
Appendix A

**Chemical-specific TRI Release and
Other Waste Management Data,
1998-2001**



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
71751-41-2 *	Abamectin	98	3	1	250	0	0	251	0	251
		99	3	1	250	0	0	251	0	251
		00	3	20	15	0	0	35	0	35
		01	3	20	13	0	0	33	0	33
30560-19-1 *	Acephate	98	7	1,775	0	0	0	1,775	0	1,775
		99	7	645	0	0	0	645	0	645
		00	6	959	0	0	0	959	7,200	8,159
		01	6	1,057	0	0	0	1,057	12,300	13,357
75-07-0 *,**	Acetaldehyde	98	278	12,535,135	193,995	531,693	21,562	13,282,385	5,916	13,288,301
		99	286	12,073,593	229,225	754,277	20,589	13,077,684	4,402	13,082,086
		00	298	12,343,637	194,393	1,079,397	22,607	13,640,034	3,782	13,643,816
		01	295	11,899,549	157,502	670,533	23,130	12,750,714	3,487	12,754,201
60-35-5 **	Acetamide	98	12	169	1	2,157,694	25,474	2,183,338	10	2,183,348
		99	12	158	1	2,452,733	0	2,452,892	2	2,452,894
		00	11	159	2	2,977,410	0	2,977,571	0	2,977,571
		01	12	427	2	1,076,766	0	1,077,195	0	1,077,195
75-05-8	Acetonitrile	98	133	1,033,895	28,862	21,974,093	33	23,036,883	65,054	23,101,937
		99	135	885,478	14,032	19,537,458	223	20,437,191	711,972	21,149,163
		00	130	743,838	16,533	22,536,234	592	23,297,197	64,786	23,361,983
		01	142	925,437	12,603	15,018,332	172	15,956,544	7,741	15,964,285
98-86-2 *	Acetophenone	98	52	171,621	655	734,007	0	906,283	49,744	956,027
		99	48	178,008	700	689,828	0	868,536	35,160	903,696
		00	54	153,587	441	718,192	266	872,486	33,577	906,063
		01	39	158,799	396	765,440	250	924,885	53,795	978,680
53-96-3 **	2-Acetylaminofluorene	98	1	110	0	0	8,500	8,610	1,205	9,815
		99	4	139	1	0	38,197	38,337	20,648	58,985
		00	4	275	0	5	12,690	12,970	467	13,437
		01	5	1,445	0	5	49,468	50,918	29,628	80,546
62476-59-9 *	Acifluorfen, sodium salt	98	4	476	2,193	0	17	2,686	421,514	424,200
		99	4	315	4,757	0	0	5,072	222,680	227,752
		00	4	332	5,811	0	0	6,143	225,664	231,807
		01	7	224	4,584	0	0	4,808	11,360	16,168
107-02-8 *	Acrolein	98	29	184,134	270	95,900	1,351	281,655	665	282,320
		99	29	204,777	255	170,950	429	376,411	139	376,550
		00	30	208,108	643	201,020	404	410,175	410	410,585
		01	34	251,223	177	294,270	0	545,670	2	545,672
79-06-1 *,**	Acrylamide	98	84	23,472	2,272	6,333,564	0	6,359,308	6,961	6,366,269
		99	90	24,874	370	7,510,853	6,289	7,542,386	6,144	7,548,530
		00	86	14,786	160	8,639,361	4	8,654,311	10,733	8,665,044
		01	86	10,219	140	7,533,641	9,035	7,553,035	11,411	7,564,446
79-10-7	Acrylic acid	98	209	322,592	6,973	4,499,644	48,696	4,877,905	87,661	4,965,566
		99	210	366,538	6,735	2,630,949	1,030	3,005,252	220,111	3,225,363
		00	213	367,591	6,074	863,693	1,231	1,238,589	122,212	1,360,801
		01	211	364,144	4,436	4,085,900	348	4,454,828	54,335	4,509,163
107-13-1 *,**	Acrylonitrile	98	116	1,148,708	1,100	4,005,290	321	5,155,419	9,071	5,164,490
