

US EPA ARCHIVE DOCUMENT



## NATIONAL ANALYSIS

# THE NATIONAL BIENNIAL RCRA HAZARDOUS WASTE REPORT (BASED ON 2011 DATA)



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## INTRODUCTION

The United States Environmental Protection Agency (EPA), in partnership 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 this 2011 National Biennial Report is to communicate the findings of EPA's 2011 hazardous waste reporting data collection efforts to the public, government agencies, and the regulated community. The 2011 National Biennial Report consists of three volumes of data:

- The **National Analysis** data presents a detailed look at waste-handling practices in the States, and largest facilities nationally, including (1) the quantity of waste generated, managed, shipped, and received, and interstate shipments and receipts, and (2) the number of generators and managing facilities,
- The **State Detail Analysis** data is a detailed look at each State's waste handling practices, including overall totals for generation, management, shipments, and receipts, as well as totals for the largest fifty facilities, and
- The **List of Reported RCRA Sites** identifies every hazardous waste facility in the United States that submitted a hazardous waste report in 2011.

## 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. Some States elect to regulate wastes not specifically regulated by EPA; these wastes are assigned State Hazardous Waste Codes. For this Report, EPA asked States to exclude data for waste with only State Hazardous Waste Codes (the waste description does not include any Federal Hazardous Waste Codes). The reader can find a more detailed explanation in the *RCRA Orientation Manual* ([www.epa.gov/wastes/inforesources/pubs/orientat/index.htm](http://www.epa.gov/wastes/inforesources/pubs/orientat/index.htm)) and in the Code of Federal Regulations in 40 CFR Parts 260 and 261. Please refer to Appendix D of this Report for a complete list of EPA Hazardous Waste Codes used by the regulated community for their 2011 Biennial Report submissions. Details about the information submitted by the regulated community can be found in the *2011 Hazardous Waste Report Instructions and Forms* ([www.epa.gov/waste/inforesources/data/biennialreport/index.htm](http://www.epa.gov/waste/inforesources/data/biennialreport/index.htm)). Guidance provided to the regulated community regarding information to include or exclude from the National Report can be found in Appendix E.

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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.

## **RCRA HAZARDOUS WASTE GENERATION**

RCRA hazardous waste generation information is obtained from data reported by RCRA large quantity generators (LQGs). A generator is defined as a Federal large quantity generator if:

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

All facilities that were LQGs in 2011 are required to provide EPA with 2011 waste generation and management information. It is important to note that the generators identified in this Report have been included based on the most current information made available to EPA by the States. However, the generator 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 exempt from Federal regulation. Hazardous waste received from off site for storage/bulking and subsequently transferred off site for treatment or disposal is excluded from generation quantities in this Report.

## **RCRA HAZARDOUS WASTE MANAGEMENT**

RCRA hazardous waste management information is obtained from the data reported by facilities that treated, stored, or disposed of RCRA hazardous wastes on site during 2011. Only wastes that were treated or disposed of in 2011 are included in the management quantities in this Report. Hazardous wastes that are stored, bulked and/or transferred off site with no prior treatment/recovery, fuel blending, or disposal at the site, are excluded from the management quantities in this Report.

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

RCRA hazardous waste shipment information is obtained from data reported by both RCRA LQGs and facilities that treated, stored, or disposed of RCRA hazardous wastes on site during 2011. RCRA hazardous waste receipt information is obtained from data reported by facilities that treated, stored, or disposed of RCRA hazardous wastes on site during 2011. All reported shipments identified by the State, or implementing EPA office, for inclusion in the National Biennial Report are included in the waste shipment quantities in this Report, even if the waste was shipped to a transfer facility. In some instances, waste is transferred within a physical location that has more than one EPA Identification Number. These waste transfers are treated as shipments.

RCRA hazardous waste interstate shipment quantities include wastes generated in one State and shipped to a receiver in a different State, excluding shipments to a foreign country. Interstate shipments are calculated from information provided by waste shippers. RCRA hazardous waste interstate receipts include all wastes received by a State which differs from the State of origin, excluding foreign imports. RCRA hazardous waste interstate receipts are calculated from information provided by the facilities that received the wastes.

### **THE DATA PRESENTED IN THIS NATIONAL BIENNIAL REPORT**

It is the responsibility of individual States or implementing EPA offices to properly identify data that is to be included in or excluded from the National Biennial Report. For this 2011 National Biennial RCRA Hazardous Waste Report, EPA has included all data that was identified by the State or implementing EPA office for inclusion in the Report, with the following two (2) exceptions:

- 1) hazardous waste received from off site for storage/bulking and subsequently transferred off site for treatment or disposal is excluded from generation quantities; and
- 2) hazardous waste that is stored, bulked, and/or transferred off site with no prior treatment/recovery, fuel blending, or disposal at the site is excluded from management quantities.



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**National Biennial RCRA Hazardous Waste Report: Based on 2011 Data**

**Exhibit 1.1** Quantity of RCRA Hazardous Waste Generated and Number of Hazardous Waste Generators, by State, 2011

State	Hazardous Waste Quantity			Number of Generators			Reported Status	
	Rank	Tons Generated	Percentage	Rank	Number	Percentage	LQG	Non-LQG
ALABAMA	10	578,348	1.7	24	239	1.5	223	16
ALASKA	48	2,524	0.0	45	46	0.3	27	19
ARIZONA	22	202,942	0.6	25	224	1.4	210	14
ARKANSAS	7	922,732	2.7	32	142	0.9	123	19
CALIFORNIA	11	534,704	1.6	2	1,249	7.6	1,223	26
COLORADO	40	31,801	0.1	30	158	1.0	107	51
CONNECTICUT	41	24,967	0.1	21	294	1.8	278	16
DELAWARE	36	43,307	0.1	42	59	0.4	49	10
DISTRICT OF COLUMBIA	53	1,137	0.0	50	24	0.1	23	1
FLORIDA	23	198,406	0.6	12	450	2.7	279	171
GEORGIA	21	211,127	0.6	16	386	2.3	334	52
GUAM	54	86	0.0	53	8	0.0	8	0
HAWAII	13	425,644	1.2	43	51	0.3	31	20
IDAHO	47	3,742	0.0	49	40	0.2	19	21
ILLINOIS	9	675,534	2.0	5	871	5.3	641	230
INDIANA	8	888,054	2.6	10	517	3.1	503	14
IOWA	32	51,013	0.1	29	161	1.0	128	33
KANSAS	5	1,238,342	3.6	26	216	1.3	170	46
KENTUCKY	25	142,246	0.4	23	269	1.6	269	0
LOUISIANA	2	4,399,520	12.8	17	369	2.2	331	38
MAINE	49	2,406	0.0	41	66	0.4	52	14
MARYLAND	35	44,250	0.1	34	134	0.8	132	2
MASSACHUSETTS	38	35,554	0.1	13	444	2.7	402	42
MICHIGAN	19	282,895	0.8	11	467	2.8	342	125
MINNESOTA	14	357,412	1.0	20	323	2.0	320	3
MISSISSIPPI	3	1,828,886	5.3	35	128	0.8	128	0
MISSOURI	20	251,015	0.7	18	340	2.1	282	58
MONTANA	44	5,883	0.0	48	41	0.2	41	0
NAVAJO NATION	55	23	0.0	56	1	0.0	1	0
NEBRASKA	39	35,425	0.1	39	84	0.5	64	20
NEVADA	42	9,839	0.0	37	101	0.6	68	33
NEW HAMPSHIRE	46	3,949	0.0	31	152	0.9	100	52
NEW JERSEY	17	290,456	0.8	7	675	4.1	575	100
NEW MEXICO	6	1,042,387	3.0	46	45	0.3	39	6
NEW YORK	24	186,483	0.5	1	1,471	8.9	1,471	0
NORTH CAROLINA	29	83,114	0.2	9	531	3.2	437	94
NORTH DAKOTA	12	455,868	1.3	51	19	0.1	19	0
OHIO	4	1,617,758	4.7	4	915	5.6	716	199
OKLAHOMA	34	44,294	0.1	27	200	1.2	179	21
OREGON	27	93,180	0.3	28	181	1.1	181	0
PENNSYLVANIA	16	308,720	0.9	6	847	5.1	671	176
PUERTO RICO	37	37,335	0.1	40	83	0.5	80	3
RHODE ISLAND	43	8,619	0.0	38	92	0.6	65	27
SOUTH CAROLINA	26	140,496	0.4	22	284	1.7	257	27
SOUTH DAKOTA	51	1,347	0.0	47	42	0.3	33	9
TENNESSEE	28	89,352	0.3	19	334	2.0	334	0
TEXAS	1	15,683,405	45.7	3	1,006	6.1	1,006	0
TRUST TERRITORIES	56	14	0.0	54	3	0.0	1	2
UTAH	33	49,726	0.1	36	112	0.7	111	1
VERMONT	50	1,978	0.0	44	48	0.3	39	9
VIRGIN ISLANDS	52	1,251	0.0	55	2	0.0	2	0
VIRGINIA	30	74,803	0.2	15	390	2.4	219	171
WASHINGTON	15	333,960	1.0	14	413	2.5	412	1
WEST VIRGINIA	31	62,334	0.2	32	142	0.9	98	44
WISCONSIN	18	289,401	0.8	8	539	3.3	394	145
WYOMING	45	4,079	0.0	51	19	0.1	15	4
<b>Total</b>		<b>34,334,072</b>	<b>100.0</b>		<b>16,447</b>	<b>100.0</b>	<b>14,262</b>	<b>2,185</b>

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

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## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 1.2** Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Generated and Number of Hazardous Waste Generators, 2011

State	Hazardous Waste Quantity			Number of Generators			Reported Status	
	Rank	Tons Generated	Percentage	Rank	Number	Percentage	LQG	Non-LQG
TEXAS	1	15,683,405	45.7	3	1,006	6.1	1,006	0
LOUISIANA	2	4,399,520	12.8	17	369	2.2	331	38
MISSISSIPPI	3	1,828,886	5.3	35	128	0.8	128	0
OHIO	4	1,617,758	4.7	4	915	5.6	716	199
KANSAS	5	1,238,342	3.6	26	216	1.3	170	46
NEW MEXICO	6	1,042,387	3.0	46	45	0.3	39	6
ARKANSAS	7	922,732	2.7	32	142	0.9	123	19
INDIANA	8	888,054	2.6	10	517	3.1	503	14
ILLINOIS	9	675,534	2.0	5	871	5.3	641	230
ALABAMA	10	578,348	1.7	24	239	1.5	223	16
CALIFORNIA	11	534,704	1.6	2	1,249	7.6	1,223	26
NORTH DAKOTA	12	455,868	1.3	51	19	0.1	19	0
HAWAII	13	425,644	1.2	43	51	0.3	31	20
MINNESOTA	14	357,412	1.0	20	323	2.0	320	3
WASHINGTON	15	333,960	1.0	14	413	2.5	412	1
PENNSYLVANIA	16	308,720	0.9	6	847	5.1	671	176
NEW JERSEY	17	290,456	0.8	7	675	4.1	575	100
WISCONSIN	18	289,401	0.8	8	539	3.3	394	145
MICHIGAN	19	282,895	0.8	11	467	2.8	342	125
MISSOURI	20	251,015	0.7	18	340	2.1	282	58
GEORGIA	21	211,127	0.6	16	386	2.3	334	52
ARIZONA	22	202,942	0.6	25	224	1.4	210	14
FLORIDA	23	198,406	0.6	12	450	2.7	279	171
NEW YORK	24	186,483	0.5	1	1,471	8.9	1,471	0
KENTUCKY	25	142,246	0.4	23	269	1.6	269	0
SOUTH CAROLINA	26	140,496	0.4	22	284	1.7	257	27
OREGON	27	93,180	0.3	28	181	1.1	181	0
TENNESSEE	28	89,352	0.3	19	334	2.0	334	0
NORTH CAROLINA	29	83,114	0.2	9	531	3.2	437	94
VIRGINIA	30	74,803	0.2	15	390	2.4	219	171
WEST VIRGINIA	31	62,334	0.2	32	142	0.9	98	44
IOWA	32	51,013	0.1	29	161	1.0	128	33
UTAH	33	49,726	0.1	36	112	0.7	111	1
OKLAHOMA	34	44,294	0.1	27	200	1.2	179	21
MARYLAND	35	44,250	0.1	34	134	0.8	132	2
DELAWARE	36	43,307	0.1	42	59	0.4	49	10
PUERTO RICO	37	37,335	0.1	40	83	0.5	80	3
MASSACHUSETTS	38	35,554	0.1	13	444	2.7	402	42
NEBRASKA	39	35,425	0.1	39	84	0.5	64	20
COLORADO	40	31,801	0.1	30	158	1.0	107	51
CONNECTICUT	41	24,967	0.1	21	294	1.8	278	16
NEVADA	42	9,839	0.0	37	101	0.6	68	33
RHODE ISLAND	43	8,619	0.0	38	92	0.6	65	27
MONTANA	44	5,883	0.0	48	41	0.2	41	0
WYOMING	45	4,079	0.0	51	19	0.1	15	4
NEW HAMPSHIRE	46	3,949	0.0	31	152	0.9	100	52
IDAHO	47	3,742	0.0	49	40	0.2	19	21
ALASKA	48	2,524	0.0	45	46	0.3	27	19
MAINE	49	2,406	0.0	41	66	0.4	52	14
VERMONT	50	1,978	0.0	44	48	0.3	39	9
SOUTH DAKOTA	51	1,347	0.0	47	42	0.3	33	9
VIRGIN ISLANDS	52	1,251	0.0	55	2	0.0	2	0
DISTRICT OF COLUMBIA	53	1,137	0.0	50	24	0.1	23	1
GUAM	54	86	0.0	53	8	0.0	8	0
NAVAJO NATION	55	23	0.0	56	1	0.0	1	0
TRUST TERRITORIES	56	14	0.0	54	3	0.0	1	2
<b>Total</b>		<b>34,334,072</b>	<b>100.0</b>		<b>16,447</b>	<b>100.0</b>	<b>14,262</b>	<b>2,185</b>

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

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 1.3** Rank Ordering of States Based on Number of Hazardous Waste Generators and Quantity of RCRA Hazardous Waste Generated, 2011

State	Number of Generators			Hazardous Waste Quantity			Reported Status	
	Rank	Number	Percentage	Rank	Tons Generated	Percentage	LQG	Non-LQG
NEW YORK	1	1,471	8.9	24	186,483	0.5	1,471	0
CALIFORNIA	2	1,249	7.6	11	534,704	1.6	1,223	26
TEXAS	3	1,006	6.1	1	15,683,405	45.7	1,006	0
OHIO	4	915	5.6	4	1,617,758	4.7	716	199
ILLINOIS	5	871	5.3	9	675,534	2.0	641	230
PENNSYLVANIA	6	847	5.1	16	308,720	0.9	671	176
NEW JERSEY	7	675	4.1	17	290,456	0.8	575	100
WISCONSIN	8	539	3.3	18	289,401	0.8	394	145
NORTH CAROLINA	9	531	3.2	29	83,114	0.2	437	94
INDIANA	10	517	3.1	8	888,054	2.6	503	14
MICHIGAN	11	467	2.8	19	282,895	0.8	342	125
FLORIDA	12	450	2.7	23	198,406	0.6	279	171
MASSACHUSETTS	13	444	2.7	38	35,554	0.1	402	42
WASHINGTON	14	413	2.5	15	333,960	1.0	412	1
VIRGINIA	15	390	2.4	30	74,803	0.2	219	171
GEORGIA	16	386	2.3	21	211,127	0.6	334	52
LOUISIANA	17	369	2.2	2	4,399,520	12.8	331	38
MISSOURI	18	340	2.1	20	251,015	0.7	282	58
TENNESSEE	19	334	2.0	28	89,352	0.3	334	0
MINNESOTA	20	323	2.0	14	357,412	1.0	320	3
CONNECTICUT	21	294	1.8	41	24,967	0.1	278	16
SOUTH CAROLINA	22	284	1.7	26	140,496	0.4	257	27
KENTUCKY	23	269	1.6	25	142,246	0.4	269	0
ALABAMA	24	239	1.5	10	578,348	1.7	223	16
ARIZONA	25	224	1.4	22	202,942	0.6	210	14
KANSAS	26	216	1.3	5	1,238,342	3.6	170	46
OKLAHOMA	27	200	1.2	34	44,294	0.1	179	21
OREGON	28	181	1.1	27	93,180	0.3	181	0
IOWA	29	161	1.0	32	51,013	0.1	128	33
COLORADO	30	158	1.0	40	31,801	0.1	107	51
NEW HAMPSHIRE	31	152	0.9	46	3,949	0.0	100	52
ARKANSAS	32	142	0.9	7	922,732	2.7	123	19
WEST VIRGINIA	32	142	0.9	31	62,334	0.2	98	44
MARYLAND	34	134	0.8	35	44,250	0.1	132	2
MISSISSIPPI	35	128	0.8	3	1,828,886	5.3	128	0
UTAH	36	112	0.7	33	49,726	0.1	111	1
NEVADA	37	101	0.6	42	9,839	0.0	68	33
RHODE ISLAND	38	92	0.6	43	8,619	0.0	65	27
NEBRASKA	39	84	0.5	39	35,425	0.1	64	20
PUERTO RICO	40	83	0.5	37	37,335	0.1	80	3
MAINE	41	66	0.4	49	2,406	0.0	52	14
DELAWARE	42	59	0.4	36	43,307	0.1	49	10
HAWAII	43	51	0.3	13	425,644	1.2	31	20
VERMONT	44	48	0.3	50	1,978	0.0	39	9
ALASKA	45	46	0.3	48	2,524	0.0	27	19
NEW MEXICO	46	45	0.3	6	1,042,387	3.0	39	6
SOUTH DAKOTA	47	42	0.3	51	1,347	0.0	33	9
MONTANA	48	41	0.2	44	5,883	0.0	41	0
IDAHO	49	40	0.2	47	3,742	0.0	19	21
DISTRICT OF COLUMBIA	50	24	0.1	53	1,137	0.0	23	1
NORTH DAKOTA	51	19	0.1	12	455,868	1.3	19	0
WYOMING	51	19	0.1	45	4,079	0.0	15	4
GUAM	53	8	0.0	54	86	0.0	8	0
TRUST TERRITORIES	54	3	0.0	56	14	0.0	1	2
VIRGIN ISLANDS	55	2	0.0	52	1,251	0.0	2	0
NAVAJO NATION	56	1	0.0	55	23	0.0	1	0
<b>Total</b>		<b>16,447</b>	<b>100.0</b>		<b>34,334,072</b>	<b>100.0</b>	<b>14,262</b>	<b>2,185</b>

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

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 1.4** Fifty Largest RCRA Hazardous Waste Generators in the U.S., 2011

