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Quantities of TRI Chemicals in Waste, 2008

Waste Management Activity	anagement Activity 2008	
	Pounds	Percent
Quantity Recycled	8,585,073,232	38.0
Quantity Recycled On-site	6,649,494,206	29.5
Quantity Recycled Off-site	1,935,579,026	8.6
Quantity Used for Energy Recovery	2,605,278,039	11.5
Quantity Used for Energy Recovery On-site	2,164,562,491	9.6
Quantity Used for Energy Recovery Off-site	440,715,548	2.0
Quantity Treated	7,439,658,151	33.0
Quantity Treated On-site	6,961,964,722	30.8
Quantity Treated Off-site	477,693,429	2.1
Total Quantity Disposed of or Otherwise Released	3,944,575,510	17.5
Total On-site Disposal to Class I Underground Injection		
Wells, RCRA Subtitle C Landfills, and Other Landfills	567,055,658	2.5
Total Other On-site Disposal or Other Releases	2,778,810,533	12.3
Total Off-site Disposal to Class I Underground Injection		
Wells, RCRA Subtitle C Landfills, and Other Landfills	399,289,514	1.8
Total Other Off-site Disposal or Other Releases	199,419,805	0.9
Total Production-related Waste Managed	22,574,584,931	100.0
Non-production-related Waste Managed	37,841,795	

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data document at

www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

Data are from TRI Form R Section 8.

11/22/09

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: All Industries

, ,			Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
108-88-3 Toluene	1,149,693,927	19,998,531	1,169,692,458
7440-50-8 Copper	234,870,879	442,830,111	677,700,990
110-54-3 n-Hexane	650,711,275	4,123,546	654,834,820
Lead compounds	270,485,484	281,176,406	551,661,891
Zinc compounds	73,562,660	340,011,860	413,574,519
67-56-1 Methanol	384,308,784	19,760,123	404,068,907
98-82-8 Cumene	333,416,048	63,216	333,479,264
7782-50-5 Chlorine	327,154,102	305,626	327,459,728
76-13-1 Freon 113	297,055,980	72	297,056,052
107-21-1 Ethylene glycol	198,034,222	57,817,401	255,851,623
107-06-2 1,2-Dichloroethane	219,320,041	594,791	219,914,832
Copper compounds	109,681,404	107,907,066	217,588,470
107-13-1 Acrylonitrile	210,654,904	3,819	210,658,723
1330-20-7 Xylene (mixed isomers)	186,508,503	15,231,594	201,740,097
75-65-0 tert-Butyl alcohol	148,085,430	3,370	148,088,800
7439-96-5 Manganese	16,151,011	102,934,298	119,085,309
75-09-2 Dichloromethane	106,301,240	8,676,871	114,978,111
79-01-6 Trichloroethylene	113,499,664	1,205,639	114,705,303
7440-47-3 Chromium	6,308,032	106,657,079	112,965,111
7440-02-0 Nickel	7,327,644	104,379,188	111,706,831
Subtotal for Top 20 Chemicals	5,043,131,233	1,613,680,605	6,656,811,838
Total for all TRI Chemicals	6,649,494,206	1,935,579,026	8,585,073,232

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The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Manufacturing* Industries

The 20 Chemicals with Largest Total Recycling On-site and On		ing industries	Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
108-88-3 Toluene	756,646,875	7,810,199	764,457,074
110-54-3 n-Hexane	612,774,424	0	612,774,424
67-56-1 Methanol	359,825,331	17,164,650	376,989,981
7440-50-8 Copper	225,339,150	144,786,702	370,125,852
98-82-8 Cumene	333,344,050	12,395	333,356,445
Zinc compounds	39,970,058	263,416,176	303,386,234
Lead compounds	137,848,087	162,793,878	300,641,966
76-13-1 Freon 113	297,055,980	0	297,055,980
7782-50-5 Chlorine	288,836,232	0	288,836,232
108-88-3 Toluene	280,092,544	7,028,356	287,120,900
107-06-2 1,2-Dichloroethane	219,319,897	594,416	219,914,313
107-13-1 Acrylonitrile	210,653,993	3,800	210,657,793
Lead compounds	124,665,081	42,003,325	166,668,406
107-21-1 Ethylene glycol	139,072,487	11,861,781	150,934,268
Copper compounds	100,903,345	47,797,675	148,701,020
75-65-0 tert-Butyl alcohol	148,085,411	1,000	148,086,411
7440-50-8 Copper	6,043,175	132,686,145	138,729,320
7550-45-0 Titanium tetrachloride	104,994,852	0	104,994,852
74-85-1 Ethylene	104,980,734	0	104,980,734
75-01-4 Vinyl chloride	98,939,569	1	98,939,570
Subtotal for Top 20 Chemicals	4,589,391,275	837,960,500	5,427,351,775
Total for all TRI Chemicals	6,459,483,380	1,828,860,129	8,288,343,509

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI)* and Factors to Consider When Using TRI Data document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

^{*} Manufacturing industries include NAICS codes 31-33.

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The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Chemicals (NAICS 325)

The 20 Chemicals with Largest Total necycling On-Site and	,	,	Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
108-88-3 Toluene	756,646,875	7,810,199	764,457,074
67-56-1 Methanol	359,825,331	17,164,650	376,989,981
98-82-8 Cumene	333,344,050	12,395	333,356,445
76-13-1 Freon 113	297,055,980	0	297,055,980
107-06-2 1,2-Dichloroethane	219,319,897	594,416	219,914,313
107-13-1 Acrylonitrile	210,653,993	3,800	210,657,793
107-21-1 Ethylene glycol	139,072,487	11,861,781	150,934,268
75-65-0 tert-Butyl alcohol	148,085,411	1,000	148,086,411
74-85-1 Ethylene	104,980,734	0	104,980,734
75-01-4 Vinyl chloride	98,939,569	1	98,939,570
75-09-2 Dichloromethane	89,401,318	7,518,371	96,919,689
1330-20-7 Xylene (mixed isomers)	86,680,159	8,567,091	95,247,250
Nitrate compounds	69,543,069	100,087	69,643,156
7664-41-7 Ammonia	57,006,447	204,896	57,211,342
115-07-1 Propylene	52,166,584	0	52,166,584
71-43-2 Benzene	47,871,929	920,630	48,792,559
108-95-2 Phenol	38,698,461	155,148	38,853,609
7782-50-5 Chlorine	37,259,968	0	37,259,968
7647-01-0 Hydrochloric acid	36,533,387	0	36,533,387
50-00-0 Formaldehyde	35,996,952	172	35,997,124
Subtotal for Top 20 Chemicals	3,219,082,600	54,914,637	3,273,997,237
Total for all TRI Chemicals	3,611,807,576	133,606,252	3,745,413,828

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The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Primary Metals (NAICS 331)