		99	117	985,281	1,173	4,462,492	23,804	5,472,750	98,418	5,571,168
		00	116	951,416	1,241	3,957,790	115,398	5,025,845	323,973	5,349,818
		01	118	935,855	924	10,216,942	133,191	11,286,912	189,566	11,476,478

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Abamectin	98	0	0	0	0	6,230	4,165	28	10,423	0
	99	0	0	0	0	4,918	3,589	23	8,530	0
	00	0	0	0	0	3,341	1,848	90	5,279	0
	01	0	0	0	0	2,910	1,654	33	4,597	0
* Acephate	98	90	0	0	0	9,800	12,683	2,186	24,759	0
	99	70	0	0	0	7,500	17,922	426	25,918	0
	00	130	0	0	0	28,463	17,857	515	46,965	0
	01	207	0	0	0	31,900	33,364	624	66,095	0
*,** Acetaldehyde	98	14,000	694	10,343,401	13,232,082	17,269,881	1,672,948	13,357,576	55,890,582	1,163
	99	17,183	1,460	14,666,967	246,178	23,454,370	1,431,358	13,091,548	52,909,064	125
	00	15,148	70,161	27,405,658	342,307	26,494,832	1,953,134	13,655,048	69,936,288	569
	01	14,172	379	27,480,883	228,370	25,470,158	2,150,012	12,762,654	68,106,628	42,105
** Acetamide	98	0	0	81,220	62,087	90,563	362	2,183,308	2,417,540	0
	99	0	0	80,637	44,923	166,644	575	2,452,889	2,745,668	0
	00	0	0	83,297	42,385	21,718	2,766	2,978,060	3,128,226	0
	01	0	0	65,582	10,138	35,707	43,506	1,077,099	1,232,032	0
Acetonitrile	98	13,140,578	1,880,831	20,420,834	11,558,875	21,243,933	8,021,273	24,199,286	100,465,610	1,027
	99	12,656,086	2,000,134	41,533,791	13,049,202	23,246,983	8,685,076	21,252,844	122,424,116	74
	00	11,558,433	1,952,069	30,165,449	14,907,281	23,733,077	7,157,973	23,373,445	112,847,727	390
	01	12,599,449	2,939,339	24,813,686	19,714,337	29,425,950	5,015,359	20,772,860	115,280,980	2,560
* Acetophenone	98	0	3,448	32,071,882	1,415,197	856,740	161,672	963,965	35,472,904	0
	99	0	3,683	33,367,740	1,435,519	961,217	178,690	920,846	36,867,695	5
	00	0	14,741	30,480,564	10,908,265	1,056,295	129,001	943,861	43,532,727	0
	01	0	10,405	35,537,021	8,239,060	906,555	170,871	1,015,566	45,879,478	22
** 2-Acetylmino-fluorene	98	0	0	0	0	310	41	9,800	10,151	0
	99	0	0	0	0	99,902	0	58,981	158,883	0
	00	0	0	0	0	84,933	781	13,436	99,150	0
	01	0	5,573	330	14,754	96,146	17,297	80,701	214,801	0
* Acifluorfen, sodium salt	98	0	0	0	0	13,105	3,237	423,965	440,307	0
	99	0	0	0	0	45,498	1,891	227,507	274,896	0
	00	0	0	0	0	5,929	2,304	231,538	239,771	5
	01	0	0	0	0	287,704	197,691	16,191	501,586	0
* Acrolein	98	0	0	3,712,551	38,933	16,430,612	12	278,469	20,460,577	194
	99	0	0	4,878,507	176,954	8,581,456	211	365,014	14,002,142	16
	00	0	0	11,790,188	67,678	3,422,820	140,068	394,272	15,815,026	306
	01	0	0	3,140,047	204,634	4,594,724	367	545,263	8,485,035	88
*,** Acrylamide	98	162	0	90,200	234,769	222,498	311,267	6,364,139	7,223,035	49,723
	99	3	0	94,233	61,662	282,769	279,156	7,546,607	8,264,430	0
	00	27	0	82,504	19,012	385,662	180,993	8,656,126	9,324,324	7,000
