	Lime sludge without metals	B701	Inorganic gases
B502	Lime sludge with metals/metal hydroxide sludge	<b>ORGANIC GASES</b> - Waste that is primarily organic with low-to-moderate inorganic content and is a gas at atmospheric pressure	
B503	Wastewater treatment sludge with toxic organics	B801	Organic gases
B504	Other wastewater treatment sludge		
B505	Untreated plating sludge without cyanides		
B506	Untreated plating sludge with cyanides		
B507	Other sludge with cyanides		
B508	Sludge with reactive sulfides		
B509	Sludge with other reactives		
B510	Degreasing sludge with metal scale or filings		
B511	Air pollution control device sludge (e.g., fly ash, wet scrubber sludge)		
B512	Sediment or lagoon dragout contaminated with organics		
B513	Sediment or lagoon dragout contaminated with inorganics only		
B514	Drilling mud		
B515	Asbestos slurry or sludge		
B516	Chloride or other brine sludge		
B519	Other inorganic sludges (Specify in Comments)		
<b>ORGANIC SLUDGES</b> - Waste that is primarily organic with low-to-moderate inorganic solids content and water content, and pumpable			
B601	Still bottoms of halogenated (e.g., chlorinated) solvents or other organic liquids		
B602	Still bottoms of nonhalogenated solvents or other organic liquids		
B603	Oily sludge		
B604	Organic paint or ink sludge		
B605	Reactive or polymerizable organics		
B606	Resins, tars, or tarry sludge		
B607	Biological treatment sludge		

## **APPENDIX C**

### **EPA STATE - REGION MAPPING**

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## EPA STATE - REGION MAPPING

EPA REGION	STATES IN REGION
REGION 1	Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont
REGION 2	New Jersey New York Puerto Rico Virgin Islands
REGION 3	Delaware District of Columbia Maryland Pennsylvania Virginia West Virginia
REGION 4	Alabama Florida Georgia Kentucky Mississippi North Carolina South Carolina Tennessee
REGION 5	Illinois Indiana Michigan Minnesota Ohio Wisconsin
REGION 6	Arkansas Louisiana New Mexico Oklahoma Texas
REGION 7	Iowa Kansas Missouri Nebraska
REGION 8	Colorado Montana North Dakota South Dakota Utah Wyoming
REGION 9	Arizona California Guam Hawaii Navajo Nation Nevada Trust Territories
REGION 10	Alaska Idaho Oregon Washington

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## **APPENDIX D**

### **EPA HAZARDOUS WASTE CODES**

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# EPA HAZARDOUS WASTE CODES

Code	Waste description	Code	Waste description
<b>CHARACTERISTICS OF HAZARDOUS WASTE</b>			
D001	Ignitable waste	D022	Chloroform
D002	Corrosive waste	D023	o-Cresol
D003	Reactive waste	D024	m-Cresol
D004	Arsenic	D025	p-Cresol
D005	Barium	D026	Cresol
D006	Cadmium	D027	1,4-Dichlorobenzene
D007	Chromium	D028	1,2-Dichloroethane
D008	Lead	D029	1,1-Dichloroethylene
D009	Mercury	D030	2,4-Dinitrotoluene
D010	Selenium	D031	Heptachlor (and its epoxide)
D011	Silver	D032	Hexachlorobenzene
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)	D033	Hexachlorobutadiene
D013	Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	D034	Hexachloroethane
D014	Methoxychlor (1,1,1-trichloro-2,2-bis [p-methoxyphenyl] ethane)	D035	Methyl ethyl ketone
D015	Toxaphene (C <sub>10</sub> H <sub>10</sub> Cl <sub>8</sub> , Technical chlorinated camphene, 67-69 percent chlorine)	D036	Nitrobenzene
D016	2,4-D (2,4-Dichlorophenoxyacetic acid)	D037	Pentachlorophenol
D017	2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	D038	Pyridine
D018	Benzene	D039	Tetrachloroethylene
D019	Carbon tetrachloride	D040	Trichlorethylene
D020	Chlordane	D041	2,4,5-Trichlorophenol
D021	Chlorobenzene	D042	2,4,6-Trichlorophenol
		D043	Vinyl chloride

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
<b>HAZARDOUS WASTE FROM NONSPECIFIC SOURCES</b>			
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten 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.	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 ten 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.
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 ten 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.	F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten 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.
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 ten 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.	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.

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
F010	Quenching bath residues from oil baths from metal heat treating operations in which cyanides are used in the process.	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 process) 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.)
F011	Spent cyanide solutions from slat bath pot cleaning from metal heat treating operations.		
F012	Quenching wastewater 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, except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	F024	Process wastes including, but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to, and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludge, spent catalysts, and wastes listed in Sections 261.31. or 261.32)
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.)	F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to, and including five, with varying amounts and positions of chlorine substitution.
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.	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.