, ,			Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
7440-50-8 Copper	225,339,150	144,786,702	370,125,852
Zinc compounds	39,970,058	263,416,176	303,386,234
7782-50-5 Chlorine	288,836,232	0	288,836,232
Lead compounds	124,665,081	42,003,325	166,668,406
Copper compounds	100,903,345	47,797,675	148,701,020
7550-45-0 Titanium tetrachloride	104,994,852	0	104,994,852
Manganese compounds	26,217,184	48,443,225	74,660,409
Chromium compounds	59,266,164	14,984,231	74,250,395
79-01-6 Trichloroethylene	48,337,109	249,532	48,586,641
Nickel compounds	28,744,223	18,038,967	46,783,190
7439-96-5 Manganese	15,248,250	28,134,033	43,382,283
7647-01-0 Hydrochloric acid	40,413,123	1,614,386	42,027,509
7439-92-1 Lead	33,223,394	6,311,102	39,534,496
107-21-1 Ethylene glycol	30,591,420	38,391	30,629,811
7429-90-5 Aluminum (fume or dust)	17,494,221	11,353,333	28,847,554
7440-66-6 Zinc (fume or dust)	4,094,145	22,786,402	26,880,547
7440-47-3 Chromium	4,426,804	20,398,444	24,825,247
7440-02-0 Nickel	5,446,757	18,791,625	24,238,382
108-10-1 Methyl isobutyl ketone	19,689,302	38,328	19,727,630
7664-39-3 Hydrogen fluoride	18,922,084	96	18,922,180
Subtotal for Top 20 Chemicals	1,236,822,897	689,185,973	1,926,008,870
Total for all TRI Chemicals	1,277,245,371	700,377,737	1,977,623,108

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The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Paper Products (NAICS 322)

The 20 Chemicals with Largest Total necycling On-site and On-			Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
108-88-3 Toluene	39,757,703	1,552,950	41,310,653
110-54-3 n-Hexane	1,660,837	25,359	1,686,196
110-82-7 Cyclohexane	433,700	0	433,700
0049-04-4 Chlorine dioxide	258,073	0	258,073
7782-50-5 Chlorine	210,000	0	210,000
Manganese compounds	0	181,877	181,877
Nickel compounds	0	108,692	108,692
Barium compounds	0	107,015	107,015
7429-90-5 Aluminum (fume or dust)	0	101,244	101,244
67-56-1 Methanol	83,587	6,842	90,429
1330-20-7 Xylene (mixed isomers)	54,841	23,513	78,354
872-50-4 N-Methyl-2-pyrrolidone	76,798	0	76,798
Zinc compounds	22,784	46,830	69,614
7440-50-8 Copper	0	27,046	27,046
7439-92-1 Lead	8	17,006	17,013
Lead compounds	0	16,664	16,664
108-05-4 Vinyl acetate	11,182	1,331	12,513
Antimony compounds	11,108	0	11,108
7664-41-7 Ammonia	10,025	784	10,809
1163-19-5 Decabromodiphenyl oxide	9,870	0	9,870
Subtotal for Top 20 Chemicals	42,600,516	2,217,153	44,817,669
Total for all TRI Chemicals	42,609,169	2,237,760	44,846,928

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The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Petroleum (NAICS 324)

The 20 Chemicals with Largest Total necycling On-site and On-site	ĺ	,	Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
1330-20-7 Xylene (mixed isomers)	73,801,981	126,411	73,928,392
108-88-3 Toluene	36,322,477	1,146,215	37,468,692
107-21-1 Ethylene glycol	15,254,384	14,108,730	29,363,114
91-20-3 Naphthalene	22,399,749	37,628	22,437,376
95-63-6 1,2,4-Trimethylbenzene	19,264,982	28,265	19,293,247
110-82-7 Cyclohexane	8,368,788	278	8,369,066
110-54-3 n-Hexane	7,080,894	630,682	7,711,576
100-41-4 Ethylbenzene	5,175,694	7,557	5,183,252
71-43-2 Benzene	3,381,923	73,846	3,455,769
1313-27-5 Molybdenum trioxide	0	2,121,233	2,121,233
Nickel compounds	32,650	1,936,800	1,969,450
7664-41-7 Ammonia	1,726,932	10,995	1,737,927
111-42-2 Diethanolamine	1,185,814	0	1,185,814
Zinc compounds	4,102	1,140,721	1,144,823
Vanadium compounds	671	637,072	637,743
Cobalt compounds	1,063	602,542	603,605
1319-77-3 Cresol (mixed isomers)	458,041	71	458,113
7440-62-2 Vanadium (except when contained in an alloy)	0	403,555	403,555
Copper compounds	10,267	260,938	271,205
Polycyclic aromatic compounds	179,980	26,363	206,342
Subtotal for Top 20 Chemicals	194,650,392	23,299,902	217,950,294
Total for all TRI Chemicals	195,208,103	23,835,955	219,044,058

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The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Metal Mining (NAICS 2122)

The 20 Chemicals with Largest Total Recycling On-Site		, (,	Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
Zinc compounds	28,498,198	690	28,498,888
7664-41-7 Ammonia	5,119,361	0	5,119,361
Mercury compounds	3,216,662	30,192	3,246,854
 Manganese compounds 	2,578,233	25,364	2,603,597
Nitrate compounds	2,500,867	0	2,500,867
Lead compounds	1,556,630	600,516	2,157,145
Cyanide compounds	1,160,818	0	1,160,818
Cadmium compounds	1,120,847	2,700	1,123,547
Copper compounds	596,286	311,921	908,207
Nickel compounds	151,045	19,164	170,209
Vanadium compounds	117,924	0	117,924
Arsenic compounds	35,599	36,003	71,602
7440-47-3 Chromium	0	64,600	64,600
7439-96-5 Manganese	0	38,800	38,800
Cobalt compounds	30,000	2,800	32,800
Beryllium compounds	26,935	0	26,935
107-21-1 Ethylene glycol	0	24,429	24,429
Chromium compounds	430	16,428	16,858
Selenium compounds	13,000	0	13,000
Antimony compounds	8,570	5	8,575
Subtotal for Top 20 Chemicals	46,731,404	1,173,612	47,905,016
Total for all TRI Chemicals	46,734,773	1,181,932	47,916,705

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The Chemicals with Largest Total Recycling On-site and Off-site, 2008: Coal Mining (NAICS 2121)

, ,		·	Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
107-21-1 Ethylene glycol	0	20,000	20,000
7664-41-7 Ammonia	12,454	0	12,454
Chromium compounds	0	826	826
Cobalt compounds	0	826	826
Nickel compounds	0	661	661
Zinc compounds	0	528	528
Manganese compounds	0	221	221
7439-97-6 Mercury	0	25	25
Lead compounds	0	18	18
Antimony compounds	0	12	12
Total for all TRI Chemicals	12,454	23,117	35,571

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Electric Utilities (NAICS 2211)