	01	44	0	100,650	20,590	404,767	309,335	7,560,932	8,396,318	45,101
Acrylic acid	98	4,863,156	101,540	31,352,060	6,575,155	24,621,308	2,086,542	4,959,240	74,559,001	6,993
	99	4,680,911	52,220	20,853,278	6,360,743	33,402,345	1,201,706	3,236,560	69,787,763	111,051
	00	4,228,023	720	28,231,405	5,637,355	29,119,546	2,240,863	1,401,643	70,859,555	1,123
	01	1,000,969	17	29,896,179	5,080,780	27,193,468	1,949,498	4,517,565	69,638,476	178
*,** Acrylonitrile	98	12,827,695	190	4,841,082	182,829	11,314,070	2,392,222	5,132,207	36,690,295	2,373
	99	12,435,645	0	3,909,625	263,070	12,182,578	1,759,323	8,520,217	39,070,458	81,963
	00	9,094,814	0	6,411,967	323,000	14,345,238	797,930	4,897,616	35,870,565	109,038
	01	8,759,657	0	5,765,237	257,369	18,307,434	691,461	11,213,898	44,995,056	5,258

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
15972-60-8 *	Alachlor	98	5	1,564	220	0	0	1,784	9,713	11,497
		99	5	797	390	0	0	1,187	1,925	3,112
		00	6	1,373	7	0	0	1,380	5,167	6,547
		01	6	766	10	0	0	776	830	1,606
116-06-3 *	Aldicarb	98	5	155	0	0	15	170	0	170
		99	6	177	0	0	256	433	156	589
		00	6	185	0	0	5	190	0	190
		01	5	161	0	0	4	165	0	165
309-00-2 *	Aldrin	98	3	307	7	0	22,000	22,314	3,308	25,622
		99	1	0	0	0	0	0	0	0
		00	11	0.79	0.00	0.00	2,342.00	2,342.79	2.58	2,345.37
		01	8	0.31	0.00	0.00	0.00	0.31	1.07	1.38
28057-48-9	d-trans-Allethrin	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
107-18-6 *	Allyl alcohol	98	36	262,464	9,688	463,854	0	736,006	16	736,022
		99	34	263,689	5,041	599,946	755	869,431	16,223	885,654
		00	35	379,146	6,067	526,618	5	911,836	7	911,843
		01	39	125,458	13,377	607,484	54	746,373	505	746,878
107-11-9	Allylamine	98	3	951	40	0	0	991	0	991
		99	3	1,040	450	0	0	1,490	0	1,490
		00	3	1,060	2,500	0	0	3,560	0	3,560
		01	3	1,114	0	0	0	1,114	0	1,114
107-05-1	Allyl chloride	98	26	70,900	5	0	2	70,907	1,724	72,631
		99	30	79,490	26	0	8,189	87,705	6,112	93,817
		00	28	146,993	541	0	0	147,534	3,880	151,414
		01	28	35,150	15	0	0	35,165	2,711	37,876
7429-90-5 *	Aluminum (fume or dust)	98	347	1,486,258	3,898	5	5,660,455	7,150,616	7,564,170	14,714,786
		99	352	1,763,716	5,023	0	5,959,493	7,728,232	14,544,546	22,272,778
		00	358	1,530,399	4,798	0	11,368,208	12,903,405	8,655,239	21,558,644
		01	351	1,297,306	8,333	0	9,083,363	10,389,002	6,988,074	17,377,075
1344-28-1	Aluminum oxide (fibrous forms)	98	66	26,807	750	0	15,603,760	15,631,317	2,994,534	18,625,851
		99	63	112,183	756	0	30,751,294	30,864,233	3,186,848	34,051,081
		00	70	137,521	558	8,449	42,491,089	42,637,617	3,631,728	46,269,345
		01	65	46,992	804	305	3,995,600	4,043,701	6,740,171	10,783,872
20859-73-8 *	Aluminum phosphide	98	2	0	0	0	0	0	0	0
		99	4	4	0	0	0	4	153	157
		00	2	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
