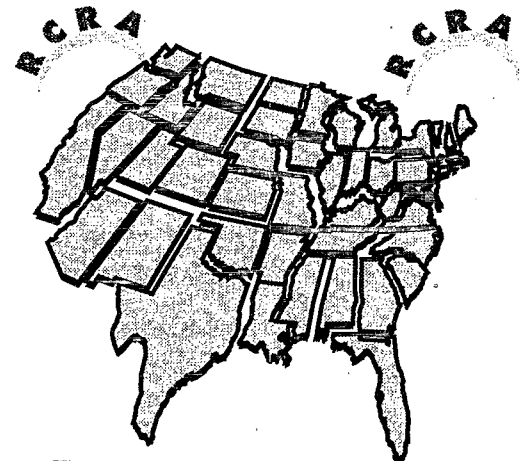
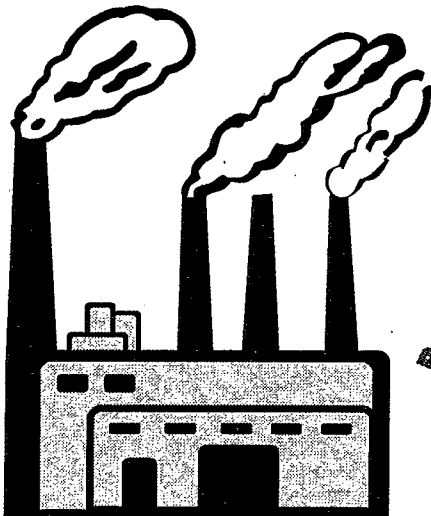
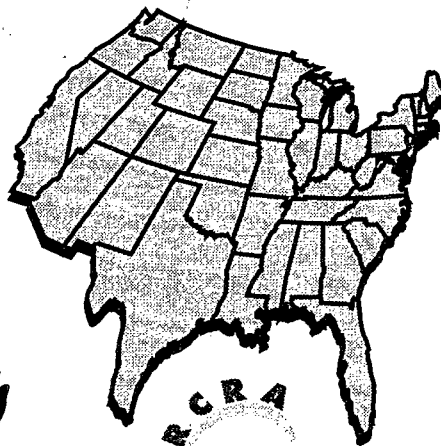
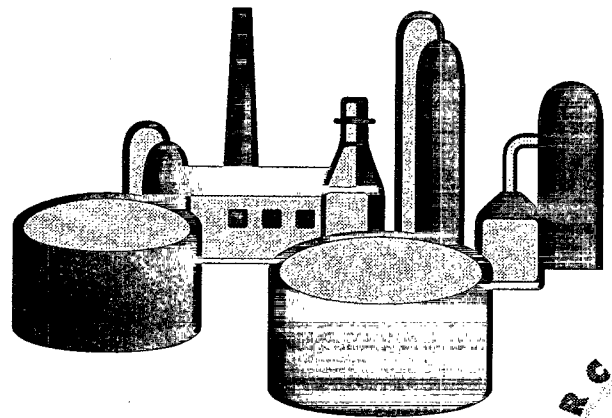
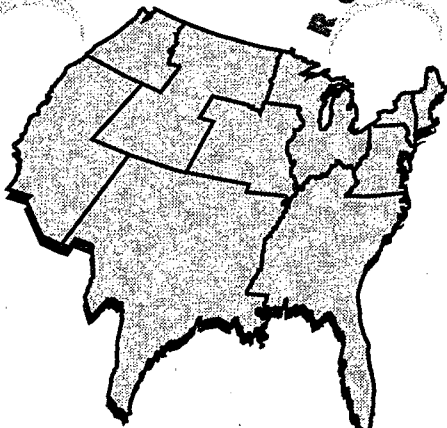