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
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.)	F035	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA hazardous waste Nos. F020, F021, F022, F023, F026, and F027.	F037	Petroleum refinery primary oil/water/solids separation sludge - Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and storm water units receiving dry weather flow. Sludges generated in storm water units that do not receive dry weather flow, sludges generated in aggressive biological treatment units as defined in Section 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units), and K051 wastes are exempted from this listing.
F032	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use, or have previously used, chlorophenolic formulations [except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with Section 261.35 (i.e., the newly promulgated equipment cleaning or replacement standards), and where the generator does not resume or initiate use of chlorophenolic formulations]. (This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.)		
F034	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge - Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated in aggressive biological treatment units as defined in Section 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units), and F037, K048, and K051 wastes are exempted from this listing.	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.
F039	Leachate resulting from the treatment, storage, or disposal of wastes classified by more than one waste code under Subpart D, or from a mixture of wastes classified under Subparts C and D of this part. (Leachate resulting from the management of one or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its hazardous waste code(s): F020, F021, F022, F023, F026, F027, and/or F028.)	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.
<b>HAZARDOUS WASTE FROM SPECIFIC SOURCES</b>			
K001	Bottom sediment sludge from the treatment of wastewaters 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.		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.
K021	Aqueous spent antimony catalyst waste from fluoromethane production.	K035	Wastewater treatment sludges generated in the production of creosote.
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	K037	Wastewater treatment sludges from the production of disulfoton.
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	K038	Wastewater from the washing and stripping of phorate production.
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.
K026	Stripping still tails from the production of methyl ethyl pyridines.	K040	Wastewater treatment sludge from the production of phorate.
K027	Centrifuge and distillation residues from toluene diisocyanate production.	K041	Wastewater treatment sludge from the production of toxaphene.
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.	K043	2,6-dichlorophenol waste from the production of 2,4-D.
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	K044	Wastewater treatment sludges from the manufacturing and processing of explosives.
K031	By-product salts generated in the production of MSMA and cacodylic acid.	K045	Spent carbon from the treatment of wastewater containing explosives.
K032	Wastewater treatment sludge from the production of chlordane.	K046	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	K047	Pink/red water from TNT operations.
		K048	Dissolved air flotation (DAF) float from the petroleum refining industry.

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
K049	Slop oil emulsion solids from the petroleum refining industry.	K083	Distillation bottoms from aniline production.
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
K051	API separator sludge from the petroleum refining industry.	K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.
K052	Tank bottoms (leaded) from the petroleum refining industry.	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.
K060	Ammonia still lime sludge from coking operations.	K087	Decanter tank tar sludge from coking operations.
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	K088	Spent potliners from primary aluminum reduction.
K062	Spent pickle liquor from steel finishing operations of plants that produce iron or steel.	K090	Emission control dust or sludge from ferrochromiumsilicon production.
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.	K091	Emission control dust or sludge from ferrochromium production.
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.
K066	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.	K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.
K069	Emission control dust/sludge from secondary lead smelting.	K095	Distillation bottoms from the production of 1,1,1-trichloroethane.
K071	Brine purification muds from the mercury cell process in chlorine production, in which separately prepurified brine is not used.	K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
K098	Untreated process wastewater from the production of toxaphene.	K109	Spent filter cartridges from product purification from the product of 1,1-dimethylhydrazine from carboxylic acid hydrazides.
K099	Untreated wastewater from the production of 2,4-D.	K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine from carboxylic acid hydrazides.
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	K113	Condensed liquid light ends from purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene.
K103	Process residues from aniline extraction from the production of aniline.	K114	Vicinals from the purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene.
K104	Combined wastewaters generated from nitrobenzene/aniline production.	K115	Heavy ends from purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine from carboxylic acid hydrazides.		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.
K126	Baghouse dust and floor sweepings in milling and packaging operations from production or formulation of ethylenebisdithiocarbamic acid and its salts.	K147	Tar storage residues from coal tar refining.
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	K148	Residues from coal tar distillation, including, but not limited to, still bottoms.
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	K149	Distillation bottoms from the production of alpha (or methyl-) chlorinated tolunes, ring-chlorinated tolunes, benzoyl chlorides, and compounds with mixtures of these functional groups. [This waste does not include still bottoms from the distillation of benzoyl chloride]
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	K150	Organic residues excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha (or methyl-) chlorinated tolunes, benzoyl chlorides, and compounds with mixtures of these functional groups.
K141	Process residues from the recovery of coal tar, including, but not limited to, tar collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank sludge from coking operations).	K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha (or methyl-) chlorinated tolunes, benzoyl chlorides, and compounds with mixtures of these functional groups.
K142	Tank storage residues from the production of coke from coal or from the recovery of coke by-products from coal.		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes.	P002	Acetamide, N-(aminothioxomethyl)-
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes.	P003	2-Propenal
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes.	P003	Acrolein
K159	Organics from the treatment of thiocarbamate wastes.	P004	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)-
K160	Solids (including filter wastes, separation solids, and spent catalysts) from the production of thiocarbamates and solids from the treatment of thiocarbamate wastes.	P004	Aldrin
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126).	P005	2-Propen-1-ol
<b>DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUALS, AND SPILL RESIDUES THEREOF—ACUTE HAZARDOUS WASTE</b>		P005	Allyl alcohol
<i>(AN ALPHABETIZED LISTING CAN BE FOUND AT 40 CFR 261.33.)</i>		P006	Aluminum phosphide (R,T)
P001	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%	P007	3(2H)-Isoxazolone, 5-(aminomethyl)-
P001	Warfarin, & salts, when present at concentrations greater than 0.3%	P007	5-(Aminomethyl)-3-isoxazolol
P002	1-Acetyl-2-thiourea	P008	4-Aminopyridine
		P008	4-Pyridinamine
		P009	Ammonium picrate (R)
		P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)
		P010	Arsenic acid H <sub>3</sub> AsO <sub>4</sub>
		P011	Arsenic oxide As <sub>2</sub> O <sub>3</sub>
		P011	Arsenic pentoxide
		P012	Arsenic oxide As <sub>2</sub> O <sub>3</sub>
		P012	Arsenic trioxide
		P013	Barium cyanide
		P014	Benzenethiol
		P014	Thiophenol
		P015	Beryllium