Rank	EPA ID	Name	City	Tons Generated
1	TXD001700806	ASCEND CHOCOLATE BAYOU PLANT	ALVIN, TX	4,348,018
2	LAD008213191	RUBICON LLC	GEISMAR, LA	2,170,824
3	TXD059685339	DIAMOND SHAMROCK MCKEE PLANT	SUNRAY, TX	1,870,924
4	TXD008080533	BP PRODUCTS NORTH AMERICA	TEXAS CITY, TX	1,866,800
5	MSD096046792	E.I. DU PONT DE NEMOURS AND COMPANY, INC. (	PASS CHRISTIAN, MS	1,754,314
6	LAD008175390	CORNERSTONE CHEMICAL COMPANY	WAGGAMAN, LA	1,404,152
7	TXR000076828	PASADENA INJECTION WELL	PASADENA, TX	1,342,780
8	TXR000057968	INVISTA SARL VICTORIA SITE	VICTORIA, TX	1,305,425
9	KSD007482029	OCCIDENTAL CHEMICAL CORPORATION	WICHITA, KS	1,107,532
10	NMD048918817	NAVAJO REFINING COMPANY LLC	ARTESIA, NM	1,033,276
11	OHD042157644	INEOS USA LLC	LIMA, OH	988,363
12	TXD000751172	INEOS USA GREEN LAKE FACILITY	PORT LAVACA, TX	912,504
13	TXD083472266	LYONDELL CHEMICAL CHANNELVIEW	CHANNELVIEW, TX	848,281
14	ARD000021998	LION OIL COMPANY	EL DORADO, AR	622,893
15	TXR000057752	INVISTA SARL SABINE RIVER WORKS	ORANGE, TX	585,437
16	TXD008081697	BASF FREEPORT SITE	FREEPORT, TX	538,803
17	NDD006175467	TESORO REFINING AND MARKETING COMPANY	MANDAN, ND	454,756
18	ILD042075333	CABOT CORP	TUSCOLA, IL	439,082
19	IND003913423	ARCELORMITTAL BURNS HARBOR, LLC	BURNS HARBOR, IN	427,862
20	HID056786395	TESORO HAWAII REFINERY	KAPOLEI, HI	424,546
21	ALD046481032	SANDERS LEAD COMPANY, INC	TROY, AL	373,886
22	TXD000838896	VEOLIA ES TECHNICAL SOLUTIONS	PORT ARTHUR, TX	310,406
23	TXD008081101	E I DU PONT DE NEMOURS BEAUMONT WORKS	NEDERLAND, TX	287,165
24	TXD008106999	MERISOL GREENS BAYOU PLANT	HOUSTON, TX	268,690
25	LAR000057828	EVONIK CYRO LLC	WAGGAMAN, LA	265,866
26	MND006148092	GOPHER RESOURCE CORPORATION	EAGAN, MN	258,749
27	WA7890008967	US DEPT OF ENERGY HANFORD FACILITY	RICHLAND, WA	249,979
28	TXD087491973	ASARCO AMARILLO COPPER REFINERY	AMARILLO, TX	182,670
29	AZD982441263	SIEMENS WATER TECHNOLOGIES CORP	PARKER, AZ	182,157
30	FLR000068007	K.C. INDUSTRIES, L.L.C., MULBERRY, FLORI	MULBERRY, FL	148,813
31	MOD050226075	BASF CORPORATION - HANNIBAL PLANT	PALMYRA, MO	141,654
32	LAD020597597	ANGUS CHEMICAL COMPANY	STERLINGTON, LA	137,869
33	ARD006354161	REYNOLDS METALS COMPANY GUM SPRINGS PLA	ARCADELPHIA, AR	112,769
34	KSD980633259	SYSTECH ENVIRONMENTAL CORP	FREDONIA, KS	100,148
35	IND093219012	HERITAGE ENVIRONMENTAL SERVICES LLC	INDIANAPOLIS, IN	95,781
36	MID000724831	MICHIGAN DISPOSAL INC	BELLEVILLE, MI	95,519
37	WID046536231	ERCO WORLDWIDE (USA) INC - PORT EDWARDS F	NEKOOSA, WI	91,707
38	OHD005048947	SYSTECH ENVIRONMENTAL CORP	PAULDING, OH	83,895
39	GAD070330576	EXIDE TECHNOLOGIES	COLUMBUS, GA	83,250
40	TXD008092793	THE DOW CHEMICAL TEXAS OPERATIONS FREEPO	FREEPORT, TX	80,528
41	CAD076528678	THE DOW CHEMICAL COMPANY	PITTSBURG, CA	79,588
42	TXD008076846	HUNTSMAN PETROCHEMICAL PO MTBE PLANT	PORT NECHES, TX	77,920
43	LAD980622104	MOMENTIVE SPECIALTY CHEMICALS INC.	NORCO, LA	77,190
44	CAD041319294	UNITED AIRLINES - SFO MAINTENANCE CENTER	SAN FRANCISCO, CA	75,920
45	TXD058275769	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	CHANNELVIEW, TX	70,369
46	TXD049213127	PERGAN MARSHALL	MARSHALL, TX	62,075
47	TXD055141378	CLEAN HARBORS DEER PARK	LA PORTE, TX	61,842
48	CAD008271090	PALACE PLATING	LOS ANGELES, CA	54,687
49	INR000001099	STEEL DYNAMICS, INC. - FLAT ROLL DIVISION	BUTLER, IN	53,687
50	NJD002454544	VEOLIA ES TECHNICAL SOLUTIONS LLC	MIDDLESEX, NJ	52,680
<b>Total</b>				<b>28,664,031</b>

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

Exhibit 1.5 Number of Hazardous Waste Generators by Generator Quantity Range, 2011

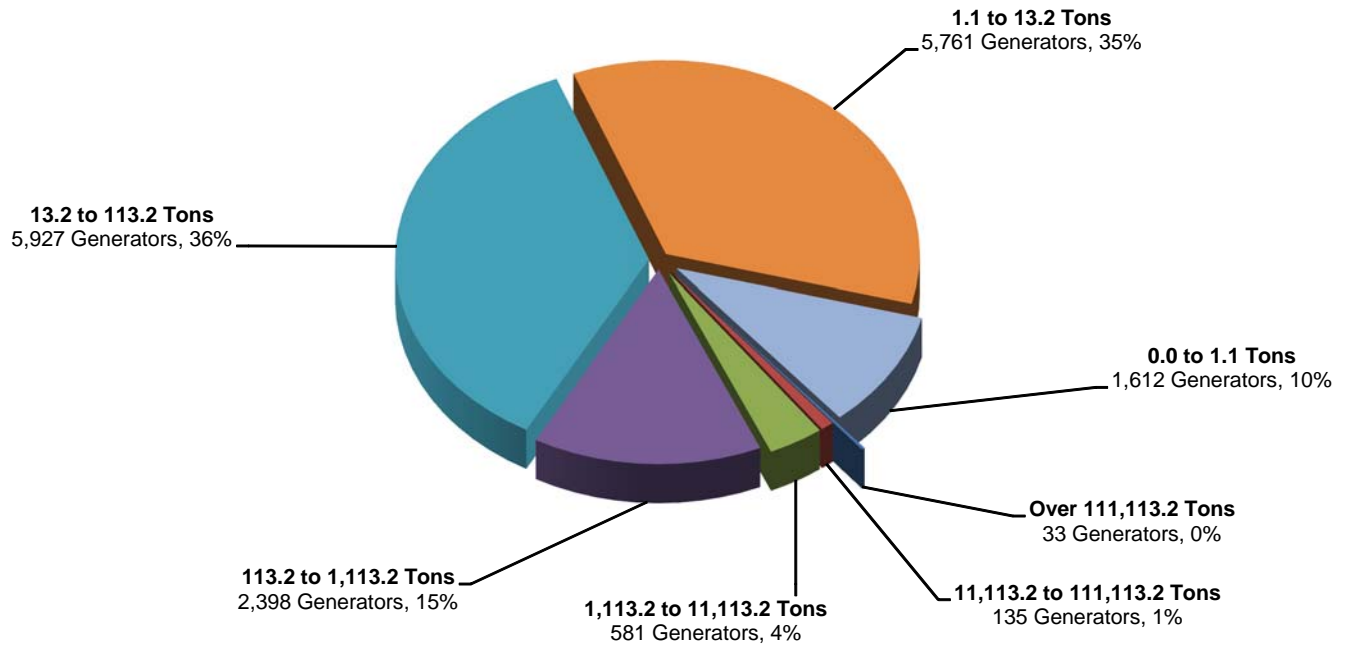
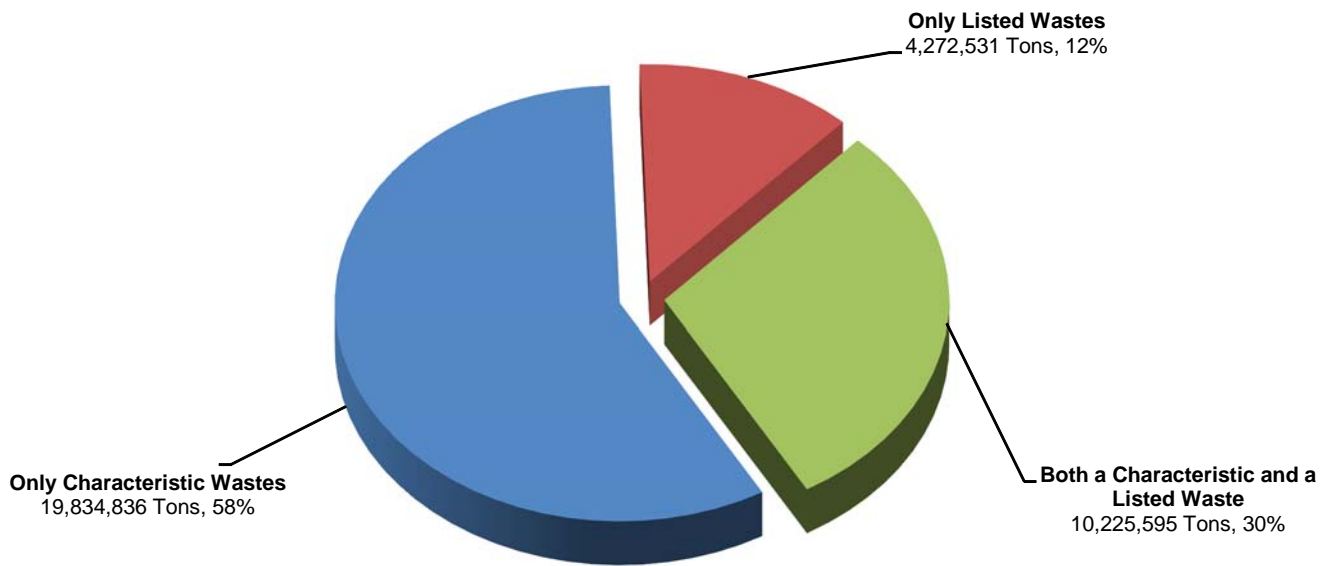


Exhibit 1.6 Percentages of National Generation Total That Were Characteristic, Listed, or Both Characteristic and Listed Waste, 2011



## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 1.7** Tons of Generated Waste That Were Only Characteristic Waste, Only Listed Waste, or Both Characteristic and Listed Waste, 2011

Only Characteristic Wastes		Only Listed Wastes		Both a Characteristic and a Listed Waste	
ONLY IGNITABLE	425,203	ONLY AN F CODE	806,656		
ONLY CORROSIVE	573,955	ONLY A K CODE	2,218,404		
ONLY REACTIVE	30,703	ONLY A P CODE	13,354		
ONLY D004-17	1,339,884	ONLY A U CODE	30,298		
ONLY D018-43	5,650,009				
HAS MORE THAN ONE CHARACTERISTIC CODE	11,815,082	HAS MORE THAN ONE LISTED CODE	1,203,820		
<b>TOTAL</b>	<b>19,834,836</b>	<b>TOTAL</b>	<b>4,272,531</b>	<b>Both Characteristic and Listed</b>	<b>10,225,595</b>

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

**Exhibit 1.8** Tons of Generated Waste with Multiple Characteristics, That Were Multiply Listed, or Both, 2011

Only Characteristic Wastes But With Multiple Characteristics		Only Listed Wastes But Multiply Listed		Both Characteristic and Listed Wastes <sup>1</sup>	
HAS IGNITABLE CODE	2,528,766			IGNITABLE CODE W/ AT LEAST ONE LISTED CODE	1,535,892
HAS CORROSIVE CODE	8,263,959			CORROSIVE CODE W/ AT LEAST ONE LISTED CODE	3,114,689
HAS REACTIVE CODE	2,698,638			REACTIVE CODE W/ AT LEAST ONE LISTED CODE	1,353,110
HAS D004-17 CODE	3,789,897			D004-17 CODE W/ AT LEAST ONE LISTED CODE	1,949,857
HAS D018-43 CODE	8,130,358			D018-43 CODE W/ AT LEAST ONE LISTED CODE	8,936,667
		HAS F CODE	1,191,935	F WASTE W/ AT LEAST ONE CHARACTERISTIC CODE	7,897,041
		HAS K CODE	1,160,821	K WASTE W/ AT LEAST ONE CHARACTERISTIC CODE	8,281,332
		HAS P CODE	98,340	P WASTE W/ AT LEAST ONE CHARACTERISTIC CODE	1,275,314
		HAS U CODE	197,006	U WASTE W/ AT LEAST ONE CHARACTERISTIC CODE	4,530,901
<b>TOTAL</b>	<b>11,815,082</b>	<b>TOTAL</b>	<b>1,203,820</b>	<b>TOTAL</b>	<b>10,225,595</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.

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

**National Biennial RCRA Hazardous Waste Report: Based on 2011 Data**

**Exhibit 1.9** Fifty Largest Quantities of Hazardous Waste Generated, by Primary NAICS Code in the U.S., 2011

Rank	NAICS Code	Description	Tons Generated
1	3251	BASIC CHEMICAL MANUFACTURING	18,921,471
2	3241	PETROLEUM AND COAL PRODUCTS MANUFACTURING	6,645,129
3	5622	WASTE TREATMENT AND DISPOSAL	2,036,930
4	3253	PESTICIDE, FERTILIZER, AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING	1,643,979
5	3311	IRON AND STEEL MILLS AND FERROALLOY MANUFACTURING	1,367,335
6	3314	NONFERROUS METAL (EXCEPT ALUMINUM) PRODUCTION AND PROCESSING	995,286
7	3328	COATING, ENGRAVING, HEAT TREATING, AND ALLIED ACTIVITIES	255,537
8	3252	RESIN, SYNTHETIC RUBBER, AND ARTIFICIAL SYNTHETIC FIBERS AND FILAMENTS	228,376
9	3254	PHARMACEUTICAL AND MEDICINE MANUFACTURING	214,270
10	3259	OTHER CHEMICAL PRODUCT AND PREPARATION MANUFACTURING	188,745
11	5621	WASTE COLLECTION	131,313
12	3359	OTHER ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING	117,353
13	3255	PAINT, COATING, AND ADHESIVE MANUFACTURING	115,736
14	9281	NATIONAL SECURITY AND INTERNATIONAL AFFAIRS	90,244
15	5629	REMEDIATION AND OTHER WASTE MANAGEMENT SERVICES	84,560
16	3364	AEROSPACE PRODUCT AND PARTS MANUFACTURING	82,022
17	3344	SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENT MANUFACTURING	81,048
18	3313	ALUMINA AND ALUMINUM PRODUCTION AND PROCESSING	78,739
19	4811	SCHEDULED AIR TRANSPORTATION	78,323
20	3312	STEEL PRODUCT MANUFACTURING FROM PURCHASED STEEL	56,565
21	4931	WAREHOUSING AND STORAGE	49,183
22	3261	PLASTICS PRODUCT MANUFACTURING	47,541
23	3273	CEMENT AND CONCRETE PRODUCT MANUFACTURING	43,358
24	3111	ANIMAL FOOD MANUFACTURING	43,071
25	3363	MOTOR VEHICLE PARTS MANUFACTURING	38,188
26	3329	OTHER FABRICATED METAL PRODUCT MANUFACTURING	32,045
27	3256	SOAP, CLEANING COMPOUND, AND TOILET PREPARATION MANUFACTURING	30,178
28	3315	FOUNDRIES	25,555
29	2122	METAL ORE MINING	24,985
30	2211	ELECTRIC POWER GENERATION, TRANSMISSION AND DISTRIBUTION	24,735
31	4881	SUPPORT ACTIVITIES FOR AIR TRANSPORTATION	21,964
32	2361	RESIDENTIAL BUILDING CONSTRUCTION	20,603
33	3361	MOTOR VEHICLE MANUFACTURING	20,076
34	4239	MISCELLANEOUS DURABLE GOODS MERCHANT WHOLESALERS	18,843
35	6215	MEDICAL AND DIAGNOSTIC LABORATORIES	18,487
36	3231	PRINTING AND RELATED SUPPORT ACTIVITIES	17,777
37	5413	ARCHITECTURAL, ENGINEERING, AND RELATED SERVICES	17,743
38	4246	CHEMICAL AND ALLIED PRODUCTS MERCHANT WHOLESALERS	15,404
39	3323	ARCHITECTURAL AND STRUCTURAL METALS MANUFACTURING	13,995
40	5417	SCIENTIFIC RESEARCH AND DEVELOPMENT SERVICES	13,979
41	3222	CONVERTED PAPER PRODUCT MANUFACTURING	13,580
42	9261	ADMINISTRATION OF ECONOMIC PROGRAM	12,759
43	2379	OTHER HEAVY AND CIVIL ENGINEERING CONSTRUCTION	11,850
44	2373	HIGHWAY, STREET, AND BRIDGE CONSTRUCTION	10,643
45	4889	OTHER SUPPORT ACTIVITIES FOR TRANSPORTATION	10,491
46	3211	SAWMILLS AND WOOD PRESERVATION	10,225
47	4862	PIPELINE TRANSPORTATION OF NATURAL GAS	10,223
48	9241	ADMINISTRATION OF ENVIRONMENTAL QUALITY PROGRAMS	10,130
49	6113	COLLEGES, UNIVERSITIES, AND PROFESSIONAL SCHOOLS	9,752
50	3353	ELECTRICAL EQUIPMENT MANUFACTURING	9,608
<b>Total</b>			<b>34,059,933</b>

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

**US EPA ARCHIVE DOCUMENT**



## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 2.1** Quantity of RCRA Hazardous Waste Managed and Number of RCRA Management Facilities, by State, 2011

State	Hazardous Waste Quantity			Number of Facilities			Reported Status	
	Rank	Tons Managed	Percentage	Rank	Number	Percentage	TSDF	Non-TSDF
ALABAMA	11	778,921	2.0	25	19	1.4	9	10
ALASKA	46	560	0.0	41	5	0.4	2	3
ARIZONA	23	208,570	0.5	21	26	1.9	4	22
ARKANSAS	7	1,173,355	3.0	20	27	1.9	8	19
CALIFORNIA	21	325,979	0.8	5	72	5.2	37	35
COLORADO	32	78,567	0.2	30	13	0.9	4	9
CONNECTICUT	40	7,510	0.0	28	15	1.1	7	8
DELAWARE	47	397	0.0	45	3	0.2	1	2
DISTRICT OF COLUMBIA	51	0	0.0	51	0	0.0	0	0
FLORIDA	3	2,673,038	6.8	3	92	6.6	11	81
GEORGIA	25	172,507	0.4	6	62	4.5	5	57
GUAM	50	0	0.0	50	1	0.1	1	0
HAWAII	16	424,468	1.1	45	3	0.2	1	2
IDAHO	28	114,597	0.3	45	3	0.2	2	1
ILLINOIS	10	870,361	2.2	24	21	1.5	10	11
INDIANA	8	1,135,520	2.9	17	32	2.3	16	16
IOWA	45	813	0.0	33	11	0.8	2	9
KANSAS	6	1,377,953	3.5	21	26	1.9	6	20
KENTUCKY	13	477,841	1.2	14	34	2.4	12	22
LOUISIANA	2	4,350,349	11.1	19	30	2.2	17	13
MAINE	48	198	0.0	28	15	1.1	1	14
MARYLAND	36	43,956	0.1	40	6	0.4	4	2
MASSACHUSETTS	43	3,193	0.0	16	33	2.4	3	30
MICHIGAN	12	558,252	1.4	26	17	1.2	11	6
MINNESOTA	17	423,446	1.1	4	75	5.4	7	68
MISSISSIPPI	4	2,031,414	5.2	34	10	0.7	3	7
MISSOURI	19	328,518	0.8	18	31	2.2	14	17
MONTANA	44	1,110	0.0	49	2	0.1	0	2
NAVAJO NATION	51	0	0.0	51	0	0.0	0	0
NEBRASKA	37	34,873	0.1	41	5	0.4	1	4
NEVADA	33	76,742	0.2	36	7	0.5	5	2
NEW HAMPSHIRE	51	0	0.0	51	0	0.0	0	0
NEW JERSEY	20	328,421	0.8	7	61	4.4	9	52
NEW MEXICO	9	1,036,926	2.7	30	13	0.9	4	9
NEW YORK	30	103,886	0.3	7	61	4.4	12	49
NORTH CAROLINA	31	93,905	0.2	12	44	3.2	11	33
NORTH DAKOTA	14	454,681	1.2	45	3	0.2	3	0
OHIO	5	1,680,479	4.3	10	51	3.7	24	27
OKLAHOMA	29	109,238	0.3	27	16	1.2	4	12
OREGON	34	70,769	0.2	23	22	1.6	3	19
PENNSYLVANIA	15	444,198	1.1	11	48	3.5	23	25
PUERTO RICO	41	5,390	0.0	41	5	0.4	3	2
RHODE ISLAND	39	10,087	0.0	44	4	0.3	1	3
SOUTH CAROLINA	26	160,003	0.4	35	8	0.6	8	0
SOUTH DAKOTA	49	33	0.0	36	7	0.5	1	6
TENNESSEE	35	49,091	0.1	13	37	2.7	12	25
TEXAS	1	15,788,751	40.5	2	99	7.1	41	58
TRUST TERRITORIES	51	0	0.0	51	0	0.0	0	0
UTAH	27	142,201	0.4	30	13	0.9	11	2
VERMONT	18	364,194	0.9	36	7	0.5	0	7
VIRGIN ISLANDS	51	0	0.0	51	0	0.0	0	0
VIRGINIA	42	3,489	0.0	9	53	3.8	4	49
WASHINGTON	22	289,733	0.7	1	100	7.2	10	90
WEST VIRGINIA	38	28,941	0.1	36	7	0.5	6	1
WISCONSIN	24	190,508	0.5	14	34	2.4	10	24
WYOMING	51	0	0.0	51	0	0.0	0	0
<b>Total</b>		<b>39,027,932</b>	<b>100.0</b>		<b>1,389</b>	<b>100.0</b>	<b>404</b>	<b>985</b>

**Notes:** Columns may not sum due to rounding.  
Facilities reporting storage-only and their quantity managed are excluded.