The 20 Offermedia with Eurgest Total Recycling Off-site and Off-	ĺ		Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
Chromium compounds	20,518	1,730,004	1,750,522
Copper compounds	0	1,418,673	1,418,673
Barium compounds	66,079	1,149,477	1,215,556
Nickel compounds	0	1,155,534	1,155,534
Manganese compounds	44,952	1,066,742	1,111,694
7440-39-3 Barium	0	653,334	653,334
Zinc compounds	7,977	450,275	458,252
Vanadium compounds	0	440,813	440,813
7782-50-5 Chlorine	0	220,361	220,361
107-21-1 Ethylene glycol	0	42,145	42,145
7664-41-7 Ammonia	0	41,275	41,275
Lead compounds	2,817	36,086	38,903
Antimony compounds	0	34,626	34,626
7440-02-0 Nickel	0	31,674	31,674
7440-62-2 Vanadium (except when contained in an alloy)	0	23,652	23,652
7439-92-1 Lead	0	16,547	16,547
Cobalt compounds	0	9,300	9,300
91-20-3 Naphthalene	0	7,451	7,451
Mercury compounds	0	4,157	4,157
7439-96-5 Manganese	0	2,694	2,694
Subtotal for Top 20 Chemicals	142,343	8,534,821	8,677,164
Total for all TRI Chemicals	142,343	8,540,355	8,682,698

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Chemical Wholesale Distributors (NAICS 4246)

, ,	ĺ		Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
1330-20-7 Xylene (mixed isomers)	1,169,703	148,607	1,318,310
108-10-1 Methyl isobutyl ketone	787,345	195,526	982,871
7782-50-5 Chlorine	838,329	0	838,329
108-88-3 Toluene	298,093	106,251	404,344
67-56-1 Methanol	202,771	33,627	236,398
75-09-2 Dichloromethane	148,450	24,071	172,521
71-36-3 n-Butyl alcohol	148,866	9,098	157,964
75-05-8 Acetonitrile	154,044	0	154,044
76-14-2 Dichlorotetrafluoroethane (CFC-114)	153,820	0	153,820
121-44-8 Triethylamine	125,722	0	125,722
75-63-8 Bromotrifluoromethane (Halon 1301)	60,319	0	60,319
68-12-2 N,N-Dimethylformamide	49,276	0	49,276
7664-41-7 Ammonia	6,394	41,149	47,543
100-41-4 Ethylbenzene	13,319	27,751	41,070
95-63-6 1,2,4-Trimethylbenzene	31,254	3,943	35,197
Glycol ethers	6,302	26,586	32,888
7664-39-3 Hydrogen fluoride	22,344	0	22,344
79-01-6 Trichloroethylene	1,455	19,811	21,266
127-18-4 Tetrachloroethylene	99	16,023	16,122
110-54-3 n-Hexane	14,794	755	15,549
Subtotal for Top 20 Chemicals	4,232,699	653,198	4,885,897
Total for all TRI Chemicals	4,241,174	670,314	4,911,488

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI)* and Factors to Consider When Using TRI Data document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Petroleum Terminals/Bulk Storage (NAICS 4247)

The 20 One media with Eargest Total Nedyelling On-site and On-si	ĺ		Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
107-21-1 Ethylene glycol	0	2,644,358	2,644,358
108-88-3 Toluene	572,827	340,130	912,957
1330-20-7 Xylene (mixed isomers)	399,553	333,160	732,713
110-54-3 n-Hexane	438,429	111,075	549,504
95-63-6 1,2,4-Trimethylbenzene	138,868	150,121	288,990
Zinc compounds	0	287,267	287,267
71-43-2 Benzene	175,980	81,739	257,720
91-20-3 Naphthalene	23,587	192,704	216,291
100-41-4 Ethylbenzene	90,715	96,550	187,265
110-82-7 Cyclohexane	125,688	16,810	142,498
1634-04-4 Methyl tert-butyl ether	59,212	697	59,909
98-82-8 Cumene	4,987	1,622	6,610
Polycyclic aromatic compounds	11	414	425
Lead compounds	0	41	42
191-24-2 Benzo(g,h,i)perylene	2	38	41
108-95-2 Phenol	0	38	38
7439-92-1 Lead	0	26	26
Mercury compounds	0	11	11
100-42-5 Styrene	0	10	10
115-07-1 Propylene	0	5	5
Subtotal for Top 20 Chemicals	2,029,861	4,256,817	6,286,678
Total for all TRI Chemicals	2,029,861	4,256,817	6,286,678

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI)* and Factors to Consider When Using TRI Data document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

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The 20 Chemicals with Largest Total Recycling On-site and Off-site, 2008: Hazardous Waste/Solvent Recovery (NAICS 562)

The 20 Chemicals with Largest Total Necycling On-Site and			Total Quantity
CAS	Quantity Recycled	Quantity Recycled	Recycled On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
Lead compounds	0	58,355,583	58,355,583
107-21-1 Ethylene glycol	7,383,921	16,902,752	24,286,673
872-50-4 N-Methyl-2-pyrrolidone	16,049,160	2,069,201	18,118,361
1330-20-7 Xylene (mixed isomers)	11,924,750	312,365	12,237,115
75-09-2 Dichloromethane	9,706,077	196,214	9,902,291
127-18-4 Tetrachloroethylene	6,784,294	93,488	6,877,783
108-88-3 Toluene	6,381,747	233,852	6,615,599
7439-92-1 Lead	2,968,472	192,881	3,161,354
Zinc compounds	0	2,812,341	2,812,341
110-54-3 n-Hexane	2,209,498	9,098	2,218,596
7440-50-8 Copper	0	1,989,071	1,989,071
108-10-1 Methyl isobutyl ketone	1,746,409	467	1,746,876
Nickel compounds	10,171	1,672,590	1,682,761
7440-36-0 Antimony	0	868,000	868,000
67-56-1 Methanol	751,149	12,762	763,911
Cadmium compounds	0	640,343	640,343
75-45-6 Chlorodifluoromethane (HCFC-22)	628,218	0	628,218
79-01-6 Trichloroethylene	551,351	5,780	557,131
Glycol ethers	504,272	20,493	524,765
108-90-7 Chlorobenzene	436,056	410	436,466
Subtotal for Top 20 Chemicals	68,035,547	86,387,692	154,423,239
Total for all TRI Chemicals	69,151,654	87,712,128	156,863,782

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: All Industries

The 20 Chemicals with Largest Total Energy necovery On-site and			Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
74-85-1 Ethylene	432,460,430	12,653,275	445,113,705
67-56-1 Methanol	333,563,010	95,861,743	429,424,753
115-07-1 Propylene	241,207,790	112,840	241,320,631
108-88-3 Toluene	125,788,060	77,429,960	203,218,020
7664-41-7 Ammonia	172,131,984	841,647	172,973,631
1330-20-7 Xylene (mixed isomers)	80,226,492	67,585,563	147,812,055
7664-93-9 Sulfuric acid	69,502,999	0	69,502,999
71-43-2 Benzene	47,493,497	2,278,710	49,772,207
100-42-5 Styrene	29,730,734	12,098,517	41,829,251
110-54-3 n-Hexane	27,253,280	13,272,492	40,525,772
100-41-4 Ethylbenzene	28,725,735	9,722,364	38,448,100
79-10-7 Acrylic acid	29,032,724	2,729,655	31,762,379
75-00-3 Chloroethane	31,663,962	26,469	31,690,431
Glycol ethers	14,156,841	14,992,256	29,149,097
75-07-0 Acetaldehyde	28,063,863	947,236	29,011,099
75-65-0 tert-Butyl alcohol	26,274,082	1,647,896	27,921,978
71-36-3 n-Butyl alcohol	18,371,404	6,222,578	24,593,982
108-10-1 Methyl isobutyl ketone	14,000,607	8,633,057	22,633,664
75-05-8 Acetonitrile	16,633,815	5,739,619	22,373,434
98-86-2 Acetophenone	21,771,839	445,047	22,216,886
Subtotal for Top 20 Chemicals	1,788,053,149	333,240,925	2,121,294,074
Total for all TRI Chemicals	2,164,562,491	440,715,548	2,605,278,039