834-12-8 *	Ametryn	98	5	1,168	51	0	0	1,219	0	1,219
		99	4	1,460	16	0	0	1,476	0	1,476
		00	4	1,310	12	0	0	1,322	0	1,322
		01	5	1,851	11	0	0	1,862	0	1,862
117-79-3 **	2-Aminoanthraquinone	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Alachlor	98	0	0	0	0	82,244	181,800	11,013	275,057	0
	99	0	0	0	0	272,537	139,100	2,598	414,235	0
	00	0	0	0	0	125,646	96,135	6,471	228,252	0
	01	0	0	0	0	102,105	114,732	667	217,504	0
* Aldicarb	98	0	0	0	0	17,135	40,611	150	57,896	10
	99	0	0	0	0	171,255	19,953	328	191,536	0
	00	0	0	0	0	152,904	28,524	180	181,608	0
	01	0	0	0	0	85,751	9,220	156	95,127	0
* Aldrin	98	0	0	0	1	77,986	110	26,045	104,142	0
	99	0	0	0	0	53,598	0	0	53,598	0
	00	0.00	0.00	0.00	0.00	82,504.75	283.00	2,345.32	85,133.07	0.00
	01	0.00	0.00	0.00	306.00	58,529.00	24.00	18.38	58,877.38	0.00
d-trans-Allethrin	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	419	0	419	0
* Allyl alcohol	98	248,764	0	1,413,165	1,229,919	1,233,832	173,575	693,505	4,992,760	0
	99	340,364	0	1,844,591	1,074,820	4,164,724	195,126	836,160	8,455,785	750
	00	2,798,933	0	2,012,131	508,062	1,945,221	1,382,106	904,897	9,551,350	0
	01	2,290,496	0	4,668,018	1,207,443	2,474,377	911,190	746,317	12,297,841	0
Allylamine	98	0	0	0	5	380	0	991	1,376	0
	99	0	0	0	1	4,000	0	1,274	5,275	0
	00	0	0	0	0	22,000	0	3,304	25,304	0
	01	0	0	0	0	28,800	0	1,078	29,878	0
Allyl chloride	98	780,000	68,000	5,349,016	321,228	370,936	195,216	71,009	7,155,405	1
	99	23,000	44,000	157,078	236,934	494,159	649,453	91,616	1,696,240	1,000
	00	650,000	82,000	5,335,210	226,011	4,019,560	193,380	205,785	10,711,946	45
	01	170,423	110,000	6,103,884	248,855	1,829,379	320,527	36,353	8,819,421	1,106
* Aluminum (fume or dust)	98	15,724,778	30,018,801	0	4,267	18,514,372	176,584	14,465,394	78,904,196	40,280
	99	15,586,205	28,635,504	0	5,058	22,030,241	552,882	20,917,251	87,727,141	10
	00	17,261,275	20,059,823	0	3,954	22,912,090	608,198	20,941,564	81,786,903	0
	01	5,996,088	21,267,827	0	628	20,598,920	486,721	16,903,098	65,253,282	7,703
Aluminum oxide (fibrous forms)	98	7,716,545	267,471	0	0	46,453	1,671,168	17,631,736	27,333,373	0
	99	12,612,154	497,988	0	1,111	909,607	1,244,196	33,608,202	48,873,258	0
	00	13,283,176	407,915	0	1,946	208,614	816,517	45,553,967	60,272,135	17
	01	107,920	69,691	0	831	93,024	626,100	9,998,656	10,896,222	7,937
* Aluminum phosphide	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	66,262	0	28,100	94,362	0
	00	0	0	0	0	35,975	0	0	35,975	0
	01	0	0	0	0	20,396	0	0	20,396	0
* Ametryn	98	25	0	0	0	120,083	85,000	592	205,700	0
	99	25	0	0	0	46,079	12,000	801	58,905	0
	00	25	0	0	0	19,006	9,402	660	29,093	0
	01	25	0	0	0	58,018	43,172	1,182	102,397	0