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 2.2** Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Managed and Number of RCRA Management Facilities, 2011

State	Hazardous Waste Quantity			Number of Facilities			Reported Status	
	Rank	Tons Managed	Percentage	Rank	Number	Percentage	TSDF	Non-TSDF
TEXAS	1	15,788,751	40.5	2	99	7.1	41	58
LOUISIANA	2	4,350,349	11.1	19	30	2.2	17	13
FLORIDA	3	2,673,038	6.8	3	92	6.6	11	81
MISSISSIPPI	4	2,031,414	5.2	34	10	0.7	3	7
OHIO	5	1,680,479	4.3	10	51	3.7	24	27
KANSAS	6	1,377,953	3.5	21	26	1.9	6	20
ARKANSAS	7	1,173,355	3.0	20	27	1.9	8	19
INDIANA	8	1,135,520	2.9	17	32	2.3	16	16
NEW MEXICO	9	1,036,926	2.7	30	13	0.9	4	9
ILLINOIS	10	870,361	2.2	24	21	1.5	10	11
ALABAMA	11	778,921	2.0	25	19	1.4	9	10
MICHIGAN	12	558,252	1.4	26	17	1.2	11	6
KENTUCKY	13	477,841	1.2	14	34	2.4	12	22
NORTH DAKOTA	14	454,681	1.2	45	3	0.2	3	0
PENNSYLVANIA	15	444,198	1.1	11	48	3.5	23	25
HAWAII	16	424,468	1.1	45	3	0.2	1	2
MINNESOTA	17	423,446	1.1	4	75	5.4	7	68
VERMONT	18	364,194	0.9	36	7	0.5	0	7
MISSOURI	19	328,518	0.8	18	31	2.2	14	17
NEW JERSEY	20	328,421	0.8	7	61	4.4	9	52
CALIFORNIA	21	325,979	0.8	5	72	5.2	37	35
WASHINGTON	22	289,733	0.7	1	100	7.2	10	90
ARIZONA	23	208,570	0.5	21	26	1.9	4	22
WISCONSIN	24	190,508	0.5	14	34	2.4	10	24
GEORGIA	25	172,507	0.4	6	62	4.5	5	57
SOUTH CAROLINA	26	160,003	0.4	35	8	0.6	8	0
UTAH	27	142,201	0.4	30	13	0.9	11	2
IDAHO	28	114,597	0.3	45	3	0.2	2	1
OKLAHOMA	29	109,238	0.3	27	16	1.2	4	12
NEW YORK	30	103,886	0.3	7	61	4.4	12	49
NORTH CAROLINA	31	93,905	0.2	12	44	3.2	11	33
COLORADO	32	78,567	0.2	30	13	0.9	4	9
NEVADA	33	76,742	0.2	36	7	0.5	5	2
OREGON	34	70,769	0.2	23	22	1.6	3	19
TENNESSEE	35	49,091	0.1	13	37	2.7	12	25
MARYLAND	36	43,956	0.1	40	6	0.4	4	2
NEBRASKA	37	34,873	0.1	41	5	0.4	1	4
WEST VIRGINIA	38	28,941	0.1	36	7	0.5	6	1
RHODE ISLAND	39	10,087	0.0	44	4	0.3	1	3
CONNECTICUT	40	7,510	0.0	28	15	1.1	7	8
PUERTO RICO	41	5,390	0.0	41	5	0.4	3	2
VIRGINIA	42	3,489	0.0	9	53	3.8	4	49
MASSACHUSETTS	43	3,193	0.0	16	33	2.4	3	30
MONTANA	44	1,110	0.0	49	2	0.1	0	2
IOWA	45	813	0.0	33	11	0.8	2	9
ALASKA	46	560	0.0	41	5	0.4	2	3
DELAWARE	47	397	0.0	45	3	0.2	1	2
MAINE	48	198	0.0	28	15	1.1	1	14
SOUTH DAKOTA	49	33	0.0	36	7	0.5	1	6
GUAM	50	0	0.0	50	1	0.1	1	0
DISTRICT OF COLUMBIA	51	0	0.0	51	0	0.0	0	0
NAVAJO NATION	51	0	0.0	51	0	0.0	0	0
NEW HAMPSHIRE	51	0	0.0	51	0	0.0	0	0
TRUST TERRITORIES	51	0	0.0	51	0	0.0	0	0
VIRGIN ISLANDS	51	0	0.0	51	0	0.0	0	0
WYOMING	51	0	0.0	51	0	0.0	0	0
<b>Total</b>		<b>39,027,932</b>	<b>100.0</b>		<b>1,389</b>	<b>100.0</b>	<b>404</b>	<b>985</b>

**Notes:** Columns may not sum due to rounding.  
Facilities reporting storage-only and their quantity managed are excluded.

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 2.3** Rank Ordering of States Based on Number of RCRA Management Facilities and Quantity of RCRA Hazardous Waste Managed, 2011

State	Number of Facilities			Hazardous Waste Quantity			Reported Status	
	Rank	Number	Percentage	Rank	Tons Managed	Percentage	TSDf	Non-TSDf
WASHINGTON	1	100	7.2	22	289,733	0.7	10	90
TEXAS	2	99	7.1	1	15,788,751	40.5	41	58
FLORIDA	3	92	6.6	3	2,673,038	6.8	11	81
MINNESOTA	4	75	5.4	17	423,446	1.1	7	68
CALIFORNIA	5	72	5.2	21	325,979	0.8	37	35
GEORGIA	6	62	4.5	25	172,507	0.4	5	57
NEW JERSEY	7	61	4.4	20	328,421	0.8	9	52
NEW YORK	7	61	4.4	30	103,886	0.3	12	49
VIRGINIA	9	53	3.8	42	3,489	0.0	4	49
OHIO	10	51	3.7	5	1,680,479	4.3	24	27
PENNSYLVANIA	11	48	3.5	15	444,198	1.1	23	25
NORTH CAROLINA	12	44	3.2	31	93,905	0.2	11	33
TENNESSEE	13	37	2.7	35	49,091	0.1	12	25
KENTUCKY	14	34	2.4	13	477,841	1.2	12	22
WISCONSIN	14	34	2.4	24	190,508	0.5	10	24
MASSACHUSETTS	16	33	2.4	43	3,193	0.0	3	30
INDIANA	17	32	2.3	8	1,135,520	2.9	16	16
MISSOURI	18	31	2.2	19	328,518	0.8	14	17
LOUISIANA	19	30	2.2	2	4,350,349	11.1	17	13
ARKANSAS	20	27	1.9	7	1,173,355	3.0	8	19
ARIZONA	21	26	1.9	23	208,570	0.5	4	22
KANSAS	21	26	1.9	6	1,377,953	3.5	6	20
OREGON	23	22	1.6	34	70,769	0.2	3	19
ILLINOIS	24	21	1.5	10	870,361	2.2	10	11
ALABAMA	25	19	1.4	11	778,921	2.0	9	10
MICHIGAN	26	17	1.2	12	558,252	1.4	11	6
OKLAHOMA	27	16	1.2	29	109,238	0.3	4	12
CONNECTICUT	28	15	1.1	40	7,510	0.0	7	8
MAINE	28	15	1.1	48	198	0.0	1	14
COLORADO	30	13	0.9	32	78,567	0.2	4	9
NEW MEXICO	30	13	0.9	9	1,036,926	2.7	4	9
UTAH	30	13	0.9	27	142,201	0.4	11	2
IOWA	33	11	0.8	45	813	0.0	2	9
MISSISSIPPI	34	10	0.7	4	2,031,414	5.2	3	7
SOUTH CAROLINA	35	8	0.6	26	160,003	0.4	8	0
NEVADA	36	7	0.5	33	76,742	0.2	5	2
SOUTH DAKOTA	36	7	0.5	49	33	0.0	1	6
VERMONT	36	7	0.5	18	364,194	0.9	0	7
WEST VIRGINIA	36	7	0.5	38	28,941	0.1	6	1
MARYLAND	40	6	0.4	36	43,956	0.1	4	2
ALASKA	41	5	0.4	46	560	0.0	2	3
NEBRASKA	41	5	0.4	37	34,873	0.1	1	4
PUERTO RICO	41	5	0.4	41	5,390	0.0	3	2
RHODE ISLAND	44	4	0.3	39	10,087	0.0	1	3
DELAWARE	45	3	0.2	47	397	0.0	1	2
HAWAII	45	3	0.2	16	424,468	1.1	1	2
IDAHO	45	3	0.2	28	114,597	0.3	2	1
NORTH DAKOTA	45	3	0.2	14	454,681	1.2	3	0
MONTANA	49	2	0.1	44	1,110	0.0	0	2
GUAM	50	1	0.1	50	0	0.0	1	0
DISTRICT OF COLUMBIA	51	0	0.0	51	0	0.0	0	0
NAVAJO NATION	51	0	0.0	51	0	0.0	0	0
NEW HAMPSHIRE	51	0	0.0	51	0	0.0	0	0
TRUST TERRITORIES	51	0	0.0	51	0	0.0	0	0
VIRGIN ISLANDS	51	0	0.0	51	0	0.0	0	0
WYOMING	51	0	0.0	51	0	0.0	0	0
<b>Total</b>		<b>1,389</b>	<b>100.0</b>		<b>39,027,932</b>	<b>100.0</b>	<b>404</b>	<b>985</b>

**Notes:** Columns may not sum due to rounding.  
Facilities reporting storage-only and their quantity managed are excluded.

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 2.4** Fifty Largest RCRA Hazardous Waste Managers in the U.S., 2011

Rank	EPA ID	Name	City	Tons Managed <sup>1</sup>
1	TXD001700806	ASCEND CHOCOLATE BAYOU PLANT	ALVIN, TX	4,346,505
2	FLD001447952	UNITED TECHNOLOGIES CRP, PRATT & WHITNEY	JUPITER, FL	2,497,330
3	LAD008213191	RUBICON LLC	GEISMAR, LA	2,170,065
4	TXD059685339	DIAMOND SHAMROCK MCKEE PLANT	SUNRAY, TX	1,868,728
5	TXD008080533	BP PRODUCTS NORTH AMERICA	TEXAS CITY, TX	1,848,608
6	MSD096046792	E.I. DU PONT DE NEMOURS AND COMPANY, INC. (	PASS CHRISTIAN, MS	1,754,301
7	LAD008175390	CORNERSTONE CHEMICAL COMPANY	WAGGAMAN, LA	1,710,925
8	TXR000076828	PASADENA INJECTION WELL	PASADENA, TX	1,341,784
9	TXR000057968	INVISTA SARL VICTORIA SITE	VICTORIA, TX	1,299,186
10	KSD007482029	OCCIDENTAL CHEMICAL CORPORATION	WICHITA, KS	1,107,333
11	NMD048918817	NAVAJO REFINING COMPANY LLC	ARTESIA, NM	1,032,108
12	OHD042157644	INEOS USA LLC	LIMA, OH	988,261
13	TXD000751172	INEOS USA GREEN LAKE FACILITY	PORT LAVACA, TX	911,861
14	TXD083472266	LYONDELL CHEMICAL CHANNELVIEW	CHANNELVIEW, TX	906,412
15	ARD000021998	LION OIL COMPANY	EL DORADO, AR	621,652
16	TXR000057752	INVISTA SARL SABINE RIVER WORKS	ORANGE, TX	576,572
17	TXD008081697	BASF FREEPORT SITE	FREEPORT, TX	530,678
18	NDD006175467	TESORO REFINING AND MARKETING COMPANY	MANDAN, ND	454,560
19	ILD042075333	CABOT CORP	TUSCOLA, IL	439,036
20	IND003913423	ARCELORMITTAL BURNS HARBOR, LLC	BURNS HARBOR, IN	427,145
21	HID056786395	TESORO HAWAII REFINERY	KAPOLEI, HI	424,316
22	ALD046481032	SANDERS LEAD COMPANY, INC	TROY, AL	387,289
23	MND006148092	GOPHER RESOURCE CORPORATION	EAGAN, MN	365,538
24	VTD002084705	IBM CORPORATION	ESSEX JUNCTION, VT	364,065
25	KYD006371314	LUBRIZOL ADVANCED MATERIALS, INC	LOUISVILLE, KY	362,387
26	TXD000838896	VEOLIA ES TECHNICAL SOLUTIONS	PORT ARTHUR, TX	324,844
27	TXD008081101	E I DU PONT DE NEMOURS BEAUMONT WORKS	NEDERLAND, TX	283,950
28	TXD008106999	MERISOL GREENS BAYOU PLANT	HOUSTON, TX	269,334
29	MID000724831	MICHIGAN DISPOSAL INC	BELLEVILLE, MI	261,370
30	WA7890008967	US DEPT OF ENERGY HANFORD FACILITY	RICHLAND, WA	251,787
31	TXD069452340	US ECOLOGY TEXAS	ROBSTOWN, TX	222,497
32	TXD055141378	CLEAN HARBORS DEER PARK	LA PORTE, TX	209,991
33	IND093219012	HERITAGE ENVIRONMENTAL SERVICES LLC	INDIANAPOLIS, IN	205,450
34	PAD002395887	HORSEHEAD CORP	PALMERTON, PA	198,894
35	AZD982441263	SIEMENS WATER TECHNOLOGIES CORP	PARKER, AZ	182,785
36	TXD087491973	ASARCO AMARILLO COPPER REFINERY	AMARILLO, TX	182,439
37	ALR000042754	STEEL DUST RECYCLING, LLC	MILLPORT, AL	155,921
38	ARD006354161	REYNOLDS METALS COMPANY GUM SPRINGS PLA	ARKADELPHIA, AR	154,697
39	OHD020273819	VICKERY ENVIRONMENTAL INC	VICKERY, OH	152,503
40	MOD050226075	BASF CORPORATION - HANNIBAL PLANT	PALMYRA, MO	152,314
41	TXD000719518	TM DEER PARK SERVICES	DEER PARK, TX	150,311
42	FLR000068007	K.C. INDUSTRIES, L.L.C., MULBERRY, FLORI	MULBERRY, FL	148,813
43	MSD008183519	FERNWOOD INDUSTRIES, L.L.C.	FERNWOOD, MS	145,697
44	LAD020597597	ANGUS CHEMICAL COMPANY	STERLINGTON, LA	137,694
45	IND006419212	GREENCASTLE WDF FACILITY	GREENCASTLE, IN	133,225
46	ILD040891368	HORSEHEAD CORP	CHICAGO, IL	122,989
47	ARD981512270	ASH GROVE CEMENT COMPANY	FOREMAN, AR	116,325
48	ALD008185407	HUXFORD POLE AND TIMBER CO., INC	HUXFORD, AL	115,170
49	ARD981057870	RINECO CHEMICAL INDUSTRIES, INC.	BENTON, AR	114,572
50	IDD073114654	US ECOLOGY IDAHO INC SITE B	GRAND VIEW, ID	112,850
<b>Total</b>				<b>33,243,064</b>

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

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

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 2.5** Quantity of RCRA Hazardous Waste Managed, by Management Method, 2011

Management Method	Tons Managed	Percentage of Quantity	Number of Facilities <sup>1</sup>	Percentage of Facilities <sup>1</sup>
AQUEOUS INORGANIC TREATMENT	702,769	1.8	108	7.8
AQUEOUS ORGANIC TREATMENT	2,848,612	7.3	40	2.9
DEEPWELL OR UNDERGROUND INJECTION	22,852,829	58.6	41	3.0
ENERGY RECOVERY	1,563,267	4.0	68	4.9
FUEL BLENDING	651,974	1.7	90	6.5
INCINERATION	1,009,814	2.6	132	9.5
LAND TREATMENT/APPLICATION/FARMING	16,376	0.0	14	1.0
LANDFILL/SURFACE IMPOUNDMENT	1,291,650	3.3	53	3.8
METALS RECOVERY	1,039,554	2.7	106	7.6
OTHER DISPOSAL	3,612,247	9.3	341	24.6
OTHER RECOVERY	184,533	0.5	64	4.6
OTHER TREATMENT	1,990,520	5.1	300	21.6
SLUDGE TREATMENT	395,316	1.0	26	1.9
SOLVENTS RECOVERY	255,219	0.7	383	27.6
STABILIZATION	613,251	1.6	79	5.7
<b>Total</b>	<b>39,027,932</b>	<b>100.0</b>	<b>1389</b>	

**Exhibit 2.6** Management Method, by Quantity of RCRA Hazardous Waste Managed, 2011

Management Method	Tons Managed	Percentage of Quantity	Number of Facilities <sup>1</sup>	Percentage of Facilities <sup>1</sup>
DEEPWELL OR UNDERGROUND INJECTION	22,852,829	58.6	41	3.0
OTHER DISPOSAL	3,612,247	9.3	341	24.6
AQUEOUS ORGANIC TREATMENT	2,848,612	7.3	40	2.9
OTHER TREATMENT	1,990,520	5.1	300	21.6
ENERGY RECOVERY	1,563,267	4.0	68	4.9
LANDFILL/SURFACE IMPOUNDMENT	1,291,650	3.3	53	3.8
METALS RECOVERY	1,039,554	2.7	106	7.6
INCINERATION	1,009,814	2.6	132	9.5
AQUEOUS INORGANIC TREATMENT	702,769	1.8	108	7.8
FUEL BLENDING	651,974	1.7	90	6.5
STABILIZATION	613,251	1.6	79	5.7
SLUDGE TREATMENT	395,316	1.0	26	1.9
SOLVENTS RECOVERY	255,219	0.7	383	27.6
OTHER RECOVERY	184,533	0.5	64	4.6
LAND TREATMENT/APPLICATION/FARMING	16,376	0.0	14	1.0
<b>Total</b>	<b>39,027,932</b>	<b>100.0</b>	<b>1389</b>	

**Exhibit 2.7** Management Method and Quantity of RCRA Hazardous Waste Managed, by Number of Facilities, 2011

Management Method	Tons Managed	Percentage of Quantity	Number of Facilities <sup>1</sup>	Percentage of Facilities <sup>1</sup>
SOLVENTS RECOVERY	255,219	0.7	383	27.6
OTHER DISPOSAL	3,612,247	9.3	341	24.6
OTHER TREATMENT	1,990,520	5.1	300	21.6
INCINERATION	1,009,814	2.6	132	9.5
AQUEOUS INORGANIC TREATMENT	702,769	1.8	108	7.8
METALS RECOVERY	1,039,554	2.7	106	7.6
FUEL BLENDING	651,974	1.7	90	6.5
STABILIZATION	613,251	1.6	79	5.7
ENERGY RECOVERY	1,563,267	4.0	68	4.9
OTHER RECOVERY	184,533	0.5	64	4.6
LANDFILL/SURFACE IMPOUNDMENT	1,291,650	3.3	53	3.8
DEEPWELL OR UNDERGROUND INJECTION	22,852,829	58.6	41	3.0
AQUEOUS ORGANIC TREATMENT	2,848,612	7.3	40	2.9
SLUDGE TREATMENT	395,316	1.0	26	1.9
LAND TREATMENT/APPLICATION/FARMING	16,376	0.0	14	1.0
<b>Total</b>	<b>39,027,932</b>	<b>100.0</b>	<b>1389</b>	

<sup>1</sup> Column may not sum because facilities may have multiple handling methods.