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI)* and Factors to Consider When Using TRI Data document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Manufacturing* Industries

The 20 Chemicals with Largest Total Energy Recovery On-site and C		acturing industries	Total Quantity
	Quantity Used for	Quantity Used for	
CAS	Energy Recovery	Energy Recovery	
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
67-56-1 Methanol	192,278,074	187,196	192,465,270
74-85-1 Ethylene	166,438,224	12,653,273	179,091,497
67-56-1 Methanol	100,811,008	77,494,937	178,305,944
115-07-1 Propylene	142,441,993	112,621	142,554,615
7664-41-7 Ammonia	141,416,677	693	141,417,370
74-85-1 Ethylene	141,359,058	2	141,359,060
74-85-1 Ethylene	115,027,671	0	115,027,671
115-07-1 Propylene	86,804,373	5	86,804,378
108-88-3 Toluene	83,218,933	1,197,066	84,415,999
7664-93-9 Sulfuric acid	69,498,699	0	69,498,699
1330-20-7 Xylene (mixed isomers)	66,983,046	897,686	67,880,732
108-88-3 Toluene	16,315,123	38,544,241	54,859,365
1330-20-7 Xylene (mixed isomers)	1,923,463	32,853,298	34,776,761
75-00-3 Chloroethane	31,663,962	24,546	31,688,508
7664-41-7 Ammonia	28,934,071	74,658	29,008,729
75-07-0 Acetaldehyde	26,466,074	906,053	27,372,127
100-42-5 Styrene	18,276,011	8,786,763	27,062,774
75-65-0 tert-Butyl alcohol	25,503,796	1,362,007	26,865,803
79-10-7 Acrylic acid	23,537,425	2,719,051	26,256,476
67-56-1 Methanol	24,063,128	294,265	24,357,393
Subtotal for Top 20 Chemicals	1,502,960,809	178,108,362	1,681,069,171
Total for all TRI Chemicals	2,157,687,840	335,402,003	2,493,089,843

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

^{*} Manufacturing industries include NAICS Codes 31-33.

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Chemicals (NAICS 325)

The 20 Chemicals with Largest Total Energy Recovery On-Site and			Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
74-85-1 Ethylene	166,438,224	12,653,273	179,091,497
67-56-1 Methanol	100,811,008	77,494,937	178,305,944
115-07-1 Propylene	142,441,993	112,621	142,554,615
7664-93-9 Sulfuric acid	69,498,699	0	69,498,699
108-88-3 Toluene	16,315,123	38,544,241	54,859,365
1330-20-7 Xylene (mixed isomers)	1,923,463	32,853,298	34,776,761
75-00-3 Chloroethane	31,663,962	24,546	31,688,508
7664-41-7 Ammonia	28,934,071	74,658	29,008,729
75-07-0 Acetaldehyde	26,466,074	906,053	27,372,127
100-42-5 Styrene	18,276,011	8,786,763	27,062,774
75-65-0 tert-Butyl alcohol	25,503,796	1,362,007	26,865,803
79-10-7 Acrylic acid	23,537,425	2,719,051	26,256,476
71-43-2 Benzene	22,877,814	1,075,375	23,953,188
110-54-3 n-Hexane	12,364,187	9,780,099	22,144,286
98-86-2 Acetophenone	21,377,799	436,274	21,814,073
107-06-2 1,2-Dichloroethane	19,371,516	144,360	19,515,876
78-87-5 1,2-Dichloropropane	17,899,793	1,706	17,901,499
75-05-8 Acetonitrile	12,868,803	4,524,443	17,393,246
106-99-0 1,3-Butadiene	16,003,931	223,844	16,227,775
75-01-4 Vinyl chloride	15,993,571	157	15,993,728
Subtotal for Top 20 Chemicals	790,567,263	191,717,706	982,284,969
Total for all TRI Chemicals	994,809,317	287,179,743	1,281,989,061

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Primary Metals (NAICS 331)

The 20 Chemicals with Largest Total Energy Recovery On-site and On-site, 2008: Primary Metals (NAICS 331)			
			Total Quantity
	_	Quantity Used for	
CAS	Energy Recovery	٠,	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
74-85-1 Ethylene	115,027,671	0	115,027,671
71-43-2 Benzene	19,034,247	170	19,034,417
115-07-1 Propylene	11,000,000	0	11,000,000
1330-20-7 Xylene (mixed isomers)	3,773,231	782,445	4,555,676
108-88-3 Toluene	3,988,327	522,767	4,511,094
Glycol ethers	3,826,887	96,223	3,923,110
71-36-3 n-Butyl alcohol	1,214,549	279,989	1,494,538
107-21-1 Ethylene glycol	920,718	3,805	924,523
106-99-0 1,3-Butadiene	890,000	0	890,000
95-63-6 1,2,4-Trimethylbenzene	784,860	63,831	848,691
100-41-4 Ethylbenzene	506,847	108,704	615,551
108-95-2 Phenol	404,959	88,425	493,384
108-10-1 Methyl isobutyl ketone	436,862	18,895	455,757
91-20-3 Naphthalene	313,664	31,350	345,014
872-50-4 N-Methyl-2-pyrrolidone	211,770	70,796	282,566
67-56-1 Methanol	51,797	163,397	215,194
1319-77-3 Cresol (mixed isomers)	195,140	11,574	206,714
108-38-3 m-Xylene	125,437	29,666	155,103
131-11-3 Dimethyl phthalate	76,509	20,692	97,201
108-39-4 m-Cresol	48,764	15,638	64,402
Subtotal for Top 20 Chemicals	162,832,239	2,308,366	165,140,605
Total for all TRI Chemicals	162,983,688	2,415,612	165,399,300

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI)* and Factors to Consider When Using TRI Data document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Paper Products (NAICS 322)

The 20 Chemicals with Largest Total Energy Recovery On-site and On-site, 2008: Paper Products (NAICS 322)			
			Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
67-56-1 Methanol	192,278,074	187,196	192,465,270
120-80-9 Catechol	5,519,504	771	5,520,275
108-88-3 Toluene	1,264,269	1,608,845	2,873,114
75-07-0 Acetaldehyde	1,555,640	92	1,555,732
108-95-2 Phenol	1,539,905	8,277	1,548,182
7664-41-7 Ammonia	1,467,057	500	1,467,557
107-21-1 Ethylene glycol	410,185	0	410,185
50-00-0 Formaldehyde	348,280	1,748	350,028
1330-20-7 Xylene (mixed isomers)	112,399	158,834	271,233
Polycyclic aromatic compounds	199,124	0	199,124
1319-77-3 Cresol (mixed isomers)	138,811	0	138,811
110-54-3 n-Hexane	24,243	76,101	100,344
108-10-1 Methyl isobutyl ketone	49,121	40,208	89,329
108-05-4 Vinyl acetate	0	22,868	22,868
Glycol ethers	9	18,486	18,495
100-41-4 Ethylbenzene	0	15,574	15,574
141-32-2 Butyl acrylate	0	9,288	9,288
78-92-2 sec-Butyl alcohol	4,123	2,285	6,408
95-63-6 1,2,4-Trimethylbenzene	0	5,716	5,716
872-50-4 N-Methyl-2-pyrrolidone	0	5,430	5,430
Subtotal for Top 20 Chemicals	204,910,744	2,162,219	207,072,963
Total for all TRI Chemicals	204,918,592	2,170,256	207,088,848