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
P016	Dichloromethyl ether	P031	Cyanogen
P016	Methane, oxybis[chloro-	P031	Ethanedinitrile
P017	2-Propanone, 1-bromo-	P033	Cyanogen chloride
P017	Bromoacetone	P033	Cyanogen chloride (CN)Cl
P018	Brucine	P034	2-Cyclohexyl-4,6-dinitrophenol
P018	Strychnidin-10-one, 2,3-dimethoxy-	P034	Phenol, 2-cyclohexyl-4,6-dinitro-
P020	Dinoseb	P036	Arsonous dichloride, phenyl-
P020	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	P036	Dichlorophenylarsine
P021	Calcium cyanide	P037	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2aalpha, 3beta, 6beta, 6aalpha, 7beta, 7aalpha)-
P021	Calcium cyanide Ca(CN) <sub>2</sub>	P037	Dieldrin
P022	Carbon disulfide	P038	Arsine, diethyl-
P023	Acetaldehyde, chloro-	P038	Diethylarsine
P023	Chloroacetaldehyde	P039	Disulfoton
P024	Benzenamine, 4-chloro-	P039	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P024	p-Chloraniline	P040	O,O-Diethyl O-pyrazinyl phosphorothioate
P026	1-(o-Chlorophenyl)thiourea	P040	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P026	Thiourea, (2-chlorophenyl)-	P041	Diethyl-p-nitrophenyl phosphate
P027	3-Chloropropionitrile	P041	Phosphoric acid, diethyl 4-nitrophenyl ester
P027	Propanenitrile, 3-chloro-	P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P028	Benzene, (chloromethyl)-	P042	Epinephrine
P028	Benzyl chloride	P043	Diisopropylfluorophosphate (DFP)
P029	Copper cyanide		
P029	Copper cyanide Cu(CN)		
P030	Cyanides (soluble cyanide salts), not otherwise specified		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
P043	Phosphorofluoridic acid, bis(1-methylethyl) ester	P054	Ethyleneimine
P044	Dimethoate	P056	Fluorine
P044	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	P057	Acetamide, 2-fluoro-
P045	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino]carbonyl] oxime	P057	Fluoroacetamide
P045	Thiofanox	P058	Acetic acid, fluoro-, sodium salt
P046	alpha, alpha-Dimethylphenethylamine	P058	Fluoroacetic acid, sodium salt
P046	Benzeneethanamine, alpha, alpha-dimethyl-	P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P047	4,6-Dinitro-o-cresol, & salts	P059	Heptachlor
P047	Phenol, 2-methyl-4,6-dinitro-, & salts	P060	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4abeta, 5beta, 8beta, 8abeta)-
P048	2,4-Dinitrophenol	P060	Isodrin
P048	Phenol, 2,4-dinitro-	P062	Hexaethyl tetraphosphate
P049	Dithiobiuret	P062	Tetraphosphoric acid, hexaethyl ester
P049	Thioimidodicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> NH	P063	Hydrocyanic acid
P050	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	P063	Hydrogen cyanide
P050	Endosulfan	P064	Methane, isocyanato-
P051	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2abeta, 3alpha, 6alpha, 6abeta, 7beta, 7aalpha)- & metabolites	P064	Methyl isocyanate
P051	Endrin	P065	Fulminic acid, mercury(2+) salt (R,T)
P051	Endrin, & metabolites	P065	Mercury fulminate (R,T)
P054	Aziridine	P066	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester
		P066	Methomyl
		P067	1,2-Propylenimine
		P067	Aziridine, 2-methyl-

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
P068	Hydrazine, methyl-	P081	Nitroglycerine (R)
P068	Methyl hydrazine	P082	Methanimine, N-methyl-N-nitroso-
P069	2-Methylactonitrile	P082	N-Nitrosodimethylamine
P069	Propanenitrile, 2-hydroxy-2-methyl-	P084	N-Nitrosomethylvinylamine
P070	Aldicarb	P084	Vinylamine, N-methyl-N-nitroso-
P070	Propanal, 2-methyl-2-(methylthio)-, O- [(methylamino)carbonyl]oxime	P085	Diphosphoramidate, octamethyl-
P071	Methyl parathion	P085	Octamethylpyrophosphoramidate
P071	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester	P087	Osmium oxide OsO <sub>4</sub> , (T-4)-
P072	alpha-Naphthylthiourea	P087	Osmium tetroxide
P072	Thiourea, 1-naphthalenyl-	P088	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P073	Nickel carbonyl	P088	Endothall
P073	Nickel carbonyl Ni(CO) <sub>4</sub> , (T-4)-	P089	Parathion
P074	Nickel cyanide	P089	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester
P074	Nickel cyanide Ni(CN) <sub>2</sub>	P092	Mercury, (acetato-O)phenyl-
P075	Nicotine, & salts	P092	Phenylmercury acetate
P075	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts	P093	Phenylthiourea
P076	Nitric oxide	P093	Thiourea, phenyl-
P076	Nitrogen oxide NO	P094	Phorate
P077	Benzenamine, 4-nitro-	P094	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P077	p-Nitroaniline	P095	Carbonic dichloride
P078	Nitrogen dioxide	P095	Phosgene
P078	Nitrogen oxide NO <sub>2</sub>	P096	Hydrogen phosphide
P081	1,2,3-Propanetriol, trinitrate (R)	P096	Phosphine