**Note:** Columns for these exhibits may not sum due to rounding.  
Facilities reporting storage-only and their quantity managed are excluded.

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 3.1** Quantity of RCRA Hazardous Waste Shipped and Number of Hazardous Waste Shippers, by State, 2011

State	Hazardous Waste Quantity			Number of Shippers			Reported Status	
	Rank	Tons Shipped	Percentage	Rank	Number	Percentage	LQG	Non-LQG
ALABAMA	10	192,988	3.2	24	239	1.5	223	16
ALASKA	48	2,010	0.0	46	42	0.3	27	15
ARIZONA	37	26,453	0.4	25	225	1.4	211	14
ARKANSAS	8	206,634	3.5	32	142	0.9	122	20
CALIFORNIA	4	428,745	7.2	2	1,252	7.7	1,226	26
COLORADO	34	34,621	0.6	30	158	1.0	107	51
CONNECTICUT	38	24,080	0.4	21	295	1.8	279	16
DELAWARE	29	42,992	0.7	42	59	0.4	49	10
DISTRICT OF COLUMBIA	53	1,139	0.0	50	24	0.1	23	1
FLORIDA	35	33,513	0.6	12	449	2.7	278	171
GEORGIA	30	42,299	0.7	15	383	2.3	331	52
GUAM	54	88	0.0	53	8	0.0	8	0
HAWAII	51	1,300	0.0	43	49	0.3	30	19
IDAHO	42	6,353	0.1	49	39	0.2	18	21
ILLINOIS	9	205,010	3.4	5	870	5.3	640	230
INDIANA	5	389,389	6.5	10	515	3.2	501	14
IOWA	27	50,702	0.9	29	160	1.0	128	32
KANSAS	16	135,492	2.3	26	214	1.3	170	44
KENTUCKY	11	181,968	3.1	23	264	1.6	264	0
LOUISIANA	3	516,470	8.7	17	367	2.2	330	37
MAINE	47	2,324	0.0	41	66	0.4	52	14
MARYLAND	25	54,574	0.9	34	132	0.8	130	2
MASSACHUSETTS	31	42,013	0.7	12	449	2.7	406	43
MICHIGAN	12	177,852	3.0	11	472	2.9	346	126
MINNESOTA	24	69,223	1.2	19	322	2.0	320	2
MISSISSIPPI	22	72,996	1.2	35	125	0.8	125	0
MISSOURI	18	80,894	1.4	18	335	2.0	280	55
MONTANA	43	5,956	0.1	48	40	0.2	40	0
NAVAJO NATION	55	28	0.0	56	1	0.0	1	0
NEBRASKA	28	43,653	0.7	39	83	0.5	63	20
NEVADA	40	11,932	0.2	37	99	0.6	66	33
NEW HAMPSHIRE	45	3,949	0.1	31	152	0.9	100	52
NEW JERSEY	6	328,224	5.5	7	661	4.0	562	99
NEW MEXICO	41	10,387	0.2	45	44	0.3	39	5
NEW YORK	15	165,811	2.8	1	1,473	9.0	1,473	0
NORTH CAROLINA	17	91,039	1.5	8	542	3.3	440	102
NORTH DAKOTA	52	1,179	0.0	52	18	0.1	18	0
OHIO	2	565,599	9.5	4	909	5.6	712	197
OKLAHOMA	36	29,941	0.5	27	190	1.2	168	22
OREGON	20	77,564	1.3	28	179	1.1	179	0
PENNSYLVANIA	7	262,668	4.4	6	849	5.2	672	177
PUERTO RICO	33	35,153	0.6	40	79	0.5	76	3
RHODE ISLAND	39	16,239	0.3	38	91	0.6	64	27
SOUTH CAROLINA	14	171,165	2.9	22	283	1.7	256	27
SOUTH DAKOTA	49	1,394	0.0	47	41	0.3	32	9
TENNESSEE	26	52,837	0.9	20	321	2.0	321	0
TEXAS	1	607,321	10.2	3	990	6.1	990	0
TRUST TERRITORIES	56	14	0.0	54	3	0.0	1	2
UTAH	19	79,429	1.3	36	113	0.7	112	1
VERMONT	46	2,592	0.0	44	48	0.3	39	9
VIRGIN ISLANDS	50	1,325	0.0	55	2	0.0	2	0
VIRGINIA	23	71,565	1.2	16	380	2.3	212	168
WASHINGTON	21	75,742	1.3	14	418	2.6	417	1
WEST VIRGINIA	32	39,478	0.7	32	142	0.9	99	43
WISCONSIN	13	173,034	2.9	9	520	3.2	381	139
WYOMING	44	4,079	0.1	51	19	0.1	15	4
<b>Total</b>		<b>5,951,421</b>	<b>100.0</b>		<b>16,345</b>	<b>100.0</b>	<b>14,174</b>	<b>2,171</b>

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

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 3.2** Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Shipped and Number of Hazardous Waste Shippers, 2011

State	Hazardous Waste Quantity			Number of Shippers			Reported Status	
	Rank	Tons Shipped	Percentage	Rank	Number	Percentage	LQG	Non-LQG
TEXAS	1	607,321	10.2	3	990	6.1	990	0
OHIO	2	565,599	9.5	4	909	5.6	712	197
LOUISIANA	3	516,470	8.7	17	367	2.2	330	37
CALIFORNIA	4	428,745	7.2	2	1,252	7.7	1,226	26
INDIANA	5	389,389	6.5	10	515	3.2	501	14
NEW JERSEY	6	328,224	5.5	7	661	4.0	562	99
PENNSYLVANIA	7	262,668	4.4	6	849	5.2	672	177
ARKANSAS	8	206,634	3.5	32	142	0.9	122	20
ILLINOIS	9	205,010	3.4	5	870	5.3	640	230
ALABAMA	10	192,988	3.2	24	239	1.5	223	16
KENTUCKY	11	181,968	3.1	23	264	1.6	264	0
MICHIGAN	12	177,852	3.0	11	472	2.9	346	126
WISCONSIN	13	173,034	2.9	9	520	3.2	381	139
SOUTH CAROLINA	14	171,165	2.9	22	283	1.7	256	27
NEW YORK	15	165,811	2.8	1	1,473	9.0	1,473	0
KANSAS	16	135,492	2.3	26	214	1.3	170	44
NORTH CAROLINA	17	91,039	1.5	8	542	3.3	440	102
MISSOURI	18	80,894	1.4	18	335	2.0	280	55
UTAH	19	79,429	1.3	36	113	0.7	112	1
OREGON	20	77,564	1.3	28	179	1.1	179	0
WASHINGTON	21	75,742	1.3	14	418	2.6	417	1
MISSISSIPPI	22	72,996	1.2	35	125	0.8	125	0
VIRGINIA	23	71,565	1.2	16	380	2.3	212	168
MINNESOTA	24	69,223	1.2	19	322	2.0	320	2
MARYLAND	25	54,574	0.9	34	132	0.8	130	2
TENNESSEE	26	52,837	0.9	20	321	2.0	321	0
IOWA	27	50,702	0.9	29	160	1.0	128	32
NEBRASKA	28	43,653	0.7	39	83	0.5	63	20
DELAWARE	29	42,992	0.7	42	59	0.4	49	10
GEORGIA	30	42,299	0.7	15	383	2.3	331	52
MASSACHUSETTS	31	42,013	0.7	12	449	2.7	406	43
WEST VIRGINIA	32	39,478	0.7	32	142	0.9	99	43
PUERTO RICO	33	35,153	0.6	40	79	0.5	76	3
COLORADO	34	34,621	0.6	30	158	1.0	107	51
FLORIDA	35	33,513	0.6	12	449	2.7	278	171
OKLAHOMA	36	29,941	0.5	27	190	1.2	168	22
ARIZONA	37	26,453	0.4	25	225	1.4	211	14
CONNECTICUT	38	24,080	0.4	21	295	1.8	279	16
RHODE ISLAND	39	16,239	0.3	38	91	0.6	64	27
NEVADA	40	11,932	0.2	37	99	0.6	66	33
NEW MEXICO	41	10,387	0.2	45	44	0.3	39	5
IDAHO	42	6,353	0.1	49	39	0.2	18	21
MONTANA	43	5,956	0.1	48	40	0.2	40	0
WYOMING	44	4,079	0.1	51	19	0.1	15	4
NEW HAMPSHIRE	45	3,949	0.1	31	152	0.9	100	52
VERMONT	46	2,592	0.0	44	48	0.3	39	9
MAINE	47	2,324	0.0	41	66	0.4	52	14
ALASKA	48	2,010	0.0	46	42	0.3	27	15
SOUTH DAKOTA	49	1,394	0.0	47	41	0.3	32	9
VIRGIN ISLANDS	50	1,325	0.0	55	2	0.0	2	0
HAWAII	51	1,300	0.0	43	49	0.3	30	19
NORTH DAKOTA	52	1,179	0.0	52	18	0.1	18	0
DISTRICT OF COLUMBIA	53	1,139	0.0	50	24	0.1	23	1
GUAM	54	88	0.0	53	8	0.0	8	0
NAVAJO NATION	55	28	0.0	56	1	0.0	1	0
TRUST TERRITORIES	56	14	0.0	54	3	0.0	1	2
<b>Total</b>		<b>5,951,421</b>	<b>100.0</b>		<b>16,345</b>	<b>100.0</b>	<b>14,174</b>	<b>2,171</b>

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

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 3.3** Rank Ordering of States Based on Number of Hazardous Waste Shippers and Quantity of RCRA Hazardous Waste Shipped, 2011

State	Number of Shippers			Hazardous Waste Quantity			Reported Status	
	Rank	Number	Percentage	Rank	Tons Shipped	Percentage	LQG	Non-LQG
NEW YORK	1	1,473	9.0	15	165,811	2.8	1,473	0
CALIFORNIA	2	1,252	7.7	4	428,745	7.2	1,226	26
TEXAS	3	990	6.1	1	607,321	10.2	990	0
OHIO	4	909	5.6	2	565,599	9.5	712	197
ILLINOIS	5	870	5.3	9	205,010	3.4	640	230
PENNSYLVANIA	6	849	5.2	7	262,668	4.4	672	177
NEW JERSEY	7	661	4.0	6	328,224	5.5	562	99
NORTH CAROLINA	8	542	3.3	17	91,039	1.5	440	102
WISCONSIN	9	520	3.2	13	173,034	2.9	381	139
INDIANA	10	515	3.2	5	389,389	6.5	501	14
MICHIGAN	11	472	2.9	12	177,852	3.0	346	126
FLORIDA	12	449	2.7	35	33,513	0.6	278	171
MASSACHUSETTS	12	449	2.7	31	42,013	0.7	406	43
WASHINGTON	14	418	2.6	21	75,742	1.3	417	1
GEORGIA	15	383	2.3	30	42,299	0.7	331	52
VIRGINIA	16	380	2.3	23	71,565	1.2	212	168
LOUISIANA	17	367	2.2	3	516,470	8.7	330	37
MISSOURI	18	335	2.0	18	80,894	1.4	280	55
MINNESOTA	19	322	2.0	24	69,223	1.2	320	2
TENNESSEE	20	321	2.0	26	52,837	0.9	321	0
CONNECTICUT	21	295	1.8	38	24,080	0.4	279	16
SOUTH CAROLINA	22	283	1.7	14	171,165	2.9	256	27
KENTUCKY	23	264	1.6	11	181,968	3.1	264	0
ALABAMA	24	239	1.5	10	192,988	3.2	223	16
ARIZONA	25	225	1.4	37	26,453	0.4	211	14
KANSAS	26	214	1.3	16	135,492	2.3	170	44
OKLAHOMA	27	190	1.2	36	29,941	0.5	168	22
OREGON	28	179	1.1	20	77,564	1.3	179	0
IOWA	29	160	1.0	27	50,702	0.9	128	32
COLORADO	30	158	1.0	34	34,621	0.6	107	51
NEW HAMPSHIRE	31	152	0.9	45	3,949	0.1	100	52
ARKANSAS	32	142	0.9	8	206,634	3.5	122	20
WEST VIRGINIA	32	142	0.9	32	39,478	0.7	99	43
MARYLAND	34	132	0.8	25	54,574	0.9	130	2
MISSISSIPPI	35	125	0.8	22	72,996	1.2	125	0
UTAH	36	113	0.7	19	79,429	1.3	112	1
NEVADA	37	99	0.6	40	11,932	0.2	66	33
RHODE ISLAND	38	91	0.6	39	16,239	0.3	64	27
NEBRASKA	39	83	0.5	28	43,653	0.7	63	20
PUERTO RICO	40	79	0.5	33	35,153	0.6	76	3
MAINE	41	66	0.4	47	2,324	0.0	52	14
DELAWARE	42	59	0.4	29	42,992	0.7	49	10
HAWAII	43	49	0.3	51	1,300	0.0	30	19
VERMONT	44	48	0.3	46	2,592	0.0	39	9
NEW MEXICO	45	44	0.3	41	10,387	0.2	39	5
ALASKA	46	42	0.3	48	2,010	0.0	27	15
SOUTH DAKOTA	47	41	0.3	49	1,394	0.0	32	9
MONTANA	48	40	0.2	43	5,956	0.1	40	0
IDAHO	49	39	0.2	42	6,353	0.1	18	21
DISTRICT OF COLUMBIA	50	24	0.1	53	1,139	0.0	23	1
WYOMING	51	19	0.1	44	4,079	0.1	15	4
NORTH DAKOTA	52	18	0.1	52	1,179	0.0	18	0
GUAM	53	8	0.0	54	88	0.0	8	0
TRUST TERRITORIES	54	3	0.0	56	14	0.0	1	2
VIRGIN ISLANDS	55	2	0.0	50	1,325	0.0	2	0
NAVAJO NATION	56	1	0.0	55	28	0.0	1	0
<b>Total</b>		<b>16,345</b>	<b>100.0</b>		<b>5,951,421</b>	<b>100.0</b>	<b>14,174</b>	<b>2,171</b>

Note: Columns may not sum due to rounding.

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## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 3.4** Fifty Largest RCRA Hazardous Waste Shippers in the U.S., 2011

Rank	EPA ID	Name	City	Tons Shipped
1	LAR000057828	EVONIK CYRO LLC	WAGGAMAN, LA	265,866
2	KSD980633259	SYSTECH ENVIRONMENTAL CORP	FREDONIA, KS	107,099
3	IND093219012	HERITAGE ENVIRONMENTAL SERVICES LLC	INDIANAPOLIS, IN	102,055
4	OHD005048947	SYSTECH ENVIRONMENTAL CORP	PAULDING, OH	83,749
5	CAD041319294	UNITED AIRLINES - SFO MAINTENANCE CENTER	SAN FRANCISCO, CA	75,941
6	TXD058275769	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	CHANNELVIEW, TX	69,130
7	NJD092870963	AMERICAN GALVANIZING COMPANY	FOLSOM, NJ	64,737
8	ARD981057870	RINECO CHEMICAL INDUSTRIES, INC.	BENTON, AR	62,387
9	LAD980622104	MOMENTIVE SPECIALTY CHEMICALS INC.	NORCO, LA	56,751
10	INR000001099	STEEL DYNAMICS, INC. - FLAT ROLL DIVISION	BUTLER, IN	53,687
11	NJD002454544	VEOLIA ES TECHNICAL SOLUTIONS LLC	MIDDLESEX, NJ	53,290
12	NJD986609311	SITE 114 - 880-900 GARFIELD AVE	JERSEY CITY, NJ	49,153
13	WID000808568	W M W I - OMEGA HILLS LF	GERMANTOWN, WI	49,144
14	KYD053348108	SAFETY-KLEEN SYSTEMS, INC.	SMITHFIELD, KY	48,423
15	ORQ000009431	UMATILLA CHEMICAL AGENT DISPOSAL FAC.	HERMISTON, OR	43,835
16	SCR000002006	NUCOR STEEL BERKELEY COUNTY	HUGER, SC	42,927
17	IND181157009	NUCOR STEEL	CRAWFORDSVILLE, IN	41,856
18	LAR000063263	KEMIRA WATER SOLUTIONS INC.	WAGGAMAN, LA	41,509
19	ARD069748192	CLEAN HARBORS EL DORADO	EL DORADO, AR	39,655
20	OHD048415665	ROSS INCINERATION SERVICES INC	GRAFTON, OH	37,228
21	IND000646943	TRADEBE TREATMENT & RECYCLING LLC	EAST CHICAGO, IN	36,639
22	MID000820381	PHARMACIA & UPJOHN COMPANY LLC	PORTAGE, MI	36,260
23	SCD036275626	GIANT RESOURCE RECOVERY SUMTER INC	SUMTER, SC	36,101
24	MND000686071	FLINT HILLS RESOURCES, L.P.	ROSEMOUNT, MN	35,923
25	ALR000006817	NUCOR STEEL DECATUR	TRINITY, AL	33,192
26	KYR000032045	NORTH AMERICAN STAINLESS	GHENT, KY	32,796
27	NCR000011197	NUCOR STEEL - HERTFORD COUNTY	COFIELD, NC	32,024
28	OHR000002279	NORTH STAR BLUESCOPE STEEL LLC	DELTA, OH	30,126
29	CAD008302903	VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.	AZUSA, CA	30,038
30	MSR000103143	SEVERSTAL COLUMBUS	COLUMBUS, MS	29,165
31	OHR000110197	REPUBLIC STEEL	CANTON, OH	28,282
32	WID098547854	W M W I - METRO RECYCLING & DISPOSAL	FRANKLIN, WI	27,728
33	TXD046844700	CHEMICAL RECLAMATION SERVICES AVALON FAC	AVALON, TX	26,309
34	UTD981552177	CLEAN HARBORS ARAGONITE, LLC	ARAGONITE, UT	25,920
35	TXD981053770	DURATHERM SAN LEON	SAN LEON, TX	25,218
36	OHD004465100	TIMKEN COMPANY CANTON PLANTS	CANTON, OH	25,001
37	ALR000014183	SSAB ALABAMA, INC	AXIS, AL	24,291
38	NED087069050	NUCOR CORPORATION (NUCOR STEEL - NEBRASKA)	NORFOLK, NE	24,252
39	OHD045243706	ENVIROSAFE SERVICES OF OHIO INC	OREGON, OH	23,799
40	KYD985115237	GALLATIN STEEL COMPANY	GHENT, KY	23,759
41	CAD059494310	CLEAN HARBORS SAN JOSE, LLC	SAN JOSE, CA	23,070
42	IAR000000216	SSAB IOWA INC	MUSCATINE, IA	23,056
43	ALD982088437	NUCOR STEEL TUSCALOOSA, INC	TUSCALOOSA, AL	22,783
44	CAD028409019	CROSBY & OVERTON	LONG BEACH, CA	22,722
45	OHD980613541	HERITAGE-WTI INC	EAST LIVERPOOL, OH	22,491
46	AL3210020027	ANNISTON ARMY DEPOT	ANNISTON, AL	22,483
47	ARD981908890	NUCOR YAMATO STEEL	ARMOREL, AR	21,990
48	TXD000838896	VEOLIA ES TECHNICAL SOLUTIONS	PORT ARTHUR, TX	21,577
49	TXD058260977	BAYER MATERIAL SCIENCE	BAYTOWN, TX	21,520
50	PAD990753089	EXIDE TECHNOLOGIES	READING, PA	21,256
<b>Total</b>				<b>2,198,190</b>