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI)* and Factors to Consider When Using TRI Data document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Petroleum (NAICS 324)

The 20 Chemicals with Eargest Total Energy Recovery Christic and	Ī	, ,	Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
7664-41-7 Ammonia	141,416,677	693	141,417,370
74-85-1 Ethylene	141,359,058	2	141,359,060
115-07-1 Propylene	86,804,373	5	86,804,378
75-15-0 Carbon disulfide	4,490,123	53	4,490,176
Cyanide compounds	3,644,923	25	3,644,948
71-43-2 Benzene	2,682,513	279,211	2,961,725
74-90-8 Hydrogen cyanide	2,423,953	0	2,423,953
110-54-3 n-Hexane	2,280,045	17,630	2,297,675
108-88-3 Toluene	1,217,599	492,300	1,709,898
463-58-1 Carbonyl sulfide	993,600	0	993,600
1330-20-7 Xylene (mixed isomers)	176,156	558,125	734,280
107-21-1 Ethylene glycol	0	611,109	611,109
100-41-4 Ethylbenzene	406,574	95,435	502,009
67-56-1 Methanol	412,570	32,725	445,295
106-99-0 1,3-Butadiene	397,872	4	397,876
111-42-2 Diethanolamine	260,000	1,000	261,000
95-63-6 1,2,4-Trimethylbenzene	37,428	202,213	239,640
1319-77-3 Cresol (mixed isomers)	182,300	161	182,461
91-20-3 Naphthalene	80,346	45,321	125,667
Polycyclic aromatic compounds	4,169	117,918	122,087
Subtotal for Top 20 Chemicals	389,270,278	2,453,929	391,724,208
Total for all TRI Chemicals	389,471,315	2,526,696	391,998,011

The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Metal Mining (NAICS 2122)

3 3, ,			Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
Polycyclic aromatic compounds	0	19	19
Total for all TRI Chemicals	0	19	19

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Coal Mining (NAICS 2121)

			Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
Total for all TRI Chemicals	0	0	0

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

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The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Electric Utilities (NAICS 2211)

The Chemicals with Largest Total Energy Necovery On-site and O	i dito, 2000i 2iootiio	Othicioo (1174100 22 1	
			Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
Polycyclic aromatic compounds	423,110	2,773	425,882
91-20-3 Naphthalene	62,851	73	62,924
107-21-1 Ethylene glycol	14,000	0	14,000
1330-20-7 Xylene (mixed isomers)	10,873	0	10,873
100-41-4 Ethylbenzene	3,381	0	3,381
191-24-2 Benzo(g,h,i)perylene	3,266	37	3,303
108-88-3 Toluene	2,001	0	2,001
95-63-6 1,2,4-Trimethylbenzene	1,780	175	1,955
67-56-1 Methanol	1,154	0	1,154
110-54-3 n-Hexane	950	0	950
75-07-0 Acetaldehyde	19	0	19
108-95-2 Phenol	4	0	4
50-00-0 Formaldehyde	1	0	1
1319-77-3 Cresol (mixed isomers)	1	0	1
120-80-9 Catechol	0.4	0.0	0.4
Dioxin and dioxin-like compounds	0.000000000	0.000000002	0.000000002
Total for all TRI Chemicals	523,391	3,057	526,448

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

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The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Chemical Wholesale Distributors (NAICS 4246)

The 20 Offermous with Eargest Total Energy Recovery Off-Site and	ĺ		Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
108-88-3 Toluene	0	1,222,033	1,222,033
1330-20-7 Xylene (mixed isomers)	0	689,698	689,698
67-56-1 Methanol	0	491,469	491,469
Glycol ethers	0	314,472	314,472
75-09-2 Dichloromethane	0	134,919	134,919
100-42-5 Styrene	0	127,622	127,622
108-10-1 Methyl isobutyl ketone	0	126,240	126,240
107-21-1 Ethylene glycol	0	114,161	114,161
71-36-3 n-Butyl alcohol	0	98,638	98,638
95-63-6 1,2,4-Trimethylbenzene	0	90,978	90,978
110-54-3 n-Hexane	0	86,543	86,543
68-12-2 N,N-Dimethylformamide	0	41,754	41,754
100-41-4 Ethylbenzene	0	28,198	28,198
127-18-4 Tetrachloroethylene	0	25,154	25,154
67-66-3 Chloroform	0	19,932	19,932
872-50-4 N-Methyl-2-pyrrolidone	0	17,312	17,312
111-42-2 Diethanolamine	0	15,222	15,222
79-01-6 Trichloroethylene	0	14,238	14,238
75-05-8 Acetonitrile	0	12,991	12,991
117-81-7 Di(2-ethylhexyl) phthalate	0	8,922	8,922
Subtotal for Top 20 Chemicals	0	3,680,495	3,680,495
Total for all TRI Chemicals	0	3,721,663	3,721,663

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The Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Petroleum Terminals/Bulk Storage (NAICS 4247)

The Chemicals with Largest Total Energy Necovery On-Site and O			Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	
	Pounds	Pounds	Pounds
115-07-1 Propylene	330,000	0	330,000
95-63-6 1,2,4-Trimethylbenzene	0	100,175	100,175
100-41-4 Ethylbenzene	0	61,421	61,421
108-88-3 Toluene	0	60,231	60,231
1330-20-7 Xylene (mixed isomers)	0	46,549	46,549
74-85-1 Ethylene	32,000	0	32,000
107-21-1 Ethylene glycol	0	20,836	20,836
110-54-3 n-Hexane	500	15,579	16,079
91-20-3 Naphthalene	0	15,212	15,212
71-43-2 Benzene	0	10,418	10,418
98-82-8 Cumene	0	4,258	4,258
110-82-7 Cyclohexane	0	1,639	1,639
92-52-4 Biphenyl	0	982	982
Polycyclic aromatic compounds	0	562	562
191-24-2 Benzo(g,h,i)perylene	0	34	34
1634-04-4 Methyl tert-butyl ether	0	14	14
71-36-3 n-Butyl alcohol	0	9	9
108-10-1 Methyl isobutyl ketone	0	9	9
67-56-1 Methanol	0	9	9
Total for all TRI Chemicals	362,500	337,937	700,437

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Energy Recovery On-site and Off-site, 2008: Hazardous Waste/Solvent Recovery (NAICS 562)