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
P097	Famphur	P111	Tetraethyl pyrophosphate
P097	Phosphorothioic acid O-[4- [(dimethylamino)sulfonyl]phenyl] O,O- dimethyl ester	P112	Methane, tetranitro- (R)
		P112	Tetranitromethane (R)
P098	Potassium cyanide	P113	Thallic oxide
P098	Potassium cyanide K(CN)	P113	Thallium oxide $Tl_2O_3$
P099	Argentate (1-), bis(cyano-C)-, potassium	P114	Selenious acid, dithallium (1+) salt
P099	Potassium silver cyanide	P114	Thallium(I) selenite
P101	Ethyl cyanide	P115	Sulfuric acid, dithallium (1+) salt
P101	Propanenitrile	P115	Thallium(I) sulfate
P102	2-Propyn-1-ol	P116	Hydrazinecarbothioamide
P102	Propargyl alcohol	P116	Thiosemicarbazide
P103	Selenourea	P118	Methanethiol, trichloro-
P104	Silver cyanide	P118	Trichloromethanethiol
P104	Silver cyanide Ag(CN)	P119	Ammonium vanadate
P105	Sodium azide	P119	Vanadic acid, ammonium salt
P106	Sodium cyanide	P120	Vanadium oxide $V_2O_5$
P106	Sodium cyanide Na(CN)	P120	Vanadium pentoxide
P107	Strontium sulfide SrS	P121	Zinc cyanide
P108	Strychnidin-10-one, & salts	P121	Zinc cyanide $Zn(CN)_2$
P108	Strychnine, & salts	P122	Zinc phosphide $Zn_3P_2$ , when present at concentrations greater than 10% (R,T)
P109	Tetraethyldithiopyrophosphate	P123	Toxaphene
P109	Thiodiphosphoric acid, tetraethyl ester	P127	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P110	Plumbane, tetraethyl-	P127	Carbofuran
P110	Tetraethyl lead		
P111	Diphosphoric acid, tetraethyl ester		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	P197	Formparanate
P185	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)-carbonyl]oxime	P197	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[[(methylamino)carbonyl]oxy]phenyl]-
P185	Tirpate	P198	Methanimidamide, N,N-dimethyl-N'-[3-[[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P188	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)	P198	Formetanate hydrochloride
P188	Physostigmine salicylate	P199	Methiocarb
P189	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl - 7-benzofuranyl ester	P199	Mexacarbate
P189	Carbosulfan	P199	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P190	Carbamic acid, methyl-, 3-methylphenyl ester	P201	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P190	Metolcarb	P201	Promecarb
P191	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H- pyrazol-3-yl ester	P202	m-Cumenyl methylcarbamate
P191	Dimetilan	P202	3-Isopropylphenyl N-methylcarbamate
P192	Isolan	P202	Phenol, 3-(1-methylethyl)-, methyl carbamate
P192	Carbamic acid, dimethyl-, 3-methyl-(1-methylethyl)-1H- pyrazol-5-yl ester	P203	Aldicarb sulfone
P194	Ethanimidothioc acid, 2-(dimethylamino)-N-[[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester	P203	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O- [[(methylamino)carbonyl] oxime
P194	Oxamyl	P204	Physostigmine
P196	Manganese dimethyldithiocarbamate	P204	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-methylcarbamate (ester), (3aS-cis)-
P196	Manganese, bis(dimethylcarbamo-dithioato-S,S')-,	P205	Zinc, bis(dimethylcarbamo-dithioato-S,S')-,
		P205	Ziram