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

**National Biennial RCRA Hazardous Waste Report: Based on 2011 Data**

**Exhibit 3.5** Quantity of RCRA Hazardous Waste Received and Number of Receivers, by State, 2011

State	Hazardous Waste Quantity			Number of Receivers			Reported Status	
	Rank	Tons Received	Percentage	Rank	Number	Percentage	TSDf	Non-TSDf
ALABAMA	9	246,204	4.0	13	10	2.2	8	2
ALASKA	49	11	0.0	37	3	0.7	1	2
ARIZONA	30	17,882	0.3	25	6	1.3	6	0
ARKANSAS	11	240,584	3.9	34	4	0.9	4	0
CALIFORNIA	12	183,117	3.0	2	41	8.9	41	0
COLORADO	26	43,840	0.7	23	7	1.5	6	1
CONNECTICUT	35	8,826	0.1	37	3	0.7	3	0
DELAWARE	46	115	0.0	46	1	0.2	1	0
DISTRICT OF COLUMBIA	50	0	0.0	50	0	0.0	0	0
FLORIDA	32	10,760	0.2	9	15	3.3	15	0
GEORGIA	38	3,861	0.1	23	7	1.5	7	0
GUAM	48	37	0.0	46	1	0.2	1	0
HAWAII	44	190	0.0	46	1	0.2	1	0
IDAHO	17	112,238	1.8	37	3	0.7	3	0
ILLINOIS	7	379,907	6.1	6	18	3.9	13	5
INDIANA	4	463,055	7.5	11	13	2.8	13	0
IOWA	41	570	0.0	29	5	1.1	4	1
KANSAS	8	262,248	4.2	25	6	1.3	6	0
KENTUCKY	18	106,383	1.7	19	9	2.0	8	1
LOUISIANA	3	486,260	7.9	13	10	2.2	8	2
MAINE	45	141	0.0	44	2	0.4	2	0
MARYLAND	22	56,462	0.9	34	4	0.9	3	1
MASSACHUSETTS	34	8,917	0.1	13	10	2.2	7	3
MICHIGAN	5	443,698	7.2	10	14	3.0	14	0
MINNESOTA	13	169,083	2.7	19	9	2.0	6	3
MISSISSIPPI	29	17,926	0.3	44	2	0.4	2	0
MISSOURI	15	152,381	2.5	6	18	3.9	17	1
MONTANA	50	0	0.0	50	0	0.0	0	0
NAVAJO NATION	50	0	0.0	50	0	0.0	0	0
NEBRASKA	27	37,429	0.6	34	4	0.9	3	1
NEVADA	21	78,743	1.3	29	5	1.1	5	0
NEW HAMPSHIRE	50	0	0.0	50	0	0.0	0	0
NEW JERSEY	10	242,396	3.9	12	12	2.6	9	3
NEW MEXICO	37	4,738	0.1	25	6	1.3	5	1
NEW YORK	20	83,406	1.3	5	21	4.6	16	5
NORTH CAROLINA	31	12,276	0.2	8	17	3.7	14	3
NORTH DAKOTA	43	295	0.0	37	3	0.7	3	0
OHIO	2	621,070	10.0	4	23	5.0	22	1
OKLAHOMA	19	94,277	1.5	21	8	1.7	6	2
OREGON	23	55,174	0.9	37	3	0.7	3	0
PENNSYLVANIA	6	428,355	6.9	3	26	5.7	24	2
PUERTO RICO	40	1,184	0.0	37	3	0.7	3	0
RHODE ISLAND	33	10,001	0.2	37	3	0.7	2	1
SOUTH CAROLINA	14	154,608	2.5	25	6	1.3	6	0
SOUTH DAKOTA	47	102	0.0	46	1	0.2	1	0
TENNESSEE	28	28,854	0.5	21	8	1.7	8	0
TEXAS	1	653,609	10.6	1	44	9.6	44	0
TRUST TERRITORIES	50	0	0.0	50	0	0.0	0	0
UTAH	16	145,602	2.4	13	10	2.2	10	0
VERMONT	39	1,511	0.0	29	5	1.1	2	3
VIRGIN ISLANDS	50	0	0.0	50	0	0.0	0	0
VIRGINIA	42	535	0.0	29	5	1.1	5	0
WASHINGTON	25	51,895	0.8	13	10	2.2	7	3
WEST VIRGINIA	36	6,426	0.1	29	5	1.1	5	0
WISCONSIN	24	52,849	0.9	13	10	2.2	10	0
WYOMING	50	0	0.0	50	0	0.0	0	0
<b>Total</b>		<b>6,180,028</b>	<b>100.0</b>		<b>460</b>	<b>100.0</b>	<b>413</b>	<b>47</b>

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

**US EPA ARCHIVE DOCUMENT**

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 3.6** Rank Ordering of States Based on Quantity of RCRA Hazardous Waste Received and Number of Receivers, 2011

State	Hazardous Waste Quantity			Number of Receivers			Reported Status	
	Rank	Tons Received	Percentage	Rank	Number	Percentage	TSDF	Non-TSDF
TEXAS	1	653,609	10.6	1	44	9.6	44	0
OHIO	2	621,070	10.0	4	23	5.0	22	1
LOUISIANA	3	486,260	7.9	13	10	2.2	8	2
INDIANA	4	463,055	7.5	11	13	2.8	13	0
MICHIGAN	5	443,698	7.2	10	14	3.0	14	0
PENNSYLVANIA	6	428,355	6.9	3	26	5.7	24	2
ILLINOIS	7	379,907	6.1	6	18	3.9	13	5
KANSAS	8	262,248	4.2	25	6	1.3	6	0
ALABAMA	9	246,204	4.0	13	10	2.2	8	2
NEW JERSEY	10	242,396	3.9	12	12	2.6	9	3
ARKANSAS	11	240,584	3.9	34	4	0.9	4	0
CALIFORNIA	12	183,117	3.0	2	41	8.9	41	0
MINNESOTA	13	169,083	2.7	19	9	2.0	6	3
SOUTH CAROLINA	14	154,608	2.5	25	6	1.3	6	0
MISSOURI	15	152,381	2.5	6	18	3.9	17	1
UTAH	16	145,602	2.4	13	10	2.2	10	0
IDAHO	17	112,238	1.8	37	3	0.7	3	0
KENTUCKY	18	106,383	1.7	19	9	2.0	8	1
OKLAHOMA	19	94,277	1.5	21	8	1.7	6	2
NEW YORK	20	83,406	1.3	5	21	4.6	16	5
NEVADA	21	78,743	1.3	29	5	1.1	5	0
MARYLAND	22	56,462	0.9	34	4	0.9	3	1
OREGON	23	55,174	0.9	37	3	0.7	3	0
WISCONSIN	24	52,849	0.9	13	10	2.2	10	0
WASHINGTON	25	51,895	0.8	13	10	2.2	7	3
COLORADO	26	43,840	0.7	23	7	1.5	6	1
NEBRASKA	27	37,429	0.6	34	4	0.9	3	1
TENNESSEE	28	28,854	0.5	21	8	1.7	8	0
MISSISSIPPI	29	17,926	0.3	44	2	0.4	2	0
ARIZONA	30	17,882	0.3	25	6	1.3	6	0
NORTH CAROLINA	31	12,276	0.2	8	17	3.7	14	3
FLORIDA	32	10,760	0.2	9	15	3.3	15	0
RHODE ISLAND	33	10,001	0.2	37	3	0.7	2	1
MASSACHUSETTS	34	8,917	0.1	13	10	2.2	7	3
CONNECTICUT	35	8,826	0.1	37	3	0.7	3	0
WEST VIRGINIA	36	6,426	0.1	29	5	1.1	5	0
NEW MEXICO	37	4,738	0.1	25	6	1.3	5	1
GEORGIA	38	3,861	0.1	23	7	1.5	7	0
VERMONT	39	1,511	0.0	29	5	1.1	2	3
PUERTO RICO	40	1,184	0.0	37	3	0.7	3	0
IOWA	41	570	0.0	29	5	1.1	4	1
VIRGINIA	42	535	0.0	29	5	1.1	5	0
NORTH DAKOTA	43	295	0.0	37	3	0.7	3	0
HAWAII	44	190	0.0	46	1	0.2	1	0
MAINE	45	141	0.0	44	2	0.4	2	0
DELAWARE	46	115	0.0	46	1	0.2	1	0
SOUTH DAKOTA	47	102	0.0	46	1	0.2	1	0
GUAM	48	37	0.0	46	1	0.2	1	0
ALASKA	49	11	0.0	37	3	0.7	1	2
DISTRICT OF COLUMBIA	50	0	0.0	50	0	0.0	0	0
MONTANA	50	0	0.0	50	0	0.0	0	0
NAVAJO NATION	50	0	0.0	50	0	0.0	0	0
NEW HAMPSHIRE	50	0	0.0	50	0	0.0	0	0
TRUST TERRITORIES	50	0	0.0	50	0	0.0	0	0
VIRGIN ISLANDS	50	0	0.0	50	0	0.0	0	0
WYOMING	50	0	0.0	50	0	0.0	0	0
<b>Total</b>		<b>6,180,028</b>	<b>100.0</b>		<b>460</b>	<b>100.0</b>	<b>413</b>	<b>47</b>

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

**National Biennial RCRA Hazardous Waste Report: Based on 2011 Data**

**Exhibit 3.7** Rank Ordering of States Based on Number of Receiving Facilities and Quantity of RCRA Hazardous Waste Received, 2011

State	Number of Receivers			Hazardous Waste Quantity			Reported Status	
	Rank	Number	Percentage	Rank	Tons Received	Percentage	TSDf	Non-TSDf
TEXAS	1	44	9.6	1	653,609	10.6	44	0
CALIFORNIA	2	41	8.9	12	183,117	3.0	41	0
PENNSYLVANIA	3	26	5.7	6	428,355	6.9	24	2
OHIO	4	23	5.0	2	621,070	10.0	22	1
NEW YORK	5	21	4.6	20	83,406	1.3	16	5
ILLINOIS	6	18	3.9	7	379,907	6.1	13	5
MISSOURI	6	18	3.9	15	152,381	2.5	17	1
NORTH CAROLINA	8	17	3.7	31	12,276	0.2	14	3
FLORIDA	9	15	3.3	32	10,760	0.2	15	0
MICHIGAN	10	14	3.0	5	443,698	7.2	14	0
INDIANA	11	13	2.8	4	463,055	7.5	13	0
NEW JERSEY	12	12	2.6	10	242,396	3.9	9	3
ALABAMA	13	10	2.2	9	246,204	4.0	8	2
LOUISIANA	13	10	2.2	3	486,260	7.9	8	2
MASSACHUSETTS	13	10	2.2	34	8,917	0.1	7	3
UTAH	13	10	2.2	16	145,602	2.4	10	0
WASHINGTON	13	10	2.2	25	51,895	0.8	7	3
WISCONSIN	13	10	2.2	24	52,849	0.9	10	0
KENTUCKY	19	9	2.0	18	106,383	1.7	8	1
MINNESOTA	19	9	2.0	13	169,083	2.7	6	3
OKLAHOMA	21	8	1.7	19	94,277	1.5	6	2
TENNESSEE	21	8	1.7	28	28,854	0.5	8	0
COLORADO	23	7	1.5	26	43,840	0.7	6	1
GEORGIA	23	7	1.5	38	3,861	0.1	7	0
ARIZONA	25	6	1.3	30	17,882	0.3	6	0
KANSAS	25	6	1.3	8	262,248	4.2	6	0
NEW MEXICO	25	6	1.3	37	4,738	0.1	5	1
SOUTH CAROLINA	25	6	1.3	14	154,608	2.5	6	0
IOWA	29	5	1.1	41	570	0.0	4	1
NEVADA	29	5	1.1	21	78,743	1.3	5	0
VERMONT	29	5	1.1	39	1,511	0.0	2	3
VIRGINIA	29	5	1.1	42	535	0.0	5	0
WEST VIRGINIA	29	5	1.1	36	6,426	0.1	5	0
ARKANSAS	34	4	0.9	11	240,584	3.9	4	0
MARYLAND	34	4	0.9	22	56,462	0.9	3	1
NEBRASKA	34	4	0.9	27	37,429	0.6	3	1
ALASKA	37	3	0.7	49	11	0.0	1	2
CONNECTICUT	37	3	0.7	35	8,826	0.1	3	0
IDAHO	37	3	0.7	17	112,238	1.8	3	0
NORTH DAKOTA	37	3	0.7	43	295	0.0	3	0
OREGON	37	3	0.7	23	55,174	0.9	3	0
PUERTO RICO	37	3	0.7	40	1,184	0.0	3	0
RHODE ISLAND	37	3	0.7	33	10,001	0.2	2	1
MAINE	44	2	0.4	45	141	0.0	2	0
MISSISSIPPI	44	2	0.4	29	17,926	0.3	2	0
DELAWARE	46	1	0.2	46	115	0.0	1	0
GUAM	46	1	0.2	48	37	0.0	1	0
HAWAII	46	1	0.2	44	190	0.0	1	0
SOUTH DAKOTA	46	1	0.2	47	102	0.0	1	0
DISTRICT OF COLUMBIA	50	0	0.0	50	0	0.0	0	0
MONTANA	50	0	0.0	50	0	0.0	0	0
NAVAJO NATION	50	0	0.0	50	0	0.0	0	0
NEW HAMPSHIRE	50	0	0.0	50	0	0.0	0	0
TRUST TERRITORIES	50	0	0.0	50	0	0.0	0	0
VIRGIN ISLANDS	50	0	0.0	50	0	0.0	0	0
WYOMING	50	0	0.0	50	0	0.0	0	0
<b>Total</b>		<b>460</b>	<b>100.0</b>		<b>6,180,028</b>	<b>100.0</b>	<b>413</b>	<b>47</b>

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

**US EPA ARCHIVE DOCUMENT**

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 3.8** Fifty Largest RCRA Hazardous Waste Receivers in the U.S., 2011

Rank	EPA ID	Name	City	Tons Received
1	LAD008175390	CORNERSTONE CHEMICAL COMPANY	WAGGAMAN, LA	307,297
2	PAD002395887	HORSEHEAD CORP	PALMERTON, PA	198,557
3	MID000724831	MICHIGAN DISPOSAL INC	BELLEVILLE, MI	175,103
4	ALR000042754	STEEL DUST RECYCLING, LLC	MILLPORT, AL	155,921
5	TXD000719518	TM DEER PARK SERVICES	DEER PARK, TX	150,059
6	TXD055141378	CLEAN HARBORS DEER PARK	LA PORTE, TX	149,629
7	MND006148092	GOPHER RESOURCE CORPORATION	EAGAN, MN	139,639
8	ILD040891368	HORSEHEAD CORP	CHICAGO, IL	122,989
9	IND006419212	GREENCASTLE WDF FACILITY	GREENCASTLE, IN	121,966
10	MID980991566	EQ DETROIT INC	DETROIT, MI	116,061
11	IND093219012	HERITAGE ENVIRONMENTAL SERVICES LLC	INDIANAPOLIS, IN	114,054
12	IDD073114654	US ECOLOGY IDAHO INC SITE B	GRAND VIEW, ID	112,054
13	OHD020273819	VICKERY ENVIRONMENTAL INC	VICKERY, OH	107,889
14	KSD007148034	LAFARGE MIDWEST INC	FREDONIA, KS	100,935
15	IND980503890	HERITAGE ENVIRONMENTAL SERVICES, LLC	ROACHDALE, IN	100,115
16	KSD980633259	SYSTECH ENVIRONMENTAL CORP	FREDONIA, KS	98,510
17	ILD000666206	ENVIRITE OF ILLINOIS INC	HARVEY, IL	92,868
18	OKD065438376	CLEAN HARBORS LONE MOUNTAIN LLC	ORIENTA, OK	88,101
19	NJD991291105	CLEAN EARTH OF NORTH JERSEY	SOUTH KEARNY, NJ	85,353
20	OHD005048947	SYSTECH ENVIRONMENTAL CORP	PAULDING, OH	83,477
21	OHD987048733	LAFARGE NORTH AMERICA	PAULDING, OH	83,345
22	UTD991301748	CLEAN HARBORS GRASSY MOUNTAIN, LLC.	KNOLLS, UT	73,132
23	ARD069748192	CLEAN HARBORS EL DORADO	EL DORADO, AR	69,077
24	TXD069452340	US ECOLOGY TEXAS	ROBSTOWN, TX	68,154
25	OHD048415665	ROSS INCINERATION SERVICES INC	GRAFTON, OH	66,480
26	LAD000777201	CHEMICAL WASTE MANAGEMENT	SULPHUR, LA	66,428
27	TXD083472266	LYONDELL CHEMICAL CHANNELVIEW	CHANNELVIEW, TX	66,305
28	ARD981057870	RINECO CHEMICAL INDUSTRIES, INC.	BENTON, AR	65,670
29	PAD010154045	ENVIRITE OF PENNSYLVANIA INC	YORK, PA	64,774
30	MOD054018288	GREEN AMERICA RECYCLING LLC	HANNIBAL, MO	64,460
31	OHD980568992	ENVIRITE OF OHIO INC	CANTON, OH	63,607
32	SCD003351699	GIANT CEMENT COMPANY	HARLEYVILLE, SC	62,507
33	NJD002385730	DUPONT CHAMBERS WORKS	DEEPWATER, NJ	62,252
34	KSD031203318	ASH GROVE CEMENT COMPANY	CHANUTE, KS	62,166
35	MOD981127319	LONE STAR INDUSTRIES	CAPE GIRARDEAU, MO	61,906
36	MID048090633	WAYNE DISPOSAL INC	BELLEVILLE, MI	61,671
37	NVT330010000	US ECOLOGY NEVADA	BEATTY, NV	61,197
38	IND005081542	ESSROC CEMENT CORPORATION	LOGANSPOUT, IN	61,186
39	ARD981512270	ASH GROVE CEMENT COMPANY	FOREMAN, AR	60,616
40	UTD981552177	CLEAN HARBORS ARAGONITE, LLC	ARAGONITE, UT	58,655
41	LAR000042226	SHELL NORCO CHEMICAL PLANT-WEST SITE	NORCO, LA	56,382
42	MDD980555189	CLEAN HARBORS OF BALTIMORE INC.	BALTIMORE, MD	56,064
43	ORD089452353	CHEMICAL WASTE MANAGEMENT OF THE NW	ARLINGTON, OR	52,034
44	SCD003368891	HOLCIM US INC GEOCYCLE LLC	HOLLY HILL, SC	51,823
45	ILD984828558	WOOD RIVER WWTP	WOOD RIVER, IL	49,822
46	OHD045243706	ENVIROSAFE SERVICES OF OHIO INC	OREGON, OH	48,602
47	KYD053348108	SAFETY-KLEEN SYSTEMS, INC.	SMITHFIELD, KY	47,672
48	NJD002454544	VEOLIA ES TECHNICAL SOLUTIONS LLC	MIDDLESEX, NJ	47,095
49	ARD006354161	REYNOLDS METALS COMPANY GUM SPRINGS PL	ARKADELPHIA, AR	45,221
50	ALD000622464	CHEMICAL WASTE MANAGEMENT	EMELLE, AL	44,197
<b>Total</b>				<b>4,423,078</b>