The 20 Chemicals with Largest Total Energy necovery On-Site and			Total Quantity
	Quantity Used for	Quantity Used for	Used for Energy
CAS	Energy Recovery	Energy Recovery	Recovery On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
108-88-3 Toluene	1,507,740	27,794,553	
1330-20-7 Xylene (mixed isomers)	766,996	27,909,061	28,676,057
67-56-1 Methanol	1,393,601	14,056,093	15,449,694
127-18-4 Tetrachloroethylene	0	4,760,117	4,760,117
108-10-1 Methyl isobutyl ketone	423,499	3,957,614	4,381,113
110-54-3 n-Hexane	204,205	3,003,065	3,207,270
100-41-4 Ethylbenzene	63,874	2,792,086	2,855,960
75-09-2 Dichloromethane	223,560	2,083,091	2,306,651
100-42-5 Styrene	6,397	2,214,841	2,221,238
Glycol ethers	10,392	1,766,197	1,776,589
110-82-7 Cyclohexane	63,873	1,203,745	1,267,618
71-36-3 n-Butyl alcohol	77,878	1,181,504	1,259,382
872-50-4 N-Methyl-2-pyrrolidone	13,068	1,111,060	1,124,128
107-21-1 Ethylene glycol	46,225	1,054,240	1,100,465
68-12-2 N,N-Dimethylformamide	157,703	879,867	1,037,570
79-01-6 Trichloroethylene	18,716	819,923	838,639
75-05-8 Acetonitrile	192,670	483,911	676,581
95-50-1 1,2-Dichlorobenzene	6,442	458,818	465,260
8001-58-9 Creosote	384	448,011	448,395
71-43-2 Benzene	126,225	256,753	382,978
Subtotal for Top 20 Chemicals	5,303,448	98,234,551	103,537,999
Total for all TRI Chemicals	5,988,760	100,990,395	106,979,155

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: All Industries

The 20 Ohenneus With Eurgest Total Treated Oh-site and O			Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
67-56-1 Methanol	1,061,400,362	87,836,181	1,149,236,543
7647-01-0 Hydrochloric acid	1,069,731,923	693,762	1,070,425,685
7664-93-9 Sulfuric acid	593,239,419	63,545	593,302,965
74-85-1 Ethylene	569,793,914	15,797,960	585,591,874
7664-41-7 Ammonia	472,898,657	11,171,023	484,069,680
115-07-1 Propylene	354,077,530	9,071,686	363,149,216
Nitrate compounds	198,062,351	119,221,394	317,283,745
7697-37-2 Nitric acid	262,354,442	13,060,317	275,414,759
7664-39-3 Hydrogen fluoride	229,894,236	3,695,822	233,590,057
7782-50-5 Chlorine	231,390,677	51,838	231,442,516
108-88-3 Toluene	162,519,321	21,243,121	183,762,442
64-18-6 Formic acid	122,627,391	3,411,901	126,039,292
463-58-1 Carbonyl sulfide	99,554,918	0	99,554,918
107-06-2 1,2-Dichloroethane	94,995,110	1,859,873	96,854,984
110-54-3 n-Hexane	72,729,948	3,705,062	76,435,010
1330-20-7 Xylene (mixed isomers)	62,287,980	12,689,687	74,977,668
107-21-1 Ethylene glycol	46,133,488	24,456,616	70,590,105
50-00-0 Formaldehyde	63,454,581	5,672,476	69,127,057
71-43-2 Benzene	60,790,308	2,990,673	63,780,981
75-15-0 Carbon disulfide	62,679,962	177,716	62,857,678
Subtotal for Top 20 Chemicals	5,890,616,519	336,870,654	6,227,487,173
Total for all TRI Chemicals	6,961,964,722	477,693,429	7,439,658,151

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The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: Manufacturing* Industries

The 20 Chemicals with Largest Total Treated On-Site and On	·		Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
67-56-1 Methanol	864,185,208	25,169,204	889,354,412
7647-01-0 Hydrochloric acid	699,044,303	37,372	699,081,676
74-85-1 Ethylene	520,978,696	13,992,770	534,971,466
115-07-1 Propylene	270,673,535	1,888,403	272,561,938
67-56-1 Methanol	165,892,264	53,511,220	219,403,484
7664-41-7 Ammonia	169,706,603	507,585	170,214,187
7782-50-5 Chlorine	164,292,858	12,063	164,304,922
Nitrate compounds	133,323,555	26,656,496	159,980,051
7664-39-3 Hydrogen fluoride	122,312,561	750,778	123,063,339
Nitrate compounds	54,258,618	53,112,620	107,371,237
7664-41-7 Ammonia	100,698,648	3,592,423	104,291,072
115-07-1 Propylene	80,863,885	7,023,283	87,887,168
107-06-2 1,2-Dichloroethane	85,245,072	1,778,836	87,023,908
7697-37-2 Nitric acid	83,688,223	1,069,699	84,757,922
7697-37-2 Nitric acid	73,302,914	1,780,064	75,082,978
463-58-1 Carbonyl sulfide	72,226,429	0	72,226,429
64-18-6 Formic acid	64,528,914	8,126	64,537,040
108-88-3 Toluene	47,180,805	16,829,327	64,010,132
7664-93-9 Sulfuric acid	63,945,064	12,815	63,957,879
64-18-6 Formic acid	54,803,767	3,242,407	58,046,174
Subtotal for Top 20 Chemicals	3,891,151,923	210,975,490	4,102,127,413
Total for all TRI Chemicals	5,774,408,637	464,586,857	6,238,995,494

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

^{*} Manufacturing industries include NAICS Codes 31-33.

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: Chemicals (NAICS 325)

The 20 Chemicals with Largest Total Treated On-Site and O			Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
7647-01-0 Hydrochloric acid	699,044,303	37,372	699,081,676
74-85-1 Ethylene	520,978,696	13,992,770	534,971,466
115-07-1 Propylene	270,673,535	1,888,403	272,561,938
67-56-1 Methanol	165,892,264	53,511,220	219,403,484
7782-50-5 Chlorine	164,292,858	12,063	164,304,922
Nitrate compounds	54,258,618	53,112,620	107,371,237
7664-41-7 Ammonia	100,698,648	3,592,423	104,291,072
107-06-2 1,2-Dichloroethane	85,245,072	1,778,836	87,023,908
7697-37-2 Nitric acid	83,688,223	1,069,699	84,757,922
108-88-3 Toluene	47,180,805	16,829,327	64,010,132
7664-93-9 Sulfuric acid	63,945,064	12,815	63,957,879
64-18-6 Formic acid	54,803,767	3,242,407	58,046,174
50-00-0 Formaldehyde	50,152,533	5,421,447	55,573,979
107-21-1 Ethylene glycol	32,520,023	16,635,776	49,155,800
106-99-0 1,3-Butadiene	48,123,886	572,566	48,696,452
79-10-7 Acrylic acid	39,274,671	4,676,722	43,951,394
7550-45-0 Titanium tetrachloride	42,067,110	332,746	42,399,856
71-43-2 Benzene	39,435,167	1,809,833	41,245,000
110-54-3 n-Hexane	37,317,313	3,450,526	40,767,839
79-00-5 1,1,2-Trichloroethane	35,455,541	1,153,376	36,608,916
Subtotal for Top 20 Chemicals	2,635,048,098	183,132,947	2,818,181,045
Total for all TRI Chemicals	3,295,592,479	288,077,903	3,583,670,382