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
<b>DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUES, AND SPILL RESIDUES THEREOF—TOXIC WASTES</b>		U005	Acetamide, N-9H-fluoren-2-yl
<i>(AN ALPHABETIZED LISTING CAN BE FOUND AT 40 CFR 261.33.)</i>		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	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-, [1aS-(1aalpha, 8beta, 8aalpha, 8balpha)]-
		U010	Mitomycin C
		U011	1H-1,2,4-Triazol-3-amine
		U011	Amitrole
		U012	Aniline (I,T)
		U012	Benzenamine (I,T)
		U014	Auramine
		U014	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl]-
		U015	Azaserine
		U015	L-Serine, diazoacetate (ester)
		U016	Benz[c]acridine
		U017	Benzal chloride
		U017	Benzene, (dichloromethyl)-
		U018	Benz[a]anthracene
U001	Acetaldehyde (I)		
U001	Ethanal (I)		
U002	2-Propanone (I)		
U002	Acetone (I)		
U003	Acetonitrile (I,T)		
U004	Acetophenone		
U004	Ethanone, 1-phenyl-		
U005	2-Acetylaminofluorene		
See F027	{ 2,3,4,6-Tetrachlorophenol , , 2,4,5-T , , 2,4,5-Trichlorophenol , , 2,4,6-Trichlorophenol , , Acetic acid, (2,4,5-trichlorophenoxy)- , , Pentachlorophenol } Phenol, 2,3,4,6-tetrachloro- , , Phenol, 2,4,5-trichloro- , , Phenol, 2,4,6-trichloro- , , Phenol, pentachloro- , , Propanoic acid, 2-(2,4,5-trichlorophenoxy)- , , Silvex (2,4,5-TP)		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U019	Benzene (I,T)	U032	Calcium chromate
U020	Benzenesulfonic acid chloride (C,R)	U032	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calcium salt
U020	Benzenesulfonyl chloride (C,R)	U033	Carbon oxyfluoride (R,T)
U021	[1,1'-Biphenyl]-4,4'-diamine	U033	Carbonic difluoride
U021	Benzidine	U034	Acetaldehyde, trichloro-
U022	Benzo[a]pyrene	U034	Chloral
U023	Benzene, (trichloromethyl)-	U035	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U023	Benzotrichloride (C,R,T)	U035	Chlorambucil
U024	Dichloromethoxy ethane	U036	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U024	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	U036	Chlordane, alpha & gamma isomers
U025	Dichloroethyl ether	U037	Benzene, chloro-
U025	Ethane, 1,1'-oxybis[2-chloro-	U037	Chlorobenzene
U026	Chlornaphazin	U038	Benzenecetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U026	Naphthalenamine, N,N'-bis(2-chloroethyl)-	U038	Chlorobenzilate
U027	Dichloroisopropyl ether	U039	p-Chloro-m-cresol
U027	Propane, 2,2'-oxybis[2-chloro-	U039	Phenol, 4-chloro-3-methyl-
U028	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	U041	Epichlorohydrin
U028	Diethylhexyl phthalate	U041	Oxirane, (chloromethyl)-
U029	Methane, bromo-	U042	2-Chloroethyl vinyl ether
U029	Methyl bromide	U042	Ethene, (2-chloroethoxy)-
U030	4-Bromophenyl phenyl ether	U043	Ethene, chloro-
U030	Benzene, 1-bromo-4-phenoxy-	U043	Vinyl chloride
U031	1-Butanol (I)	U044	Chloroform
U031	n-Butyl alcohol (I)	U044	Methane, trichloro-

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U045	Methane, chloro- (I,T)	U059	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U045	Methyl chloride (I,T)		
U046	Chloromethyl methyl ether	U059	Daunomycin
U046	Methane, chloromethoxy-	U060	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U047	beta-Chloronaphthalene		
U047	Naphthalene, 2-chloro-	U060	DDD
U048	o-Chlorophenol	U061	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U048	Phenol, 2-chloro-		
U049	4-Chloro-o-toluidine, hydrochloride	U061	DDT
U049	Benzenamine, 4-chloro-2-methyl-, hydrochloride	U062	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U050	Chrysene	U062	Diallate
U051	Creosote	U063	Dibenz[a,h]anthracene
U052	Cresol (Cresylic acid)	U064	Benzo[rst]pentaphene
U052	Phenol, methyl-	U064	Dibenzo[a,i]pyrene
U053	2-Butenal	U066	1,2-Dibromo-3-chloropropane
U053	Crotonaldehyde	U066	Propane, 1,2-dibromo-3-chloro-
U055	Benzene, (1-methylethyl)- (I)	U067	Ethane, 1,2-dibromo-
U055	Cumene (I)	U067	Ethylene dibromide
U056	Benzene, hexahydro- (I)	U068	Methane, dibromo-
U056	Cyclohexane (I)	U068	Methylene bromide
U057	Cyclohexanone (I)	U069	1,2-Benzenedicarboxylic acid, dibutyl ester
U058	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	U069	Dibutyl phthalate
U058	Cyclophosphamide	U070	Benzene, 1,2-dichloro-
		U070	o-Dichlorobenzene
		U071	Benzene, 1,3-dichloro-