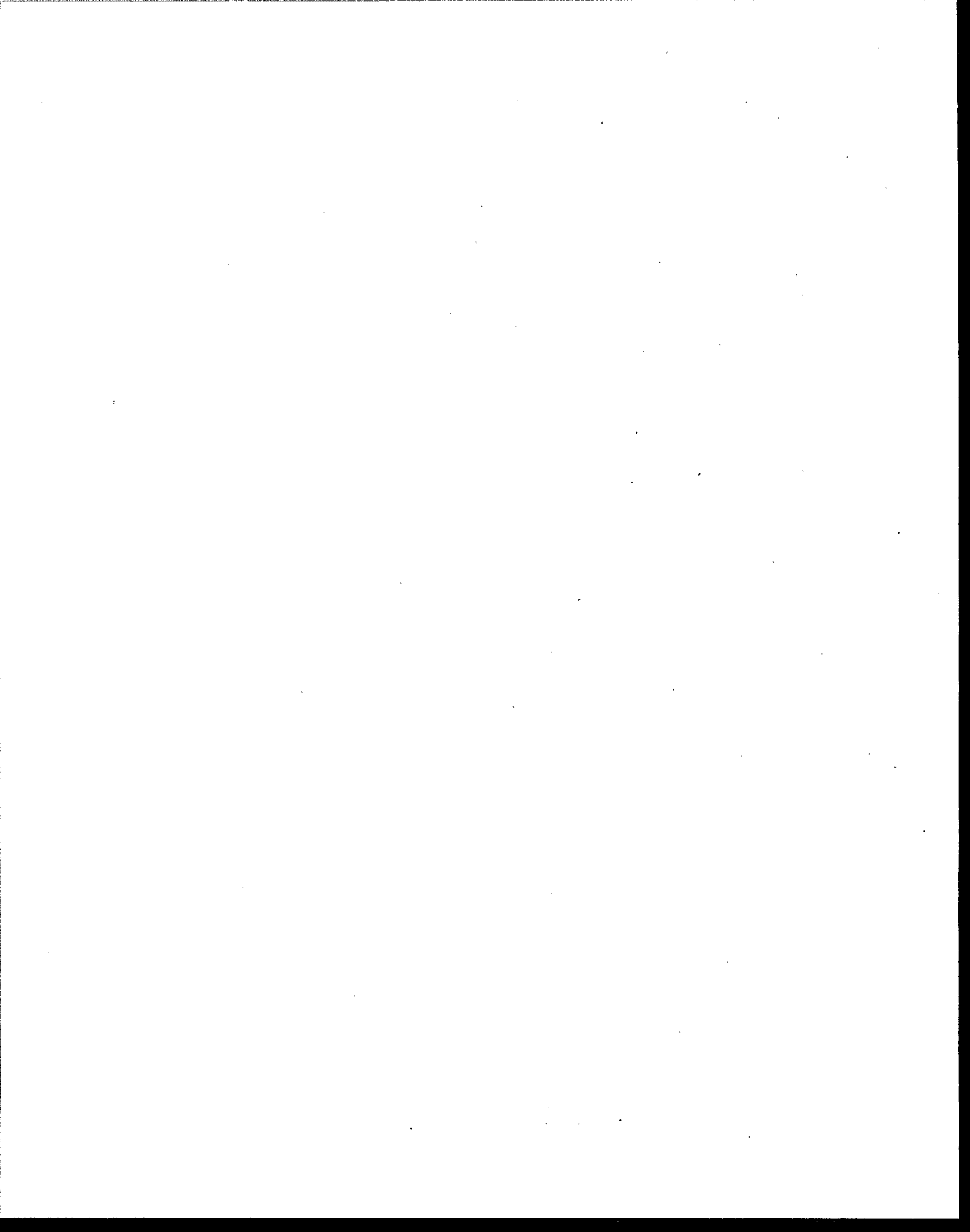


Executive Summary

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



Printed on paper that contains at least
20 percent postconsumer fiber.



EXECUTIVE SUMMARY

The United States Environmental Protection Agency (EPA), in cooperation with the States,¹ 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.² 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.

¹The 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.

²Some 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

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 ¹			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

¹Quantity 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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