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

**National Biennial RCRA Hazardous Waste Report: Based on 2011 Data**

**Exhibit 3.9** Quantity of RCRA Hazardous Waste Managed, by Management Method, Limited to Waste Received from Off-Site, 2011

Management Method	Tons Managed	Percentage of Quantity	Number of Facilities <sup>1</sup>	Percentage of Facilities <sup>1</sup>
AQUEOUS INORGANIC TREATMENT	312,888	5.1	39	8.5
AQUEOUS ORGANIC TREATMENT	108,744	1.8	16	3.5
DEEPWELL OR UNDERGROUND INJECTION	637,248	10.3	11	2.4
ENERGY RECOVERY	827,628	13.4	30	6.5
FUEL BLENDING	554,226	9.0	74	16.1
INCINERATION	549,843	8.9	62	13.5
LAND TREATMENT/APPLICATION/FARMING	125	0.0	10	2.2
LANDFILL/SURFACE IMPOUNDMENT	916,764	14.8	30	6.5
METALS RECOVERY	776,984	12.6	78	17.0
OTHER DISPOSAL	81,028	1.3	32	7.0
OTHER RECOVERY	146,906	2.4	33	7.2
OTHER TREATMENT	161,008	2.6	65	14.1
SLUDGE TREATMENT	382	0.0	5	1.1
SOLVENTS RECOVERY	180,028	2.9	46	10.0
STABILIZATION	490,370	7.9	44	9.6
STORAGE AND/OR TRANSFER	435,856	7.1	314	68.3
<b>Total</b>	<b>6,180,028</b>	<b>100.0</b>	<b>460</b>	

**Exhibit 3.10** Management Method, by Quantity of RCRA Hazardous Waste Managed, Limited to Waste Received from Off-Site, 2011

Management Method	Tons Managed	Percentage of Quantity	Number of Facilities <sup>1</sup>	Percentage of Facilities <sup>1</sup>
LANDFILL/SURFACE IMPOUNDMENT	916,764	14.8	30	6.5
ENERGY RECOVERY	827,628	13.4	30	6.5
METALS RECOVERY	776,984	12.6	78	17.0
DEEPWELL OR UNDERGROUND INJECTION	637,248	10.3	11	2.4
FUEL BLENDING	554,226	9.0	74	16.1
INCINERATION	549,843	8.9	62	13.5
STABILIZATION	490,370	7.9	44	9.6
STORAGE AND/OR TRANSFER	435,856	7.1	314	68.3
AQUEOUS INORGANIC TREATMENT	312,888	5.1	39	8.5
SOLVENTS RECOVERY	180,028	2.9	46	10.0
OTHER TREATMENT	161,008	2.6	65	14.1
OTHER RECOVERY	146,906	2.4	33	7.2
AQUEOUS ORGANIC TREATMENT	108,744	1.8	16	3.5
OTHER DISPOSAL	81,028	1.3	32	7.0
SLUDGE TREATMENT	382	0.0	5	1.1
LAND TREATMENT/APPLICATION/FARMING	125	0.0	10	2.2
<b>Total</b>	<b>6,180,028</b>	<b>100.0</b>	<b>460</b>	

**Exhibit 3.11** Management Method and Quantity of RCRA Hazardous Waste Managed, by Number of Facilities, Limited to Waste Received from Off-Site, 2011

Management Method	Tons Managed	Percentage of Quantity	Number of Facilities <sup>1</sup>	Percentage of Facilities <sup>1</sup>
STORAGE AND/OR TRANSFER	435,856	7.1	314	68.3
METALS RECOVERY	776,984	12.6	78	17.0
FUEL BLENDING	554,226	9.0	74	16.1
OTHER TREATMENT	161,008	2.6	65	14.1
INCINERATION	549,843	8.9	62	13.5
SOLVENTS RECOVERY	180,028	2.9	46	10.0
STABILIZATION	490,370	7.9	44	9.6
AQUEOUS INORGANIC TREATMENT	312,888	5.1	39	8.5
OTHER RECOVERY	146,906	2.4	33	7.2
OTHER DISPOSAL	81,028	1.3	32	7.0
ENERGY RECOVERY	827,628	13.4	30	6.5
LANDFILL/SURFACE IMPOUNDMENT	916,764	14.8	30	6.5
AQUEOUS ORGANIC TREATMENT	108,744	1.8	16	3.5
DEEPWELL OR UNDERGROUND INJECTION	637,248	10.3	11	2.4
LAND TREATMENT/APPLICATION/FARMING	125	0.0	10	2.2
SLUDGE TREATMENT	382	0.0	5	1.1
<b>Total</b>	<b>6,180,028</b>	<b>100.0</b>	<b>460</b>	

<sup>1</sup> Column may not sum because facilities may have multiple handling methods.

**Note:** Columns for these exhibits may not sum due to rounding.

## National Biennial RCRA Hazardous Waste Report: Based on 2011 Data

**Exhibit 4.1** RCRA Hazardous Waste Interstate Shipments and Receipts, by State, 2011

STATE	Interstate Shipments (Tons)	Interstate Receipts (Tons)
ALABAMA	90,171	142,615
ALASKA	1,994	0
ARIZONA	18,201	12,738
ARKANSAS	177,690	207,494
CALIFORNIA	272,885	10,452
COLORADO	27,195	33,970
CONNECTICUT	19,311	4,321
DELAWARE	42,940	60
DISTRICT OF COLUMBIA	1,139	0
FLORIDA	30,473	3,378
GEORGIA	39,554	1,493
GUAM	56	0
HAWAII	1,121	3
IDAHO	5,302	111,050
ILLINOIS	114,462	250,552
INDIANA	211,057	283,324
IOWA	50,595	278
KANSAS	25,418	148,603
KENTUCKY	160,636	69,341
LOUISIANA	124,186	91,410
MAINE	2,281	15
MARYLAND	53,179	54,814
MASSACHUSETTS	38,234	1,963
MICHIGAN	116,410	347,160
MINNESOTA	60,462	144,152
MISSISSIPPI	72,230	17,568
MISSOURI	59,000	129,663
MONTANA	4,834	0
NAVAJO NATION	28	0
NEBRASKA	42,689	34,741
NEVADA	3,652	71,366
NEW HAMPSHIRE	3,946	0
NEW JERSEY	253,990	166,332
NEW MEXICO	10,050	4,083
NEW YORK	123,392	42,399
NORTH CAROLINA	87,452	7,874
NORTH DAKOTA	1,115	84
OHIO	269,743	362,479
OKLAHOMA	23,474	88,414
OREGON	70,584	25,632
PENNSYLVANIA	154,520	288,250
PUERTO RICO	34,511	21
RHODE ISLAND	14,091	8,561
SOUTH CAROLINA	59,632	108,779
SOUTH DAKOTA	1,393	35
TENNESSEE	51,670	25,666
TEXAS	168,191	235,487
TRUST TERRITORIES	14	0
UTAH	24,578	65,570
VERMONT	2,436	1,020
VIRGIN ISLANDS	1,325	0
VIRGINIA	71,316	21
WASHINGTON	61,278	10,167
WEST VIRGINIA	39,085	6,317
WISCONSIN	79,549	30,637
WYOMING	4,079	0
<b>TOTAL</b>	<b>3,478,800</b>	<b>3,650,345</b>

Note: Columns may not sum due to rounding.

## **APPENDIX A**

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



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## EPA REGION - STATE 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 B**

### **2011 MANAGEMENT METHOD CODES**

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## 2011 MANAGEMENT METHOD CODES

Code	Management Method Code Group	Code	Management Method Code Group
	<b><u>RECLAMATION AND RECOVERY</u></b>		
H010	Metals recovery including retorting, smelting, chemical, etc.	H082	Adsorption (as the major component of treatment)
H020	Solvents recovery (distillation, extraction, etc.)	H083	Air or steam stripping (as the major component of treatment)
H039	Other recovery or reclamation for reuse including acid regeneration, organics recovery, etc. (specify in comments)	H101	Sludge treatment and/or dewatering (as the major component of treatment; not H071-H075, H077, or H082)
H050	Energy recovery at this site - used as fuel (includes on-site fuel blending before energy recovery)	H103	Absorption (as the major component of treatment)
H061	Fuel blending prior to energy recovery at another site (waste generated either onsite or received from offsite)	H111	Stabilization or chemical fixation prior to disposal at another site (as the major component of treatment; not H071-H075, H077, or H082)
	<b><u>DESTRUCTION OR TREATMENT PRIOR TO DISPOSAL AT ANOTHER SITE</u></b>	H112	Macro-encapsulation prior to disposal at another site (as the major component of treatment; not H071-H075, H077, or H082)
H040	Incineration - thermal destruction other than use as a fuel (includes any preparation prior to burning)	H121	Neutralization only (no other treatment)
H071	Chemical reduction with or without precipitation (includes any preparation or final processes for consolidation of residuals)	H122	Evaporation (as the major component of treatment; not reportable as H071-H083)
H073	Cyanide destruction with or without precipitation (includes any preparation or final processes for consolidation of residuals)	H123	Settling or clarification (as the major component of treatment; not reportable as H071-H083)
H075	Chemical oxidation (includes any preparation or final processes for consolidation of residuals)	H124	Phase separation (as the major component of treatment; not reportable as H071-H083)
H076	Wet air oxidation (includes any preparation or final processes for consolidation of residuals)	H129	Other treatment (specify in comments; not reportable as H071-H124)
H077	Other chemical precipitation with or without pre-treatment (includes processes for consolidation of residuals)		<b><u>DISPOSAL</u></b>
H081	Biological treatment with or without precipitation (includes any preparation or final processes for consolidation of residuals)	H131	Land treatment or application (to include any prior treatment and/or stabilization)
		H132	Landfill or surface impoundment that will be closed as landfill (to include prior treatment and/or stabilization)
		H134	Deepwell or underground injection (with or without treatment)
		H135	Discharge to sewer/POTW or NPDES (with prior storage - with or without treatment)

## 2011 MANAGEMENT METHOD CODES

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### Code Management Method Code Group

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#### TRANSFER OFFSITE

**H141** The site receiving this waste stored/bulked and transported the waste with no treatment or recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at that receiving site.

**APPENDIX C**  
**2011 FORM CODES**



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## 2011 FORM CODES

Code	Form Code Group	Code	Form Code Group
<b><u>MIXED MEDIA/DEBRIS/DEVICES</u></b>			
<i>Waste that is a mixture of organic and inorganic wastes, liquid and solid wastes, or devices that are not easily categorized</i>			
<b>W001</b>	Lab packs from any source <b>not containing</b> acute hazardous waste	<b>W105</b>	Acidic aqueous wastes less than 5% acid (diluted but pH < 2)
<b>W002</b>	Contaminated debris (see definition at 40 CFR 268.2(g) and requirements at 40 CFS 268.45): for example, certain paper, clothing, rags, wood, empty fiber or plastic containers, glass, piping, or other solids	<b>W107</b>	Aqueous waste containing cyanides (generally caustic)
<b>W004</b>	Lab packs from any source <b>containing acute</b> hazardous waste	<b>W110</b>	Caustic aqueous waste without cyanides (pH > 12.5)
<b>W005</b>	Waste pharmaceuticals managed as hazardous waste	<b>W113</b>	Other aqueous waste or wastewaters (fluid but not sludge)
<b>W301</b>	Contaminated soil (usually from spill clean up, demolition, or remediation); see also W512	<b>W117</b>	Waste liquid mercury (metallic)
<b>W309</b>	Batteries, battery parts, cores, casings (lead-acid or other types)	<b>W119</b>	Other inorganic liquid (specify in comments)
<b>W310</b>	Filters, solid adsorbents, ion exchange resins and spent carbon (usually from production, intermittent processes, or remediation)	<b><u>ORGANIC LIQUIDS</u></b>	
<b>W320</b>	Electrical devices (lamps, fluorescent lamps, or thermostats usually containing mercury; CRTs containing lead; etc.)	<i>Waste that is primarily organic and is highly fluid, with low inorganic solids content and low-to-moderate water content</i>	
<b>W512</b>	Sediment or lagoon dragout, drilling or other muds (wet or muddy soils); see also W301	<b>W200</b>	Still bottoms in liquid form (fluid but not sludge)
<b>W801</b>	Compressed gases of any type	<b>W202</b>	Concentrated halogenated (e.g., chlorinated) solvent
<b><u>INORGANIC LIQUIDS</u></b>		<b>W203</b>	Concentrated non-halogenated (e.g., non-chlorinated) solvent
<i>Waste that is primarily inorganic and highly fluid (e.g., aqueous), with low suspended inorganic solids and low organic content</i>			
<b>W101</b>	Very dilute aqueous waste containing more than 99% water (land disposal restriction defined wastewater that is not exempt under NPDES or POTW discharge)	<b>W204</b>	Concentrated halogenated/ non-halogenated solvent mixture
<b>W103</b>	Spent concentrated acid (5% or more)	<b>W205</b>	Oil-water emulsion or mixture (fluid but not sludge)
		<b>W206</b>	Waste oil managed as hazardous waste
		<b>W209</b>	Paint, ink, lacquer, or varnish (fluid - not dried out or sludge)
		<b>W210</b>	Reactive or polymerizable organic liquids and adhesives (fluid but not sludge)
		<b>W211</b>	Paint thinner or petroleum distillates
		<b>W219</b>	Other organic liquid (specify in comments)

## 2011 FORM CODES

Code	Form Code Group	Code	Form Code Group
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**INORGANIC SOLIDS**

*Waste that is primarily inorganic and solid, with low organic content and low-to-moderate water content; not pumpable*

- W303** Ash (from any type of burning of hazardous waste)
- W304** Slags, drosses, and other solid thermal residues
- W307** Metal scale, filings and scrap (including metal drums)
- W312** Cyanide or metal cyanide bearing solids, salts or chemicals
- W316** Metal salts or chemicals not containing cyanides
- W319** Other inorganic solids (specify in comments)

**ORGANIC SOLIDS**

*Waste that is primarily organic and solid, with low-to-moderate inorganic content and water content; not pumpable*

- W401** Pesticide solids (used or discarded -not contaminated soils - W301)
- W403** Solid resins, plastics or polymerized organics
- W405** Explosives or reactive organic solids
- W406** Dried paint (paint chips, filters, air filters, other)
- W409** Other organic solids (specify in comments)

**INORGANIC SLUDGES**

*Waste that is primarily inorganic, with moderate-to-high water content and low organic content; mostly pumpable*

- W501** Lime and/or metal hydroxide sludges and solids with no cyanides (not contaminated muds - W512)
- W503** Gypsum sludges from wastewater treatment or air pollution control
- W504** Other sludges from wastewater treatment or air pollution control
- W505** Metal bearing sludges (including plating sludge) not containing cyanides
- W506** Cyanide-bearing sludges (not contaminated soils - W512)
- W519** Other inorganic sludges (not contaminated muds - W512; specify in comments)

**ORGANIC SLUDGES**

*Waste that is primarily organic with low-to-moderate inorganic solids content and water content; pumpable*

- W603** Oily sludge (not contaminated muds - W512)
- W604** Paint or ink sludges, still bottoms in sludge form (not contaminated muds - W512)
- W606** Resins, tars, polymer or tarry sludge (not contaminated muds - W512)
- W609** Other organic sludge (specify in comments)

**APPENDIX D**  
**2011 WASTE CODES**

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## 2011 WASTE CODES

Code	Waste description	Code	Waste description
<b>CHARACTERISTICS OF HAZARDOUS WASTE</b> (SEE 40 CFR 261.24)		<b>D022</b>	Chloroform
<b>D001</b>	Ignitable waste	<b>D023</b>	o-Cresol
<b>D002</b>	Corrosive waste	<b>D024</b>	m-Cresol
<b>D003</b>	Reactive waste	<b>D025</b>	p-Cresol
<b>D004</b>	Arsenic	<b>D026</b>	Cresol
<b>D005</b>	Barium	<b>D027</b>	1,4-Dichlorobenzene
<b>D006</b>	Cadmium	<b>D028</b>	1,2-Dichloroethane
<b>D007</b>	Chromium	<b>D029</b>	1,1-Dichloroethylene
<b>D008</b>	Lead	<b>D030</b>	2,4-Dinitrotoluene
<b>D009</b>	Mercury	<b>D031</b>	Heptachlor (and its epoxide)
<b>D010</b>	Selenium	<b>D032</b>	Hexachlorobenzene
<b>D011</b>	Silver	<b>D033</b>	Hexachlorobutadiene
<b>D012</b>	Endrin	<b>D034</b>	Hexachloroethane
<b>D013</b>	Lindane	<b>D035</b>	Methyl ethyl ketone
<b>D014</b>	Methoxychlor	<b>D036</b>	Nitrobenzene
<b>D015</b>	Toxaphene	<b>D037</b>	Pentachlorophenol
<b>D016</b>	2,4-D	<b>D038</b>	Pyridine
<b>D017</b>	2,4,5-TP Silvex	<b>D039</b>	Tetrachloroethylene
<b>D018</b>	Benzene	<b>D040</b>	Trichlorethylene
<b>D019</b>	Carbon tetrachloride	<b>D041</b>	2,4,5-Trichlorophenol
<b>D020</b>	Chlordane	<b>D042</b>	2,4,6-Trichlorophenol
<b>D021</b>	Chlorobenzene	<b>D043</b>	Vinyl chloride

## 2011 WASTE CODES

Code	Waste description	Code	Waste description
<b>HAZARDOUS WASTE FROM NONSPECIFIC SOURCES</b> (SEE 40 CFR 261.31)		<b>F004</b>	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.
<b>F001</b>	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.	<b>F005</b>	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.
<b>F002</b>	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.	<b>F006</b>	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.
<b>F003</b>	The following spent non-halogenated 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.	<b>F007</b>	Spent cyanide plating bath solutions from electroplating operations.
		<b>F008</b>	Plating bath residues from the bottom of plating baths from electroplating operations in which cyanides are used in the process.
		<b>F009</b>	Spent stripping and cleaning bath solutions from electroplating operations in which cyanides are used in the process.
		<b>F010</b>	Quenching bath residues from oil baths from metal heat treating operations in which cyanides are used in the process.
		<b>F011</b>	Spent cyanide solutions from slat bath pot cleaning from metal heat treating operations.

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Code	Waste description	Code	Waste description
<b>F012</b>	Quenching wastewater treatment sludges from metal heat treating operations in which cyanides are used in the process.	<b>F024</b>	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.)
<b>F019</b>	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.	<b>F025</b>	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.
<b>F020</b>	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.)	<b>F026</b>	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.
<b>F021</b>	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.	<b>F027</b>	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.)
<b>F022</b>	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.	<b>F028</b>	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027.
<b>F023</b>	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.)		