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U071	m-Dichlorobenzene	U083	Propylene dichloride
U072	Benzene, 1,4-dichloro-	U084	1,3-Dichloropropene
U072	p-Dichlorobenzene	U084	1-Propene, 1,3-dichloro-
U073	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	U085	1,2:3,4-Diepoxybutane (I,T)
U073	3,3'-Dichlorobenzidine	U085	2,2'-Bioxirane
U074	1,4-Dichloro-2-butene (I,T)	U086	Hydrazine, 1,2-diethyl-
U074	2-Butene, 1,4-dichloro- (I,T)	U086	N,N'-Diethylhydrazine
U075	Dichlorodifluoromethane	U087	O,O-Diethyl S-methyl dithiophosphate
U075	Methane, dichlorodifluoro-	U087	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U076	Ethane, 1,1-dichloro-	U088	1,2-Benzenedicarboxylic acid, diethyl ester
U076	Ethylidene dichloride	U088	Diethyl phthalate
U077	Ethane, 1,2-dichloro-	U089	Diethylstilbesterol
U077	Ethylene dichloride	U089	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis, (E)-
U078	1,1-Dichloroethylene	U090	1,3-Benzodioxole, 5-propyl-
U078	Ethene, 1,1-dichloro-	U090	Dihydrosafrole
U079	1,2-Dichloroethylene	U091	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U079	Ethene, 1,2-dichloro-, (E)-	U091	3,3'-Dimethoxybenzidine
U080	Methane, dichloro-	U092	Dimethylamine (I)
U080	Methylene chloride	U092	Methanamine, N-methyl- (I)
U081	2,4-Dichlorophenol	U093	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U081	Phenol, 2,4-dichloro-	U093	p-Dimethylaminoazobenzene
U082	2,6-Dichlorophenol	U094	7,12-Dimethylbenz[a]anthracene
U082	Phenol, 2,6-dichloro-	U094	Benz[a]anthracene, 7,12-dimethyl-
U083	Propane, 1,2-dichloro-		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U095	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	U108	1,4-Dioxane
U095	3,3'-Dimethylbenzidine	U109	1,2-Diphenylhydrazine
U096	alpha,alpha-Dimethylbenzylhydroperoxide (R)	U109	Hydrazine, 1,2-diphenyl-
U096	Hydroperoxide, 1-methyl-1-phenylethyl- (R)	U110	1-Propanimine, N-propyl-(I)
U097	Carbamic chloride, dimethyl-	U110	Dipropylamine (I)
U097	Dimethylcarbamoyl chloride	U111	1-Propanamine, N-nitroso-N-propyl-
U098	1,1-Dimethylhydrazine	U111	Di-n-propylnitrosamine
U098	Hydrazine, 1,1-dimethyl-	U112	Acetic acid, ethyl ester (I)
U099	1,2-Dimethylhydrazine	U112	Ethyl acetate (I)
U099	Hydrazine, 1,2-diphenyl-	U113	2-Propenoic acid, ethyl ester (I)
U101	2,4-Dimethylphenol	U113	Ethyl acrylate (I)
U101	Phenol, 2,4-dimethyl-	U114	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U102	1,2-Benzenedicarboxylic acid, dimethyl ester	U114	Ethylenebisdithiocarbamic acid, salts & esters
U102	Dimethyl phthalate	U115	Ethylene oxide (I,T)
U103	Dimethyl sulfate	U115	Oxirane (I,T)
U103	Sulfuric acid, dimethyl ester	U116	2-Imidazolidinethione
U105	2,4-Dinitrotoluene	U116	Ethylenethiourea
U105	Benzene, 1-methyl-2,4-dinitro-	U117	Ethane, 1,1'-oxybis-(I)
U106	2,6-Dinitrotoluene	U117	Ethyl ether (I)
U106	Benzene, 2-methyl-1,3-dinitro-	U118	2-Propenoic acid, 2-methyl-, ethyl ester
U107	1,2-Benzenedicarboxylic acid, dioctyl ester	U118	Ethyl methacrylate
U107	Di-n-octyl phthalate	U119	Ethyl methanesulfonate
U108	1,4-Diethyleneoxide	U119	Methanesulfonic acid, ethyl ester
		U120	Fluoranthene

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U121	Methane, trichlorofluoro-	U134	Hydrofluoric acid (C,T)
U121	Trichloromonofluoromethane	U134	Hydrogen fluoride (C,T)
U122	Formaldehyde	U135	Hydrogen sulfide
U123	Formic acid (C,T)	U135	Hydrogen sulfide H <sub>2</sub> S
U124	Furan (I)	U136	Arsinic acid, dimethyl-
U124	Furfuran (I)	U136	Cacodylic acid
U125	2-Furancarboxaldehyde (I)	U137	Indeno[1,2,3-cd]pyrene
U125	Furfural (I)	U138	Methane, iodo-
U126	Glycidylaldehyde	U138	Methyl iodide
U126	Oxiranecarboxyaldehyde	U140	1-Propanol, 2-methyl- (I,T)
U127	Benzene, hexachloro-	U140	Isobutyl alcohol (I,T)
U127	Hexachlorobenzene	U141	1,3-Benzodioxole, 5-(1-propenyl)-
U128	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	U141	Isosafrole
U128	Hexachlorobutadiene	U142	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U129	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha, 2alpha, 3beta, 4alpha, 5alpha, 6beta)-	U142	Kepone
U129	Lindane	U143	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*), 7aalpha]]-
U130	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	U143	Lasiocarpine
U130	Hexachlorocyclopentadiene	U144	Acetic acid, lead(2+) salt
U131	Ethane, hexachloro-	U144	Lead acetate
U131	Hexachloroethane	U145	Lead phosphate
U132	Hexachlorophene	U145	Phosphoric acid, lead(2+) salt (2:3)
U132	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	U146	Lead subacetate
U133	Hydrazine (R,T)		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U146	Lead, bis(acetato-O)tetrahydroxytri-	U158	Benzenamine, 4,4'-methylenebis[2-chloro-
U147	2,5-Furandione	U159	2-Butanone (I,T)
U147	Maleic anhydride	U159	Methyl ethyl ketone (MEK) (I,T)
U148	3,6-Pyridazinedione, 1,2-dihydro-	U160	2-Butanone, peroxide (R,T)
U148	Maleic hydrazide	U160	Methyl ethyl ketone peroxide (R,T)
U149	Malononitrile	U161	4-Methyl-2-pentanone (I)
U149	Propanedinitrile	U161	Methyl isobutyl ketone (I)
U150	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-	U161	Pentanol, 4-methyl-
U150	Melphalan	U162	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U151	Mercury	U162	Methyl methacrylate (I,T)
U152	2-Propenenitrile, 2-methyl- (I,T)	U163	Guanidine, N-methyl-N'-nitro-N-nitroso-
U152	Methacrylonitrile (I,T)	U163	MNNG
U153	Methanethiol (I,T)	U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U153	Thiomethanol (I,T)	U164	Methylthiouracil
U154	Methanol (I)	U165	Naphthalene
U154	Methyl alcohol (I)	U166	1,4-Naphthalenedione
U155	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	U166	1,4-Naphthoquinone
U155	Methapyrilene	U167	1-Napthalenamine
U156	Carbonochloridic acid, methyl ester, (I,T)	U167	alpha-Naphthylamine
U156	Methyl chlorocarbonate (I,T)	U168	2-Napthalenamine
U157	3-Methylcholanthrene	U168	beta-Naphthylamine
U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	U169	Benzene, nitro-
U158	4,4'-Methylenebis(2-chloroaniline)	U169	Nitrobenzene (I,T)
		U170	p-Nitrophenol (I,T)