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: Primary Metals (NAICS 331)

The 20 Chemicals with Largest Total Treated Off-Site and Off-Site,		,	Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
7664-39-3 Hydrogen fluoride	122,312,561	750,778	123,063,339
7697-37-2 Nitric acid	73,302,914	1,780,064	75,082,978
7782-50-5 Chlorine	53,350,812	250	53,351,062
7647-01-0 Hydrochloric acid	20,460,186	653,009	21,113,195
7664-41-7 Ammonia	13,971,894	253,714	14,225,608
Nitrate compounds	3,166,567	7,951,742	11,118,309
74-85-1 Ethylene	5,690,219	1,800,000	7,490,219
67-56-1 Methanol	1,518,481	4,716,720	6,235,201
108-95-2 Phenol	6,019,335	93,070	6,112,405
7429-90-5 Aluminum (fume or dust)	3,014,165	3,074,766	6,088,931
1330-20-7 Xylene (mixed isomers)	4,011,247	219,218	4,230,465
7632-00-0 Sodium nitrite	3,394,167	82,980	3,477,147
74-90-8 Hydrogen cyanide	3,100,043	0	3,100,043
Polycyclic aromatic compounds	2,637,321	8,196	2,645,517
Cyanide compounds	2,399,711	168,983	2,568,694
71-43-2 Benzene	2,322,492	13,900	2,336,392
872-50-4 N-Methyl-2-pyrrolidone	1,152,521	10,721	1,163,242
7664-93-9 Sulfuric acid	1,025,005	49,307	1,074,312
108-88-3 Toluene	1,038,205	17,910	1,056,115
100-42-5 Styrene	1,012,152	411	1,012,563
Subtotal for Top 20 Chemicals	324,899,999	21,645,738	346,545,737
Total for all TRI Chemicals	333,540,018	22,270,136	355,810,154

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: Paper Products (NAICS 322)

The 20 Chemicals with Largest Total Treated On-Site and O		. (Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
67-56-1 Methanol	864,185,208	25,169,204	889,354,412
64-18-6 Formic acid	64,528,914	8,126	64,537,040
0049-04-4 Chlorine dioxide	40,232,884	20,181	40,253,065
108-88-3 Toluene	27,967,837	730,005	28,697,842
7664-41-7 Ammonia	15,704,486	24,005	15,728,490
7782-50-5 Chlorine	12,125,379	28,000	12,153,379
7647-01-0 Hydrochloric acid	9,716,949	0	9,716,949
75-07-0 Acetaldehyde	8,088,884	76,064	8,164,948
7664-93-9 Sulfuric acid	3,916,573	0	3,916,573
50-00-0 Formaldehyde	3,129,514	76,505	3,206,019
108-95-2 Phenol	3,081,428	60,519	3,141,947
1330-20-7 Xylene (mixed isomers)	2,176,826	51,565	2,228,391
110-54-3 n-Hexane	1,801,854	12,770	1,814,624
Nitrate compounds	1,709,554	7,513	1,717,067
120-80-9 Catechol	1,496,682	6,494	1,503,176
1319-77-3 Cresol (mixed isomers)	498,139	4,200	502,339
7697-37-2 Nitric acid	408,425	0	408,425
108-10-1 Methyl isobutyl ketone	317,059	56,773	373,832
108-05-4 Vinyl acetate	320,644	2,411	323,055
100-41-4 Ethylbenzene	225,814	4,553	230,367
Subtotal for Top 20 Chemicals	1,061,633,054	26,338,887	1,087,971,940
Total for all TRI Chemicals	1,062,980,248	26,542,815	1,089,523,063

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The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: Petroleum (NAICS 324)

		,	Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
7664-41-7 Ammonia	169,706,603	507,585	170,214,187
115-07-1 Propylene	80,863,885	7,023,283	87,887,168
463-58-1 Carbonyl sulfide	72,226,429	0	72,226,429
74-85-1 Ethylene	40,378,364	5,190	40,383,554
110-54-3 n-Hexane	27,005,524	57,477	27,063,002
75-15-0 Carbon disulfide	25,023,637	861	25,024,498
108-88-3 Toluene	24,451,994	450,167	24,902,161
71-43-2 Benzene	14,926,400	1,118,843	16,045,242
1330-20-7 Xylene (mixed isomers)	13,973,801	310,122	14,283,923
7664-39-3 Hydrogen fluoride	9,972,125	731	9,972,856
108-95-2 Phenol	6,320,366	761,986	7,082,352
67-56-1 Methanol	4,963,729	575,356	5,539,085
7664-93-9 Sulfuric acid	5,416,750	450	5,417,200
110-82-7 Cyclohexane	4,278,521	18,724	4,297,244
7647-01-0 Hydrochloric acid	4,007,114	380	4,007,494
111-42-2 Diethanolamine	2,190,030	1,507,195	3,697,225
95-63-6 1,2,4-Trimethylbenzene	2,554,625	581,414	3,136,039
100-41-4 Ethylbenzene	2,927,359	133,341	3,060,700
1319-77-3 Cresol (mixed isomers)	2,570,547	220,343	2,790,890
91-20-3 Naphthalene	2,598,292	45,635	2,643,927
Subtotal for Top 20 Chemicals	516,356,093	13,319,082	529,675,176
Total for all TRI Chemicals	526,891,450	14,312,151	541,203,602

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The Chemicals with Largest Total Treated On-site and Off-site, 2008: Metal Mining (NAICS 2122)

The offernicals with Largest Total Treated Off-site and Off-s		,	Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
7664-93-9 Sulfuric acid	63,783,976	0	63,783,976
Cyanide compounds	7,511,015	9	7,511,024
7632-00-0 Sodium nitrite	1,209,395	0	1,209,395
Nitrate compounds	150,000	4	150,004
7697-37-2 Nitric acid	70,761	0	70,761
7782-50-5 Chlorine	36,157	0	36,157
7664-41-7 Ammonia	30,522	0	30,522
7664-39-3 Hydrogen fluoride	4,686	0	4,686
74-90-8 Hydrogen cyanide	2,300	0	2,300
71-43-2 Benzene	0	750	750
1330-20-7 Xylene (mixed isomers)	3	166	169
108-88-3 Toluene	0	150	150
7647-01-0 Hydrochloric acid	0	31	31
91-20-3 Naphthalene	2	5	7
95-63-6 1,2,4-Trimethylbenzene	3	0	3
Dioxin and dioxin-like compounds	0.000001	0.000000	0.000001
Total for all TRI Chemicals	72,798,820	1,115	72,799,935

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The Chemicals with Largest Total Treated On-site and Off-site, 2008: Coal Mining (NAICS 2121)

CAS Number Chemname	Quantity Treated On-site	Quantity Treated Off-site	
Number offermanie	Pounds	Pounds	Pounds
7647-01-0 Hydrochloric acid	288,216	0	288,216
7664-93-9 Sulfuric acid	13,500	0	13,500
Total for all TRI Chemicals	301,716	0	301,716

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI)* and Factors to Consider When Using TRI Data document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

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The Chemicals with Largest Total Treated On-site and Off-site, 2008: Electric Utilities (NAICS 2211)