** 2-Aminoanthraquinone	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
60-09-3	** 4-Aminoazo-benzene	98	2	0	0	124	0	124	0	124
		99	2	0	0	287	0	287	0	287
		00	1	0	0	175	0	175	0	175
		01	1	0	0	59	0	59	0	59
92-67-1	** 4-Aminobiphenyl	98	1	0	0	0	0	0	0	0
		99	1	0	0	13	0	13	0	13
		00	1	1	0	47	0	48	0	48
		01	1	0	0	16	0	16	0	16
82-28-0	** 1-Amino-2-methyl-anthraquinone	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
33089-61-1	* Amitraz	98	No reports							
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
61-82-5	*,** Amitrole	98	2	1	0	0	0	1	0	1
		99	3	7	1	0	0	8	168	176
		00	3	5	0	0	0	5	5	10
		01	3	5	0	0	0	5	260	265
7664-41-7	* Ammonia	98	3,023	161,991,320	7,791,996	24,650,960	4,426,133	198,860,409	2,091,346	200,951,755
		99	2,915	155,150,562	7,637,790	26,245,785	6,736,992	195,771,129	3,342,199	199,113,328
		00	2,842	140,401,810	7,644,522	27,335,270	5,782,050	181,163,652	4,411,943	185,575,595
		01	2,672	122,057,546	6,621,166	22,974,237	3,621,049	155,273,998	3,247,048	158,521,046
101-05-3	* Anilazine	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
62-53-3	* Aniline	98	81	217,213	19,549	1,161,911	252	1,398,925	26,880	1,425,805
		99	80	176,799	15,783	533,803	1,013	727,398	55,823	783,221
		00	81	195,280	12,704	762,097	297	970,378	217,270	1,187,648
		01	76	162,114	4,571	992,953	8,896	1,168,534	157,059	1,325,593
90-04-0	** o-Anisidine	98	7	1,373	39	0	0	1,412	2	1,414
		99	7	1,587	14	0	0	1,601	1	1,602
		00	5	724	0	0	0	724	0	724
		01	6	856	0	0	0	856	0	856
104-94-9	p-Anisidine	98	1	45	0	0	0	45	0	45
		99	No reports							
		00	No reports							
		01	No reports							
134-29-2	** o-Anisidine hydrochloride	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
120-12-7	Anthracene	98	80	57,867	580	0	3,564	62,011	69,966	131,977
		99	80	78,173	515	0	169,504	248,192	79,562	327,754
		00	84	29,399	1,016	0	171	30,586	53,774	84,360
		01	89	46,590	6,631	0	329	53,550	63,214	116,764

Note: **On-site Releases** are from Section 5 of Form R. **Off-site Releases** are from Section 6 (transfers off-site to disposal) of Form R. **Off-site Releases** include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. **Off-site Releases** do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** 4-Aminoazo-benzene	98	0	0	0	0	0	74	124	198	0
	99	0	0	0	0	0	67	287	354	0
	00	0	0	0	0	0	31	175	206	0
	01	0	0	0	0	0	103	59	162	0
** 4-Aminobiphenyl	98	0	0	0	0	98,000	810	0	98,810	0
	99	0	0	0	0	124,926	48	13	124,987	0
	00	0	0	182,587	0	22	32	48	182,689	0
	01	0	0	124,917	0	24	124	16	125,081	0
** 1-Amino-2-methyl-anthraquinone	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Amitraz	98	No reports								
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
*,** Amitrole	98	0	0	0	0	22,788	0	1	22,789	0
	99	0	0	0	0	205,239	0	170	205,409	0
	00	0	0	0	0	170,032	797	8	170,837	0