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U170	Phenol, 4-nitro-	U184	Ethane, pentachloro-
U171	2-Nitropropane (I,T)	U184	Pentachloroethane
U171	Propane, 2-nitro- (I,T)	U185	Benzene, pentachloronitro-
U172	1-Butanamine, N-butyl-N-nitroso-	U185	Pentachloronitrobenzene (PCNB)
U172	N-Nitrosodi-n-butylamine	U186	1,3-Pentadiene (I)
U173	Ethanol, 2,2'-(nitrosoimino)bis-	U186	1-Methylbutadiene (I)
U173	N-Nitrosodiethanolamine	U187	Acetamide, N-(4-ethoxyphenyl)-
U174	Ethanamine, N-ethyl-N-nitroso-	U187	Phenacetin
U174	N-Nitrosodiethylamine	U188	Phenol
U176	N-Nitroso-N-ethylurea	U189	Phosphorus sulfide (R)
U176	Urea, N-ethyl-N-nitroso-	U189	Sulfur phosphide (R)
U177	N-Nitroso-N-methylurea	U190	1,3-Isobenzofurandione
U177	Urea, N-methyl-N-nitroso-	U190	Phthalic anhydride
U178	Carbamic acid, methylnitroso-, ethyl ester	U191	2-Picoline
U178	N-Nitroso-N-methylurethane	U191	Pyridine, 2-methyl-
U179	N-Nitrosopiperidine	U192	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U179	Piperidine, 1-nitroso-	U192	Pronamide
U180	N-Nitrosopyrrolidine	U193	1,2-Oxathiolane, 2,2-dioxide
U180	Pyrrolidine, 1-nitroso-	U193	1,3-Propane sultone
U181	5-Nitro-o-toluidine	U194	1-Propanamine (I,T)
U181	Benzenamine, 2-methyl-5-nitro	U194	n-Propylamine (I,T)
U182	1,3,5-Trioxane, 2,4,6-trimethyl-	U196	Pyridine
U182	Paraldehyde	U197	2,5-Cyclohexadiene-1,4-dione
U183	Benzene, pentachloro-	U197	p-Benzoquinone
U183	Pentachlorobenzene		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U200	Reserpine	U210	Tetrachloroethylene
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta, 16beta, 17alpha, 18beta, 20alpha)-	U211	Carbon tetrachloride
U201	1,3-Benzenediol	U211	Methane, tetrachloro-
U201	Resorcinol	U213	Furan, tetrahydro-(I)
U202	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts	U213	Tetrahydrofuran (I)
U202	Saccharin, & salts	U214	Acetic acid, thallium(1+) salt
U203	1,3-Benzodioxole, 5-(2-propenyl)-	U214	Thallium(I) acetate
U203	Safrole	U215	Carbonic acid, dithallium(1+) salt
U204	Selenious acid	U215	Thallium(I) carbonate
U204	Selenium dioxide	U216	Thallium chloride TlCl
U205	Selenium sulfide	U216	Thallium(I) chloride
U205	Selenium sulfide SeS <sub>2</sub> (R,T)	U217	Nitric acid, thallium(1+) salt
U206	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)-carbonyl]amino]-	U217	Thallium(I) nitrate
U206	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-,D-	U218	Ethanethioamide
U206	Streptozotocin	U218	Thioacetamide
U207	1,2,4,5-Tetrachlorobenzene	U219	Thiourea
U207	Benzene, 1,2,4,5-tetrachloro-	U220	Benzene, methyl-
U208	1,1,1,2-Tetrachloroethane	U220	Toluene
U208	Ethane, 1,1,1,2-tetrachloro-	U221	Benzenediamine, ar-methyl-
U209	1,1,2,2-Tetrachloroethane	U221	Toluenediamine
U209	Ethane, 1,1,2,2-tetrachloro-	U222	Benzenamine, 2-methyl-, hydrochloride
U210	Ethene, tetrachloro-	U222	o-Toluidine hydrochloride
		U223	Benzene, 1,3-diisocyanatomethyl- (R,T)
		U223	Toluene diisocyanate (R,T)
		U225	Bromoform