The Chemicals with Largest Total Treated On-Site and On-Site, 20	(-		Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
7664-93-9 Sulfuric acid	443,774,246	0	443,774,246
7647-01-0 Hydrochloric acid	319,050,338	0	319,050,338
7664-41-7 Ammonia	128,768,169	2,961	128,771,130
7664-39-3 Hydrogen fluoride	58,697,799	0	58,697,799
Mixtures and other trade name products	890,000	0	890,000
Nitrate compounds	539,608	0	539,608
Polycyclic aromatic compounds	432,448	4	432,453
64-18-6 Formic acid	280,000	0	280,000
7782-50-5 Chlorine	95,235	0	95,235
107-21-1 Ethylene glycol	44,604	2,207	46,811
7632-00-0 Sodium nitrite	45,110	0	45,110
91-20-3 Naphthalene	32,978	241	33,218
Lead compounds	2,995	583	3,578
191-24-2 Benzo(g,h,i)perylene	3,552	4	3,556
Barium compounds	0	1,041	1,041
110-54-3 n-Hexane	0	185	185
1330-20-7 Xylene (mixed isomers)	0	68	68
1336-36-3 Polychlorinated biphenyls (PCBs)	18	32	50
108-88-3 Toluene	0	11	11
110-82-7 Cyclohexane	0	11	11
Subtotal for Top 20 Chemicals	952,657,100	7,347	952,664,446
Total for all TRI Chemicals	952,657,108	7,358	952,664,466

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: Chemical Wholesale Distributors (NAICS 4246)

The 20 Offennedia with Edigest Total Treated Off-site and Off-si		. 22 22 30 0	Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
108-88-3 Toluene	3,738	154,129	157,867
1330-20-7 Xylene (mixed isomers)	399	97,670	98,069
67-56-1 Methanol	3,421	38,825	42,246
Glycol ethers	303	82,188	82,491
75-09-2 Dichloromethane	829	8,510	9,339
100-42-5 Styrene	118	2,044	2,162
108-10-1 Methyl isobutyl ketone	150	22,160	22,310
107-21-1 Ethylene glycol	4	49,007	49,011
71-36-3 n-Butyl alcohol	20	8,389	8,409
95-63-6 1,2,4-Trimethylbenzene	28	743	771
110-54-3 n-Hexane	4,025	7,165	11,190
68-12-2 N,N-Dimethylformamide	41	143	184
100-41-4 Ethylbenzene	0	550	550
127-18-4 Tetrachloroethylene	0	9,306	9,306
67-66-3 Chloroform	352	1,112	1,464
872-50-4 N-Methyl-2-pyrrolidone	3	523	526
111-42-2 Diethanolamine	155	10,904	11,059
79-01-6 Trichloroethylene	2	7,639	7,641
75-05-8 Acetonitrile	273	2,989	3,262
117-81-7 Di(2-ethylhexyl) phthalate	0	2,006	2,006
Subtotal for Top 20 Chemicals	13,861	506,003	519,864
Total for all TRI Chemicals	880,744	605,415	1,486,160

The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: Petroleum Terminals/Bulk Storage (NAICS 4247)

			Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
100-41-4 Ethylbenzene	6,510,283	4,280	6,514,564
74-85-1 Ethylene	1,856,819	0	1,856,819
108-88-3 Toluene	1,785,258	27,437	1,812,695
110-54-3 n-Hexane	1,701,517	50,353	1,751,870
115-07-1 Propylene	1,322,979	0	1,322,979
1330-20-7 Xylene (mixed isomers)	1,115,829	19,249	1,135,078
71-43-2 Benzene	1,041,376	14,496	1,055,872
106-99-0 1,3-Butadiene	463,000	250	463,250
95-63-6 1,2,4-Trimethylbenzene	445,629	10,003	455,633
110-82-7 Cyclohexane	147,601	6,402	154,003
1634-04-4 Methyl tert-butyl ether	74,379	5	74,384
91-20-3 Naphthalene	47,717	3,309	51,026
106-42-3 p-Xylene	18,000	0	18,000
98-82-8 Cumene	9,357	766	10,123
100-42-5 Styrene	6,508	39	6,547
67-56-1 Methanol	4,200	0	4,200
107-21-1 Ethylene glycol	0	3,085	3,085
Polycyclic aromatic compounds	255	1,390	1,645
77-73-6 Dicyclopentadiene	0	1,190	1,190
108-38-3 m-Xylene	1,175	0	1,175
Subtotal for Top 20 Chemicals	16,551,884	142,254	16,694,138
Total for all TRI Chemicals	16,552,555	144,533	16,697,088

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI)* and Factors to Consider When Using TRI Data document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.

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The 20 Chemicals with Largest Total Treated On-site and Off-site, 2008: Hazardous Waste/Solvent Recovery (NAICS 562)

The 20 Chemicals with Largest Total Treated Off-Site and Off-S			Total Quantity
CAS	Quantity Treated	Quantity Treated	Treated On-site
Number Chemname	On-site	Off-site	and Off-site
	Pounds	Pounds	Pounds
108-88-3 Toluene	16,082,588	2,072,188	18,154,776
67-56-1 Methanol	11,048,112	466,409	11,514,521
1330-20-7 Xylene (mixed isomers)	9,422,274	1,011,552	10,433,826
7697-37-2 Nitric acid	4,810,241	67,767	4,878,008
75-09-2 Dichloromethane	2,644,006	1,449,249	4,093,255
1336-36-3 Polychlorinated biphenyls (PCBs)	3,251,534	271,280	3,522,814
Nitrate compounds	1,427,618	2,077,107	3,504,725
7647-01-0 Hydrochloric acid	3,118,980	0	3,118,980
75-05-8 Acetonitrile	2,929,407	66,902	2,996,309
107-21-1 Ethylene glycol	2,242,079	679,979	2,922,058
127-18-4 Tetrachloroethylene	1,825,504	875,319	2,700,822
110-54-3 n-Hexane	2,616,044	56,084	2,672,128
71-36-3 n-Butyl alcohol	2,546,218	74,503	2,620,721
Diisocyanates	2,577,675	35,386	2,613,061
110-82-7 Cyclohexane	2,537,284	15,339	2,552,623
108-10-1 Methyl isobutyl ketone	2,269,067	126,638	2,395,704
100-41-4 Ethylbenzene	2,226,555	139,183	2,365,738
71-43-2 Benzene	2,260,975	26,128	2,287,103
584-84-9 Toluene-2,4-diisocyanate	2,067,038	528	2,067,566
108-90-7 Chlorobenzene	1,757,604	8,996	1,766,601
Subtotal for Top 20 Chemicals	79,660,803	9,520,536	89,181,340
Total for all TRI Chemicals	124,604,942	12,013,174	136,618,117

Note: This information does not indicate whether (or to what degree) the public has been exposed to toxic chemicals. Therefore, no conclusions on the potential risks can be made based solely on this information (including any ranking information). For more detailed information on this subject refer to *The Toxics Release Inventory (TRI) and Factors to Consider When Using TRI Data* document at www.epa.gov/tri/triprogram/FactorsToConPDF.pdf.