	01	0	0	330	1,491	189,084	83	29	191,017	0
* Ammonia	98	350,105,864	10,442,198	103,213,467	247,676	289,148,461	17,317,450	204,965,014	975,440,130	573,917
	99	210,791,274	7,773,129	89,129,210	144,378	325,889,568	16,426,797	199,481,783	849,636,139	518,976
	00	182,971,584	8,604,728	102,193,016	239,835	291,447,019	16,473,543	185,689,525	787,619,250	738,506
	01	121,839,483	7,679,782	125,788,947	139,878	370,090,277	15,048,231	159,845,477	800,432,076	593,541
* Anilazine	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Aniline	98	7,549,987	2	8,579,301	2,958,124	4,449,242	3,843,204	1,445,654	28,825,514	6,698
	99	9,876,710	0	7,785,942	2,364,390	3,887,606	3,625,271	769,520	28,309,439	8,993
	00	8,479,315	0	7,880,424	2,094,318	4,093,763	4,282,696	1,194,841	28,025,357	331
	01	3,270,921	0	7,993,205	1,230,618	3,673,459	2,393,801	1,336,669	19,898,673	8,887
** o-Anisidine	98	0	0	2,756	0	991	5,176	1,413	10,336	0
	99	0	0	2,398	0	376	7,083	1,602	11,459	0
	00	0	0	1,182	0	0	1,983	724	3,889	0
	01	0	0	1,167	0	0	0	856	2,023	0
p-Anisidine	98	0	0	0	0	61	0	45	106	0
	99	No reports								
	00	No reports								
	01	No reports								
** o-Anisidine hydrochloride	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
Anthracene	98	303,857	33,806	53,554	97,248	144,092	63,204	131,882	827,643	0
	99	599,528	30,265	127,242	162,322	306,581	25,279	331,251	1,582,468	0
	00	651,688	14,107	180,509	103,206	702,497	108,542	82,491	1,843,040	288
	01	928,336	47,542	2,193,329	64,119	507,916	22,837	105,912	3,869,991	5,205

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
7440-36-0	Antimony	98	133	7,125	14,518	18,994	1,256,992	1,297,629	406,154	1,703,783
		99	134	10,878	13,755	0	767,428	792,061	351,554	1,143,615
		00	134	21,412	17,401	0	172,044	210,857	208,524	419,381
		01	124	15,800	13,252	0	770,570	799,622	603,911	1,403,533
--	Antimony compounds	98	648	85,222	55,571	181,360	24,715,586	25,037,739	3,718,778	28,756,517
		99	657	131,735	62,728	672,997	28,181,551	29,049,011	3,322,130	32,371,141
		00	655	98,162	63,713	710,204	24,567,658	25,439,737	3,633,770	29,073,506
		01	592	78,622	67,267	717,011	20,335,553	21,198,453	3,080,509	24,278,962
7440-38-2	** Arsenic	98	85	56,902	1,837	269,393	76,488,574	76,816,706	306,502	77,123,208
		99	78	6,495	1,052	250	35,721,696	35,729,493	477,819	36,207,312
		00	81	3,584	1,330	138,358	1,135,813	1,279,085	281,247	1,560,332
		01	67	1,814	1,445	0	778,933	782,192	203,878	986,070
--	** Arsenic compounds	98	556	299,933	165,520	933,175	556,685,687	558,084,315	2,143,123	560,227,438
		99	532	287,691	183,746	1,078,344	568,842,367	570,392,148	3,137,309	573,529,457
		00	544	238,639	166,667	1,809,735	469,079,131	471,294,172	4,985,114	476,279,287
		01	525	177,832	141,172	1,531,741	376,234,926	378,085,671	3,000,912	381,086,583