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Code	Waste description	Code	Waste description
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.)		weather flow, sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in ' 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 not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under ' 261.4(a)(12)(i), if those residuals are to be disposed of.
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.	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.
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.	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.)
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 stormwater units receiving dry		

## 2011 WASTE CODES

Code	Waste description	Code	Waste description
<b>HAZARDOUS WASTE FROM SPECIFIC SOURCES</b> (SEE 40 CFR 261.32)		<b>K017</b>	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.
<b>K001</b>	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	<b>K018</b>	Heavy ends from the fractionation column in ethyl chloride production.
<b>K002</b>	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	<b>K019</b>	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.
<b>K003</b>	Wastewater treatment sludge from the production of molybdate orange pigments.	<b>K020</b>	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.
<b>K004</b>	Wastewater treatment sludge from the production of zinc yellow pigments.	<b>K021</b>	Aqueous spent antimony catalyst waste from fluoromethane production.
<b>K005</b>	Wastewater treatment sludge from the production of chrome green pigments.	<b>K022</b>	Distillation bottom tars from the production of phenol/acetone from cumene.
<b>K006</b>	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	<b>K023</b>	Distillation light ends from the production of phthalic anhydride from naphthalene.
<b>K007</b>	Wastewater treatment sludge from the production of iron blue pigments.	<b>K024</b>	Distillation bottoms from the production of phthalic anhydride from naphthalene.
<b>K008</b>	Oven residue from the production of chrome oxide green pigments.	<b>K025</b>	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.
<b>K009</b>	Distillation bottoms from the production of acetaldehyde from ethylene.	<b>K026</b>	Stripping still tails from the production of methyl ethyl pyridines.
<b>K010</b>	Distillation side cuts from the production of acetaldehyde from ethylene.	<b>K027</b>	Centrifuge and distillation residues from toluene diisocyanate production.
<b>K011</b>	Bottom stream from the wastewater stripper in the production of acrylonitrile.	<b>K028</b>	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.
<b>K013</b>	Bottom stream from the acetonitrile column in the production of acrylonitrile.	<b>K029</b>	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.
<b>K014</b>	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	<b>K030</b>	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
<b>K015</b>	Still bottoms from the distillation of benzyl chloride.	<b>K031</b>	By-product salts generated in the production of MSMA and cacodylic acid.
<b>K016</b>	Heavy ends or distillation residues from the production of carbon tetrachloride.	<b>K032</b>	Wastewater treatment sludge from the production of chlordane.
		<b>K033</b>	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.

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Code	Waste description	Code	Waste description
<b>K034</b>	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	<b>K051</b>	API separator sludge from the petroleum refining industry.
<b>K035</b>	Wastewater treatment sludges generated in the production of creosote.	<b>K052</b>	Tank bottoms (leaded) from the petroleum refining industry.
<b>K036</b>	Still bottoms from toluene reclamation distillation in the production of disulfoton.	<b>K060</b>	Ammonia still lime sludge from coking operations.
<b>K037</b>	Wastewater treatment sludges from the production of disulfoton.	<b>K061</b>	Emission control dust/sludge from the primary production of steel in electric furnaces.
<b>K038</b>	Wastewater from the washing and stripping of phorate production.	<b>K062</b>	Spent pickle liquor from steel finishing operations of plants that produce iron or steel.
<b>K039</b>	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	<b>K069</b>	Emission control dust/sludge from secondary lead smelting.
<b>K040</b>	Wastewater treatment sludge from the production of phorate.	<b>K071</b>	Brine purification muds from the mercury cell process in chlorine production, in which separately prepurified brine is not used.
<b>K041</b>	Wastewater treatment sludge from the production of toxaphene.	<b>K073</b>	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
<b>K042</b>	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	<b>K083</b>	Distillation bottoms from aniline production.
<b>K043</b>	2,6-dichlorophenol waste from the production of 2,4-D.	<b>K084</b>	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
<b>K044</b>	Wastewater treatment sludges from the manufacturing and processing of explosives.	<b>K085</b>	Distillation or fractionation column bottoms from the production of chlorobenzenes.
<b>K045</b>	Spent carbon from the treatment of wastewater containing explosives.	<b>K086</b>	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.
<b>K046</b>	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.	<b>K087</b>	Decanter tank tar sludge from coking operations.
<b>K047</b>	Pink/red water from TNT operations.	<b>K088</b>	Spent potliners from primary aluminum reduction.
<b>K048</b>	Dissolved air flotation (DAF) float from the petroleum refining industry.	<b>K093</b>	Distillation light ends from the production of phthalic anhydride from ortho-xylene.
<b>K049</b>	Slop oil emulsion solids from the petroleum refining industry.	<b>K094</b>	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.
<b>K050</b>	Heat exchanger bundle cleaning sludge from the petroleum refining industry.		

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Code	Waste description	Code	Waste description
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine from carboxylic acid hydrazides.
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	K109	Spent filter cartridges from product purification from the product of 1,1-dimethylhydrazine from carboxylic acid hydrazides.
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine from carboxylic acid hydrazides.
K098	Untreated process wastewater from the production of toxaphene.	K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.
K099	Untreated wastewater from the production of 2,4-D.	K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	K113	Condensed liquid light ends from purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene.
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	K114	Vicinals from the purification of toluenediamine in 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.	K115	Heavy ends from purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K103	Process residues from aniline extraction from the production of aniline.	K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.
K104	Combined wastewaters generated from nitrobenzene/aniline production.	K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.

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Code	Waste description	Code	Waste description
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	K147	Tar storage residues from coal tar refining.
K126	Baghouse dust and floor sweepings in milling and packaging operations from production or formulation of ethylenebisdithiocarbamic acid and its salts.	K148	Residues from coal tar distillation, including, but not limited to, still bottoms.
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	K149	Distillation bottoms from the production of alpha (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. [This waste does not include still bottoms from the distillation of benzoyl chloride]
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	K150	Organic residuals excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha (or methyl-) chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha (or methyl-) chlorinated toluenes, 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).	K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2propynyl n-butylcarbamate.).
K142	Tank storage residues from the production of coke from coal or from the recovery of coke by-products from coal.	K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2propynyl n-butylcarbamate.).
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.	K158	Bag house and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2propynyl n-butylcarbamate).
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.	K159	Organics from the treatment of thiocarbamate wastes.
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.		



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Code	Waste description	Code	Waste description
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).		so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met.*
K169	Crude oil tank sediment from petroleum refining operations.	K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.*
K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations.	K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide)
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (This listing does not include inert support media).	K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (This listing does not include inert support media).	K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing	K181	Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters comingled at the point of generation with nonwastewaters from other processes)
		<b>DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUALS, AND SPILL RESIDUES THEREOF B ACUTE HAZARDOUS WASTE (SEE 40 CFR 261.33 FOR AN ALPHABETIZED LISTING)</b>	
		P001	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
		P001	Warfarin, & salts, when present at concentrations greater than 0.3%
		P002	1-Acetyl-2-thiourea
		P002	Acetamide, N-(aminothioxomethyl)-
		P003	2-Propenal
		P003	Acrolein
		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)-

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Code	Waste description	Code	Waste description
P004	Aldrin	P036	Dichlorophenylarsine
P005	2-Propen-1-ol	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)-
P005	Allyl alcohol	P037	Dieldrin
P006	Aluminum phosphide (R,T)	P038	Arsine, diethyl-
P007	3(2H)-Isoxazolone, 5-(aminomethyl)-	P038	Diethylarsine
P007	5-(Aminomethyl)-3-isoxazolol	P039	Disulfoton
P008	4-Aminopyridine	P039	Phosphorodithioic acid, O,O-diethyl S-[2- (ethylthio)ethyl] ester
P008	4-Pyridinamine	P040	O,O-Diethyl O-pyrazinyl phosphorothioate
P009	Ammonium picrate (R)	P040	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)	P041	Diethyl-p-nitrophenyl phosphate
P010	Arsenic acid H3AsO4	P041	Phosphoric acid, diethyl 4-nitrophenyl ester
P011	Arsenic oxide As2O5	P042	1,2-Benzenediol, 4-[1-hydroxy-2- (methylamino)ethyl]-, (R)-
P011	Arsenic pentoxide	P042	Epinephrine
P012	Arsenic oxide As2O3	P043	Diisopropylfluorophosphate (DFP)
P012	Arsenic trioxide	P043	Phosphorofluoric acid, bis(1-methylethyl) ester
P013	Barium cyanide	P044	Dimethoate
P014	Benzenethiol	P044	Phosphorodithioic acid, O,O-dimethyl S-[2- (methylamino)-2-oxoethyl] ester
P014	Thiophenol	P045	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O- [methylamino]carbonyl] oxime
P015	Beryllium powder	P045	Thiofanox
P016	Dichloromethyl ether	P046	alpha,alpha-Dimethylphenethylamine
P016	Methane, oxybis[chloro-	P046	Benzeneethanamine, alpha, alpha-dimethyl-
P017	2-Propanone, 1-bromo-	P047	4,6-Dinitro-o-cresol, & salts
P017	Bromoacetone	P047	Phenol, 2-methyl-4,6-dinitro-, & salts
P018	Brucine	P048	2,4-Dinitrophenol
P018	Strychnidin-10-one, 2,3-dimethoxy-	P048	Phenol, 2,4-dinitro-
P020	Dinoseb	P049	Dithiobiuret
P020	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	P049	Thioimidodicarbonic diamide [(H2N)C(S)]2NH
P021	Calcium cyanide	P050	6,9-Methano-2,4,3- benzodioxathiepin,6,7,8,9,10,10-hexachloro- 1,5,5a,6,9,9a-hexahydro-,3-oxide
P021	Calcium cyanide Ca(CN)2	P050	Endosulfan
P022	Carbon disulfide	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, 2beta, 3alpha, 6alpha, 6beta, 7beta, 7aalpha)- & metabolites
P023	Acetaldehyde, chloro-	P051	Endrin
P023	Chloroacetaldehyde	P051	Endrin, & metabolites
P024	Benzenamine, 4-chloro-	P054	Aziridine
P024	p-Chloraniline	P054	Ethyleneimine
P026	1-(o-Chlorophenyl)thiourea	P056	Fluorine
P026	Thiourea, (2-chlorophenyl)-	P057	Acetamide, 2-fluoro-
P027	3-Chloropropionitrile	P057	Fluoroacetamide
P027	Propanenitrile, 3-chloro-	P058	Acetic acid, fluoro-, sodium salt
P028	Benzene, (chloromethyl)-	P058	Fluoroacetic acid, sodium salt
P028	Benzyl chloride		
P029	Copper cyanide		
P029	Copper cyanide Cu(CN)		
P030	Cyanides (soluble cyanide salts), not otherwise specified		
P031	Cyanogen		
P031	Ethanedinitrile		
P033	Cyanogen chloride		
P033	Cyanogen chloride (CN)Cl		
P034	2-Cyclohexyl-4,6-dinitrophenol		
P034	Phenol, 2-cyclohexyl-4,6-dinitro-		
P036	Arsonous dichloride, phenyl-		

## 2011 WASTE CODES

Code	Waste description	Code	Waste description
P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	P084	Vinylamine, N-methyl-N-nitroso-
P059	Heptachlor	P085	Diphosphoramidate, octamethyl-
P060	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4beta, 5beta, 8beta, 8abeta)-	P085	Octamethylpyrophosphoramidate
P060	Isodrin	P087	Osmium oxide OsO <sub>4</sub> , (T-4)-
P062	Hexaethyl tetraphosphate	P087	Osmium tetroxide
P062	Tetraphosphoric acid, hexaethyl ester	P088	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P063	Hydrocyanic acid	P088	Endothall
P063	Hydrogen cyanide	P089	Parathion
P064	Methane, isocyanato-	P089	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester
P064	Methyl isocyanate	P092	Mercury, (acetato-O)phenyl-
P065	Fulminic acid, mercury(2+) salt (R,T)	P092	Phenylmercury acetate
P065	Mercury fulminate (R,T)	P093	Phenylthiourea
P066	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester	P093	Thiourea, phenyl-
P066	Methomyl	P094	Phorate
P067	1,2-Propylenimine	P094	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P067	Aziridine, 2-methyl-	P095	Carbonic dichloride
P068	Hydrazine, methyl-	P095	Phosgene
P068	Methyl hydrazine	P096	Hydrogen phosphide
P069	2-Methylactonitrile	P096	Phosphine
P069	Propanenitrile, 2-hydroxy-2-methyl-	P097	Famphur
P070	Aldicarb	P097	Phosphorothioic acid O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P070	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime	P098	Potassium cyanide
P071	Methyl parathion	P098	Potassium cyanide K(CN)
P071	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester	P099	Argentate (1-), bis(cyano-C)-, potassium
P072	alpha-Naphthylthiourea	P099	Potassium silver cyanide
P072	Thiourea, 1-naphthalenyl-	P101	Ethyl cyanide
P073	Nickel carbonyl	P101	Propanenitrile
P073	Nickel carbonyl Ni(CO) <sub>4</sub> , (T-4)-	P102	2-Propyn-1-ol
P074	Nickel cyanide	P102	Propargyl alcohol
P074	Nickel cyanide Ni(CN) <sub>2</sub>	P103	Selenourea
P075	Nicotine, & salts	P104	Silver cyanide
P075	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts	P104	Silver cyanide Ag(CN)
P076	Nitric oxide	P105	Sodium azide
P076	Nitrogen oxide NO	P106	Sodium cyanide
P077	Benzenamine, 4-nitro-	P106	Sodium cyanide Na(CN)
P077	p-Nitroaniline	P108	Strychnidin-10-one, & salts
P078	Nitrogen dioxide	P108	Strychnine, & salts
P078	Nitrogen oxide NO <sub>2</sub>	P109	Tetraethyldithiopyrophosphate
P081	1,2,3-Propanetriol, trinitrate (R)	P109	Thiodiphosphoric acid, tetraethyl ester
P081	Nitroglycerine (R)	P110	Plumbane, tetraethyl-
P082	Methanimine, N-methyl-N-nitroso-	P110	Tetraethyl lead
P082	N-Nitrosodimethylamine	P111	Diphosphoric acid, tetraethyl ester
P084	N-Nitrosomethylvinylamine	P111	Tetraethyl pyrophosphate
		P112	Methane, tetranitro- (R)
		P112	Tetranitromethane (R)
		P113	Thallic oxide
		P113	Thallium oxide Tl <sub>2</sub> O <sub>3</sub>
		P114	Selenious acid, dithallium (1+) salt



## 2011 WASTE CODES

Code	Waste description	Code	Waste description
P114	Thallium(I) selenite	P198	Methanimidamide, N,N-dimethyl-N=-[3-[[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P115	Sulfuric acid, dithallium (1+) salt	P198	Formetanate hydrochloride
P115	Thallium(I) sulfate	P199	Methiocarb.
P116	Hydrazinecarbothioamide	P199	Phenol, (3,5-dimethyl-4(methylthio)-, methylcarbamate
P116	Thiosemicarbazide	P201	Promecarb
P118	Methanethiol, trichloro-	P201	Phenol, 3-methyl-5-(1-methylethyl)-,methyl carbamate
P118	Trichloromethanethiol	P202	Phenol, 3-(1 methylethyl)-, methyl carbamate
P119	Ammonium vanadate	P202	3-Isopropylphenyl N-methylcarbamate
P119	Vanadic acid, ammonium salt	P202	m-Cumenyl methylcarbamate
P120	Vanadium oxide V2O5	P202	Aldicarb sulfone.
P120	Vanadium pentoxide	P203	Propanal, 2-methyl-2-(methyl-sulfonyl)-,O-[[[(methylamino)carbonyl]oxime
P121	Zinc cyanide	P204	Physostigmine
P121	Zinc cyanide Zn(CN)2	P204	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1, 3a,8-trimethylmethylcarbamate (ester), (3aS-cis)-
P122	Zinc phosphide Zn3P2, when present at concentrations greater than 10% (R,T)	P205	Ziram
P123	Toxaphene		
P127	7-Benzofuranol, 2-3dihydro-2,2-dimethyl-, methylcarbamate		
P127	Carbofuran.		
P127	7-Benzofuranol, 2, 3-dihydro-2, 2 dimethyl-, methylcarbamate		
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)		
P128	Mexacarbonate		
P185	1,3-Dithiolane-2carboxaldehyde, 2,4-dimethyl-, O-[[[(methylamino)-carbonyl]oxime		
P188	Physostigmine salicylate		
P189	Carbosulfan		
P189	Carbamic acid, [(dibutylamino)-thio]methyl-,2,3-dihydro-2,2dimethyl-7benzofuranyl ester.		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)
P190	Metolcarb.		
P191	Dimetilan		
P191	Carbamic acid, dimethyl-, 1-[[[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester.		
P192	Isolan		
P192	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H-pyrazo-5-yl ester.		
P194	Ethanimidothioc acid, 2-(dimethylamino)-N-[[[(methylamino) carbonyl]oxy]-2-oxo-,methyl ester	See F027	
P194	Oxamyl		
P196	Manganese, bis(dimethylcarbamoedithioato-S,S=)		
P196	Manganese dimethyldithiocarbamate		
P197	Formparanate		
P197	Methanimidamide, N,N-dimethyl-N=-[2-methyl-4[[[(methylamino)carbonyl]oxy]phenyl]		
		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
		U005	Acetamide, N-9H-fluoren-2-yl

**DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUES, AND SPILL RESIDUES THEREOF B TOXIC WASTES (SEE 40 CFR 261.33 FOR AN ALPHABETIZED LISTING)**

## 2011 WASTE CODES

Code	Waste description	Code	Waste description
U006	Acetyl chloride (C,R,T)	U031	n-Butyl alcohol (I)
U007	2-Propenamamide	U032	Calcium chromate
U007	Acrylamide	U032	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calcium salt
U008	2-Propenoic acid (I)	U033	Carbon oxyfluoride (R,T)
U008	Acrylic acid (I)	U033	Carbonic difluoride
U009	2-Propenenitrile	U034	Acetaldehyde, trichloro-
U009	Acrylonitrile	U034	Chloral
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, 8balph)]-	U035	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U010	Mitomycin C	U035	Chlorambucil
U011	1H-1,2,4-Triazol-3-amine	U036	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U011	Amitrole	U036	Chlordane, alpha & gamma isomers
U012	Aniline (I,T)	U037	Benzene, chloro-
U012	Benzenamine (I,T)	U037	Chlorobenzene
U014	Auramine	U038	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U014	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-]	U038	Chlorobenzilate
U015	Azaserine	U039	p-Chloro-m-cresol
U015	L-Serine, diazoacetate (ester)	U039	Phenol, 4-chloro-3-methyl-
U016	Benz[c]acridine	U041	Epichlorohydrin
U017	Benzal chloride	U041	Oxirane, (chloromethyl)-
U017	Benzene, (dichloromethyl)-	U042	2-Chloroethyl vinyl ether
U018	Benz[a]anthracene	U042	Ethene, (2-chloroethoxy)-
U019	Benzene (I,T)	U043	Ethene, chloro-
U020	Benzenesulfonic acid chloride (C,R)	U043	Vinyl chloride
U020	Benzenesulfonyl chloride (C,R)	U044	Chloroform
U021	[1,1'-Biphenyl]-4,4'-diamine	U044	Methane, trichloro-
U021	Benzidine	U045	Methane, chloro- (I,T)
U022	Benzo[a]pyrene	U045	Methyl chloride (I,T)
U023	Benzene, (trichloromethyl)-	U046	Chloromethyl methyl ether
U023	Benzotrichloride (C,R,T)	U046	Methane, chloromethoxy-
U024	Dichloromethoxy ethane	U047	beta-Chloronaphthalene
U024	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	U047	Naphthalene, 2-chloro-
U025	Dichloroethyl ether	U048	o-Chlorophenol
U025	Ethane, 1,1'-oxybis[2-chloro-	U048	Phenol, 2-chloro-
U026	Chlornaphazin	U049	4-Chloro-o-toluidine, hydrochloride
U026	Naphthalenamine, N,N'-bis(2-chloroethyl)-	U049	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U027	Dichloroisopropyl ether	U050	Chrysene
U027	Propane, 2,2'-oxybis[2-chloro-	U051	Creosote
U028	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	U052	Cresol (Cresylic acid)
U028	Diethylhexyl phthalate	U052	Phenol, methyl-
U029	Methane, bromo-	U053	2-Butenal
U029	Methyl bromide	U053	Crotonaldehyde
U030	4-Bromophenyl phenyl ether	U055	Benzene, (1-methylethyl)- (I)
U030	Benzene, 1-bromo-4-phenoxy-	U055	Cumene (I)
U031	1-Butanol (I)	U056	Benzene, hexahydro- (I)
		U056	Cyclohexane (I)
		U057	Cyclohexanone (I)
		U058	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide