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U225	Methane, tribromo-	U240	Dichlorophenoxyacetic acid 2,4-D
U226	Ethane, 1,1,1-trichloro-	U243	1-Propene, 1,1,2,3,3,3-hexachloro-
U226	Methyl chloroform	U243	Hexachloropropene
U227	1,1,2-Trichloroethane	U244	Thioperoxydicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> S <sub>2</sub> , tetramethyl-
U227	Ethane, 1,1,2-trichloro-	U244	Thiram
U228	Ethene, trichloro-	U246	Cyanogen bromide (CN)Br
U228	Trichloroethylene	U247	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U234	1,3,5-Trinitrobenzene (R,T)	U247	Methoxychlor
U234	Benzene, 1,3,5-trinitro-	U248	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U235	1-Propanol, 2,3-dibromo-, phosphate (3:1)	U248	Warfarin, & salts, when present at concentrations of 0.3% or less
U235	Tris(2,3,-dibromopropyl) phosphate	U249	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at concentrations of 10% or less
U236	2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt	U271	Benomyl
U236	Trypan blue	U271	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester
U237	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	U277	Sulfallate
U237	Uracil mustard	U277	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester
U238	Carbamic acid, ethyl ester	U278	Bendiocarb
U238	Ethyl carbamate (urethane)	U278	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U239	Benzene, dimethyl- (I,T)	U279	Carbaryl
U239	Xylene (I)	U279	1-Naphthalenol, methylcarbamate
U240	2,4-D, salts & esters	U280	Barban
U240	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U280	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	U376	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothiosetenious acid
U328	Benzenamine, 2-methyl-	U376	Selenium, tetrakis (dimethyldithiocarbamate)
U328	o-Toluidine	U377	Carbamodithioic acid, methyl-, monopotassium salt
U353	Benzenamine, 4-methyl-	U377	Potassium n-methyldithiocarbamate
U353	p-Toluidine	U378	Carbamodithioic acid, (hydroxymethyl) methyl-, monopotassium salt
U359	Ethanol, 2-ethoxy-	U378	Potassium n-hydroxymethyl- n-methyldithiocarbamate
U359	Ethylene glycol monoethyl ether	U379	Sodium dibutyldithiocarbamate
U364	Bendiocarb phenol	U379	Carbamodithioic acid, dibutyl, sodium salt
U364	1,3-Benzodioxol-4-ol, 2,2-dimethyl-	U381	Carbamodithioic acid, diethyl-, sodium salt
U365	H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	U381	Sodium diethyldithiocarbamate
U365	Molinate	U382	Carbamodithioic acid, dimethyl-, sodium salt
U366	Dazomet	U382	Sodium dimethyldithiocarbamate
U366	2H-1,3,5-Thiadiazine- 2-thione, tetrahydro-3,5-dimethyl-	U383	Carbamodithioic acid, dimethyl, potassium salt
U367	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	U383	Potassium dimethyldithiocarbamate
U367	Carbofuran phenol	U384	Carbamodithioic acid, methyl-, monosodium salt
U372	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	U384	Metam Sodium
U372	Carbendazim	U385	Carbamothioic acid, dipropyl-, S-propyl ester
U373	Carbamic acid, phenyl-, 1-methylethyl ester	U386	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester
U373	Propham	U386	Cycloate
U375	Carbamic acid, butyl-, 3-iodo-2-propynyl ester		
U375	3-Iodo-2-propynyl n-butylcarbamate		

# EPA HAZARDOUS WASTE CODES

(Continued)

Code	Waste description	Code	Waste description
U387	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	U401	Tetramethylthiuram monosulfide
U387	Prosulfocarb	U402	Tetrabutylthiuram disulfide
U389	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	U402	Thioperoxydicarbonic diamide, tetrabutyl
U389	Triallate	U403	Disulfiram
U390	Carbamothioic acid, dipropyl-, S-ethyl ester	U403	Thioperoxydicarbonic diamide, tetraethyl
U390	EPTC	U404	Ethanamine, N,N-diethyl-
U391	Carbamothioic acid, butylethyl-, S-propyl ester	U404	Triethylamine
U391	Pebulate	U407	Ethyl Ziram
U392	Butylate	U409	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester
U392	Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester	U409	Thiophanate-methyl
U393	Copper, bis(dimethylcarbamodithioato-S,S')-	U410	Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U393	Copper dimethyldithiocarbamate	U410	Thiodicarb
U394	A2213	U411	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U394	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	U411	Propoxur
U395	Diethylene glycol, dicarbamate		
U395	Ethanol, 2,2'-oxybis-, dicarbamate		
U396	Ferbam		
U396	Iron, tris(dimethylcarbamodithioato-S,S')-,		
U400	Bis(pentamethylene)thiuram tetrasulfide		
U400	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-		
U401	Bis(dimethylthiocarbamoyl) sulfide		

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