1332-21-4	*,** Asbestos (friable)	98	81	2,452	1	0	14,137,869	14,140,322	8,252,294	22,392,616
		99	87	3,182	0	0	13,573,597	13,576,779	4,657,243	18,234,022
		00	85	2,536	1	0	21,184,513	21,187,050	3,258,483	24,445,533
		01	72	1,679	5	0	18,362,719	18,364,403	2,181,012	20,545,415
1912-24-9	* Atrazine	98	28	30,983	2,756	336	628,143	662,218	19,470	681,688
		99	28	20,946	1,212	172	643,912	666,242	22,928	689,170
		00	27	22,513	1,034	198	501,732	525,477	74,734	600,211
		01	28	24,872	934	535	510,160	536,501	215,476	751,977
7440-39-3	Barium	98	127	149,988	148,457	25,000	9,514,566	9,838,011	1,797,402	11,635,413
		99	110	164,777	57,412	24,153	5,948,717	6,195,059	2,329,711	8,524,770
		00	107	252,128	21,113	70,254	10,030,788	10,374,284	1,838,164	12,212,448
		01	106	603,986	17,162	20,000	5,769,290	6,410,438	1,764,267	8,174,705
--	Barium compounds	98	1,150	3,159,928	2,106,354	1,321,650	177,353,199	183,941,131	44,501,791	228,442,922
		99	1,132	3,229,858	2,176,237	1,982,918	252,557,257	259,946,270	42,792,467	302,738,737
		00	1,119	2,814,554	1,744,849	2,099,443	243,461,575	250,120,421	49,505,315	299,625,736
		01	1,088	2,163,853	1,475,918	1,980,947	201,019,832	206,640,550	45,504,419	252,144,968
22781-23-3	* Bendiocarb	98	4	5	0	0	0	5	10	15
		99	4	16	0	0	0	16	10	26
		00	5	1	0	0	0	1	0	1
		01	2	0	0	0	0	0	0	0
1861-40-1	* Benfluralin	98	8	1,564	0	0	0	1,564	3	1,567
		99	9	1,231	0	0	0	1,231	5	1,236
		00	6	750	0	0	0	750	0	750
		01	7	400	0	0	0	400	3,970	4,370
17804-35-2	* Benomyl	98	4	11	0	0	0	11	5	16
		99	5	7	0	0	0	7	254	261
		00	4	6	0	0	0	6	0	6
		01	4	11	0	0	0	11	505	516
98-87-3	Benzal chloride	98	6	418	0	0	0	418	0	418
		99	4	410	0	0	0	410	22	432
		00	6	487	0	0	0	487	18	505
		01	6	365	0	0	0	365	506	871

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For arsenic compounds, applies only to inorganic arsenic compounds.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
Antimony	98	4,625,143	738,488	30,405	66,692	308,925	90,259	1,632,900	7,492,812	6
	99	5,276,182	1,189,949	0	0	351,900	108,507	1,027,495	7,954,033	3
	00	4,372,208	1,459,586	0	0	434,428	70,601	335,345	6,672,168	260
	01	5,901,927	1,815,061	0	0	602	44,441	1,346,082	9,108,113	5,813
Antimony compounds	98	4,895,580	4,169,988	6,820	16,879	582,993	499,196	28,413,129	38,584,585	143,125
	99	5,072,859	3,817,162	0	53,103	470,337	483,870	31,688,143	41,585,474	530,326
	00	4,508,161	4,950,360	0	17,821	480,197	287,874	28,803,996	39,048,409	187,887
	01	4,518,467	2,159,095	0	10,353	113,978	68,517	23,899,921	30,770,331	355,562
** Arsenic	98	3,946,422	185,974	0	0	125,485	20,091	77,187,391	81,465,363	2,533
	99	1,502,341	710,558	0	0	74,034	115,583	36,478,719	38,881,235	1,171
	00	1,017,227	128,637	0	0	79,533	15,200	1,688,740	2,929,337	36,685