## 2011 WASTE CODES

Code	Waste description	Code	Waste description
U058	Cyclophosphamide	U081	Phenol, 2,4-dichloro-
U059	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxohexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	U082	2,6-Dichlorophenol
U059	Daunomycin	U082	Phenol, 2,6-dichloro-
U060	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	U083	Propane, 1,2-dichloro-
U060	DDD	U083	Propylene dichloride
U061	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-	U084	1,3-Dichloropropene
U061	DDT	U084	1-Propene, 1,3-dichloro-
U062	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	U085	1,2:3,4-Diepoxybutane (I,T)
U062	Diallate	U085	2,2'-Bioxirane
U063	Dibenz[a,h]anthracene	U086	Hydrazine, 1,2-diethyl-
U064	Benzo[rs]t]pentaphene	U086	N,N'-Diethylhydrazine
U064	Dibenzo[a,i]pyrene	U087	O,O-Diethyl S-methyl dithiophosphate
U066	1,2-Dibromo-3-chloropropane	U087	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U066	Propane, 1,2-dibromo-3-chloro-	U088	1,2-Benzenedicarboxylic acid, diethyl ester
U067	Ethane, 1,2-dibromo-	U088	Diethyl phthalate
U067	Ethylene dibromide	U089	Diethylstilbesterol
U068	Methane, dibromo-	U089	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis, (E)-
U068	Methylene bromide	U090	1,3-Benzodioxole, 5-propyl-
U069	1,2-Benzenedicarboxylic acid, dibutyl ester	U090	Dihydrosafrole
U069	Dibutyl phthalate	U091	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U070	Benzene, 1,2-dichloro-	U091	3,3'-Dimethoxybenzidine
U070	o-Dichlorobenzene	U092	Dimethylamine (I)
U071	Benzene, 1,3-dichloro-	U092	Methanamine, N-methyl- (I)
U071	m-Dichlorobenzene	U093	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U072	Benzene, 1,4-dichloro-	U093	p-Dimethylaminoazobenzene
U072	p-Dichlorobenzene	U094	7,12-Dimethylbenz[a]anthracene
U073	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	U094	Benz[a]anthracene, 7,12-dimethyl-
U073	3,3'-Dichlorobenzidine	U095	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U074	1,4-Dichloro-2-butene (I,T)	U095	3,3'-Dimethylbenzidine
U074	2-Butene, 1,4-dichloro- (I,T)	U096	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U075	Dichlorodifluoromethane	U096	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U075	Methane, dichlorodifluoro-	U097	Carbamic chloride, dimethyl-
U076	Ethane, 1,1-dichloro-	U097	Dimethylcarbamoyl chloride
U076	Ethylidene dichloride	U098	1,1-Dimethylhydrazine
U077	Ethane, 1,2-dichloro-	U098	Hydrazine, 1,1-dimethyl-
U077	Ethylene dichloride	U099	1,2-Dimethylhydrazine
U078	1,1-Dichloroethylene	U099	Hydrazine, 1,2-diphenyl-
U078	Ethene, 1,1-dichloro-	U101	2,4-Dimethylphenol
U079	1,2-Dichloroethylene	U101	Phenol, 2,4-dimethyl-
U079	Ethene, 1,2-dichloro-,(E)-	U102	1,2-Benzenedicarboxylic acid, dimethyl ester
U080	Methane, dichloro-	U102	Dimethyl phthalate
U080	Methylene chloride	U103	Dimethyl sulfate
U081	2,4-Dichlorophenol	U103	Sulfuric acid, dimethyl ester
		U105	2,4-Dinitrotoluene
		U105	Benzene, 1-methyl-2,4-dinitro-
		U106	2,6-Dinitrotoluene
		U106	Benzene, 2-methyl-1,3-dinitro-
		U107	1,2-Benzenedicarboxylic acid, dioctyl ester
		U107	Di-n-octyl phthalate
		U108	1,4-Diethyleneoxide

## 2011 WASTE CODES

Code	Waste description	Code	Waste description
U108	1,4-Dioxane	U134	Hydrofluoric acid (C,T)
U109	1,2-Diphenylhydrazine	U134	Hydrogen fluoride (C,T)
U109	Hydrazine, 1,2-diphenyl-	U135	Hydrogen sulfide
U110	1-Propanimine, N-propyl-(I)	U135	Hydrogen sulfide H2S
U110	Dipropylamine (I)	U136	Arsinic acid, dimethyl-
U111	1-Propanamine, N-nitroso-N-propyl-	U136	Cacodylic acid
U111	Di-n-propylnitrosamine	U137	Indeno[1,2,3-cd]pyrene
U112	Acetic acid, ethyl ester (I)	U138	Methane, iodo-
U112	Ethyl acetate (I)	U138	Methyl iodide
U113	2-Propenoic acid, ethyl ester (I)	U140	1-Propanol, 2-methyl- (I,T)
U113	Ethyl acrylate (I)	U140	Isobutyl alcohol (I,T)
U114	Carbamodithioic acid, 1,2-ethanediybis-, salts & esters	U141	1,3-Benzodioxole, 5-(1-propenyl)-
U114	Ethylenebisdithiocarbamic acid, salts & esters	U141	Isosafrole
U115	Ethylene oxide (I,T)	U142	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-
U115	Oxirane (I,T)	U142	Kepone
U116	2-Imidazolidinethione	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]]-
U116	Ethylenethiourea	U143	Lasiocarpine
U117	Ethane, 1,1'-oxybis-(I)	U144	Acetic acid, lead(2+) salt
U117	Ethyl ether (I)	U144	Lead acetate
U118	2-Propenoic acid, 2-methyl-, ethyl ester	U145	Lead phosphate
U118	Ethyl methacrylate	U145	Phosphoric acid, lead(2+) salt (2:3)
U119	Ethyl methanesulfonate	U146	Lead subacetate
U119	Methanesulfonic acid, ethyl ester	U146	Lead, bis(acetato-O)tetrahydroxytri-
U120	Fluoranthene	U147	2,5-Furandione
U121	Methane, trichlorofluoro-	U147	Maleic anhydride
U121	Trichloromonofluoromethane	U148	3,6-Pyridazinedione, 1,2-dihydro-
U122	Formaldehyde	U148	Maleic hydrazide
U123	Formic acid (C,T)	U149	Malononitrile
U124	Furan (I)	U149	Propanedinitrile
U124	Furfuran (I)	U150	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U125	2-Furancarboxaldehyde (I)	U150	Melphalan
U125	Furfural (I)	U151	Mercury
U126	Glycidylaldehyde	U152	2-Propenenitrile, 2-methyl- (I,T)
U126	Oxiranecarboxyaldehyde	U152	Methacrylonitrile (I,T)
U127	Benzene, hexachloro-	U153	Methanethiol (I,T)
U127	Hexachlorobenzene	U153	Thiomethanol (I,T)
U128	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	U154	Methanol (I)
U128	Hexachlorobutadiene	U154	Methyl alcohol (I)
U129	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha, 2alpha, 3beta, 4alpha, 5alpha, 6beta)-	U155	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U129	Lindane	U155	Methapyrilene
U130	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	U156	Carbonochloridic acid, methyl ester, (I,T)
U130	Hexachlorocyclopentadiene	U156	Methyl chlorocarbonate (I,T)
U131	Ethane, hexachloro-	U157	3-Methylcholanthrene
U131	Hexachloroethane	U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U132	Hexachlorophene	U157	4,4'-Methylenebis(2-chloroaniline)
U132	Phenol, 2,2'-methylenebis[3,4,6-trichloro-		
U133	Hydrazine (R,T)		



## 2011 WASTE CODES

Code	Waste description	Code	Waste description
U158	Benzenamine, 4,4'-methylenebis[2-chloro-	U183	Benzene, pentachloro-
U159	2-Butanone (I,T)	U183	Pentachlorobenzene
U159	Methyl ethyl ketone (MEK) (I,T)	U184	Ethane, pentachloro-
U160	2-Butanone, peroxide (R,T)	U184	Pentachloroethane
U160	Methyl ethyl ketone peroxide (R,T)	U185	Benzene, pentachloronitro-
U161	4-Methyl-2-pentanone (I)	U185	Pentachloronitrobenzene (PCNB)
U161	Methyl isobutyl ketone (I)	U186	1,3-Pentadiene (I)
U161	Pentanol, 4-methyl-	U186	1-Methylbutadiene (I)
U162	2-Propenoic acid, 2-methyl-, methyl ester (I,T)	U187	Acetamide, N-(4-ethoxyphenyl)-
U162	Methyl methacrylate (I,T)	U187	Phenacetin
U163	Guanidine, N-methyl-N'-nitro-N-nitroso-	U188	Phenol
U163	MNNG	U189	Phosphorus sulfide (R)
U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thio-	U189	Sulfur phosphide (R)
U164	Methylthiouracil	U190	1,3-Isobenzofurandione
U165	Naphthalene	U190	Phthalic anhydride
U166	1,4-Naphthalenedione	U191	2-Picoline
U166	1,4-Naphthoquinone	U191	Pyridine, 2-methyl-
U167	1-Naphthalenamine	U192	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U167	alpha-Naphthylamine	U192	Pronamide
U168	2-Naphthalenamine	U193	1,2-Oxathiolane, 2,2-dioxide
U168	beta-Naphthylamine	U193	1,3-Propane sultone
U169	Benzene, nitro-	U194	1-Propanamine (I,T)
U169	Nitrobenzene (I,T)	U194	n-Propylamine (I,T)
U170	p-Nitrophenol (I,T)	U196	Pyridine
U170	Phenol, 4-nitro-	U197	2,5-Cyclohexadiene-1,4-dione
U171	2-Nitropropane (I,T)	U197	p-Benzoquinone
U171	Propane, 2-nitro- (I,T)	U200	Reserpine
U172	1-Butanamine, N-butyl-N-nitroso-	U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta, 16beta, 17alpha, 18beta, 20alpha)-
U172	N-Nitrosodi-n-butylamine	U201	1,3-Benzenediol
U173	Ethanol, 2,2'-(nitrosoimino)bis-	U201	Resorcinol
U173	N-Nitrosodiethanolamine	U202	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U174	Ethanamine, N-ethyl-N-nitroso-	U202	Saccharin, & salts
U174	N-Nitrosodiethylamine	U203	1,3-Benzodioxole, 5-(2-propenyl)-
U176	N-Nitroso-N-ethylurea	U203	Safrole
U176	Urea, N-ethyl-N-nitroso-	U204	Selenious acid
U177	N-Nitroso-N-methylurea	U204	Selenium dioxide
U177	Urea, N-methyl-N-nitroso-	U204	Selenium sulfide
U178	Carbamic acid, methylnitroso-, ethyl ester	U205	Selenium sulfide SeS2 (R,T)
U178	N-Nitroso-N-methylurethane	U206	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)-carbonyl]amino]-
U179	N-Nitrosopiperidine	U206	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-,D-
U179	Piperidine, 1-nitroso-	U206	Streptozotocin
U180	N-Nitrosopyrrolidine	U207	1,2,4,5-Tetrachlorobenzene
U180	Pyrrolidine, 1-nitroso-	U207	Benzene, 1,2,4,5-tetrachloro-
U181	5-Nitro-o-toluidine	U208	1,1,1,2-Tetrachloroethane
U181	Benzenamine, 2-methyl-5-nitro		
U182	1,3,5-Trioxane, 2,4,6-trimethyl-		
U182	Paraldehyde		

## 2011 WASTE CODES

Code	Waste description	Code	Waste description
U208	Ethane, 1,1,1,2-tetrachloro-	U239	Xylene (l)
U209	1,1,2,2-Tetrachloroethane	U240	2,4-D, salts & esters
U209	Ethane, 1,1,2,2-tetrachloro-	U240	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U210	Ethene, tetrachloro-	U240	Dichlorophenoxyacetic acid 2,4-D
U210	Tetrachloroethylene	U243	1-Propene, 1,1,2,3,3,3-hexachloro-
U211	Carbon tetrachloride	U243	Hexachloropropene
U211	Methane, tetrachloro-	U244	Thioperoxydicarbonic diamide [(H2N)C(S)]2S2, tetramethyl-
U213	Furan, tetrahydro-(l)	U244	Thiram
U213	Tetrahydrofuran (l)	U246	Cyanogen bromide (CN)Br
U214	Acetic acid, thallium(1+) salt	U247	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U214	Thallium(l) acetate	U247	Methoxychlor
U215	Carbonic acid, dithallium(1+) salt	U248	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U215	Thallium(l) carbonate	U248	Warfarin, & salts, when present at concentrations of 0.3% or less
U216	Thallium chloride TlCl	U249	Zinc phosphide Zn3P2, when present at concentrations of 10% or less
U216	Thallium(l) chloride	U271	Benomyl
U217	Nitric acid, thallium(1+) salt	U278	Bendiocarb
U217	Thallium(l) nitrate	U278	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U218	Ethanethioamide	U279	Carbaryl
U218	Thioacetamide	U279	1-Naphthalenol, methylcarbamate
U219	Thiourea	U280	Barban
U220	Benzene, methyl-	U280	Carbamic acid, (3-chlorophenol)-, 4-chloro-2-butynyl ester
U220	Toluene	U328	Benzenamine, 2-methyl-
U221	Benzenediamine, ar-methyl-	U328	o-Toluidine
U221	Toluenediamine	U353	Benzenamine, 4-methyl-
U222	Benzenamine, 2-methyl-, hydrochloride	U353	p-Toluidine
U222	o-Toluidine hydrochloride	U359	Ethanol, 2-ethoxy-
U223	Benzene, 1,3-diisocyanatomethyl- (R,T)	U359	Ethylene glycol monoethyl ether
U223	Toluene diisocyanate (R,T)	U364	1,3-Benzodioxol-4ol, 2,2-dimethyl
U225	Bromoform	U364	Bendiocarb phenol
U225	Methane, tribromo-	U367	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U226	Ethane, 1,1,1-trichloro-	U367	Carbofuran phenol
U226	Methyl chloroform	U372	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U227	1,1,2-Trichloroethane	U372	Carbendazim
U227	Ethane, 1,1,2-trichloro-	U373	Carbamic acid, phenyl-, 1-methylethyl ester
U228	Ethene, trichloro-	U373	Propham
U228	Trichloroethylene	U387	Carbamothiocic acid, dipropyl-, S-(phenylmethyl) ester
U234	1,3,5-Trinitrobenzene (R,T)	U387	Prosulfocarb
U234	Benzene, 1,3,5-trinitro-	U389	Triallate
U235	1-Propanol, 2,3-dibromo-, phosphate (3:1)	U389	Carbamothiocic acid, bis (1-methylethyl)-, S-(2,3,3-trichloro-2propenyl) ester
U235	Tris(2,3,-dibromopropyl) phosphate		
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		
U236	Trypan blue		
U237	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-		
U237	Uracil mustard		
U238	Carbamic acid, ethyl ester		
U238	Ethyl carbamate (urethane)		
U239	Benzene, dimethyl- (l,T)		

**2011 WASTE CODES**

Code	Waste description	Code	Waste description
<b>U394</b>	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo, methyl ester	<b>U409</b>	Thiophanate-methyl
<b>U394</b>	A2213	<b>U409</b>	Carbamic acid, (1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester
<b>U395</b>	Diethylene glycol, dicarbamate	<b>U410</b>	Ethanimidothioic acid, N, N=(thiobis[(methylimino)carbonyloxy])bis-, dimethyl ester
<b>U395</b>	Ethanol, 2, 2;-oxybis-,dicarbamate	<b>U411</b>	Propoxur
<b>U404</b>	Ethanamine, N, N-diethyl-	<b>U411</b>	Phenol, 2-(-1-methylethoxy)-, methylcarbamate
<b>U404</b>	Triethylamine		

**APPENDIX E**  
**STATE GUIDANCE**



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## STATE GUIDANCE

The Environmental Protection Agency, Office of Resource Conservation and Recovery provides guidance to the implementers (States and Regions) to determine which reported waste should be included in the National Hazardous Waste Biennial Report (NBR). It is the responsibility of each implementer to determine which sites and wastes should be included in the NBR. Implementers indicate which sites and wastes are to be included in the NBR by setting “include in national report” flags. These flags exist at both the site level and waste level. Implementers may submit sites and waste streams that are not included in the NBR. An implementer’s complete submission, regardless of whether the site and/or waste stream is marked for inclusion in the NBR, is stored in RCRAInfo.

A site should be included in the NBR if that site was a Large Quantity Generator (based on the federal definition) or a Treatment, Storage, or Disposal Facility (TSDF) in calendar year 2011, regardless of the site’s current generator and/or TSDF status. The Site ID Form generator status boxes (Item 10.A.1.a, b, or c) and TSDF Status box (Item 10.A.6) indicate the site’s generator status and TSDF status on the date that the biennial report submission was certified (Item 14). It is possible that a site’s generator and/or TSDF status was different in calendar year 2011 than it was at the time of the biennial report submission certification.

The *2011 Hazardous Waste Report Instructions and Forms* says “RCRA hazardous waste exported directly to a foreign country **should not be reported** on the GM Form (unless required by your state). Facilities that export hazardous waste must file a separate Annual Report under 40 CFR 262.56.” Some implementers require reporting of wastes exported to foreign countries. In these cases, waste shipped off-site to foreign countries should be marked for inclusion in the NBR.

In general, wastewaters should be excluded from the NBR. Characteristics that often identify wastewaters include the following form codes and/or management methods.

### Form Codes:

- W101 Very dilute aqueous waste containing more than 99% water
- W105 Acidic aqueous wastes less than 5% acid
- W113 Other aqueous waste or wastewaters

### Management Methods:

- H071 Chemical reduction with or without precipitation
- H073 Cyanide destruction with or without precipitation
- H075 Chemical oxidation
- H076 Wet air oxidation
- H077 Other chemical precipitation with or without pre-treatment

H081 Biological treatment with or without precipitation  
H082 Adsorption  
H083 Air or steam stripping  
H121 Neutralization only  
H122 Evaporation  
H123 Settling or clarification  
H124 Phase separation  
H129 Other treatment  
H135 Discharge to sewer/POTW or NPDES

The 2011 Hazardous Waste Report Instructions and Forms contains the following additional instructions regarding the reporting of wastewaters:

Following are the materials and wastes addressed under 40 CFR 261.4(a) and (b) and 261.5(c), which **should not be reported** on Form GM:

- Materials which are excluded from being a solid waste, e.g., any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works (unless they are stored or treated in regulated units prior to being discharged). (40 CFR 261.4(a))
- Wastes managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10. (40 CFR 261.5(c)(2)) **Any hazardous waste residues generated from these units, however, must be reported on Form GM.**

Wastes exhibiting wastewater characteristics (i.e., form code of W101, W105, or W113) that are managed via deepwell or underground injection (H134) should be included in the NBR.