	01	1,049,122	52,856	0	0	0	40	995,511	2,097,529	727
** Arsenic compounds	98	2,588,312	859,137	0	1	112,182	128,977	559,267,261	562,955,870	2,154,043
	99	3,590,875	1,084,216	300	0	61,122	202,776	570,383,449	575,322,738	7,638,781
	00	3,884,343	463,946	0	0	4,142	323,638	470,654,905	475,330,974	3,315,226
	01	5,676,289	439,803	0	0	20,476	28,566	379,423,693	385,588,827	1,899,930
*,** Asbestos (friable)	98	252,323	150	0	0	1,241,569	362	20,045,569	21,539,973	2,206,595
	99	178,509	145	0	0	643,303	3,802	16,576,382	17,402,141	364,000
	00	62,442	0	0	0	184,155	35,652	24,177,077	24,459,326	0
	01	46,667	0	0	0	110,225	58,818	20,448,581	20,664,291	14,960
* Atrazine	98	250	0	0	0	923,252	213,489	689,770	1,826,761	251
	99	2,250	0	0	0	656,978	190,905	723,859	1,573,992	250
	00	78,625	0	0	0	628,213	195,934	604,533	1,507,305	16,060
	01	77,563	0	0	0	807,372	102,256	740,065	1,727,256	0
Barium	98	164,381	500,853	601,788	418	775,954	409,804	11,568,259	14,021,457	650
	99	193,181	889,706	0	0	1,211,119	272,744	7,960,756	10,527,506	10
	00	254,216	1,759,673	57,134	0	24,520	108,214	11,968,665	14,172,423	2,139,911
	01	193,567	543,885	58,814	0	24,721	600	7,676,346	8,497,933	917
Barium compounds	98	35,755,872	7,238,454	19,138	116,789	5,926,805	2,114,681	227,529,725	278,701,464	24,641
	99	32,533,201	5,466,349	6,000	139,668	5,052,078	1,088,923	305,598,031	349,884,250	25,391
	00	35,805,189	5,692,321	0	11,818	5,581,764	1,941,012	299,385,974	348,418,078	50,376
	01	51,277,953	4,227,986	0	7,106	7,899,459	647,597	253,313,765	317,373,866	2,087,659
* Bendiocarb	98	0	0	0	0	0	580	30	610	0
	99	0	0	0	0	56,392	581	11	56,984	0
	00	0	0	0	0	13,974	1,242	1	15,217	0
	01	0	0	0	0	0	0	0	0	0
* Benfluralin	98	79,000	0	0	0	31	897	1,347	81,275	0
	99	87,000	0	0	0	0	335	1,223	88,558	0
	00	4,600	0	0	0	0	0	751	5,351	0
	01	4,700	0	0	0	0	0	4,374	9,074	0
* Benomyl	98	0	0	45,000	65,600	115,574	20,263	21	246,458	0
	99	0	0	0	107,108	45,752	16,128	23	169,011	0
	00	0	0	0	42,029	30,674	5,492	6	78,201	0
	01	0	0	0	29,000	24,556	6,130	438	60,124	0
Benzal chloride	98	0	0	0	120,000	319,247	200	420	439,867	0
	99	0	0	0	550,000	759,990	74	433	1,310,497	0
	00	0	0	0	1,100,000	1,358,924	1,018	494	2,460,436	0
	01	0	0	480	511,491	778,213	790	887	1,291,861	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For arsenic compounds, applies only to inorganic arsenic compounds.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
55-21-0	Benzamide	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
71-43-2	*,** Benzene	98	1,018	7,701,546	18,877	570,806	240,262	8,531,491	195,654	8,727,145
		99	994	7,707,644	27,844	840,628	143,864	8,719,980	149,419	8,869,399
		00	1,002	6,992,437	13,871	620,250	50,901	7,677,459	47,224	7,724,683
		01	1,012	5,894,659	21,130	217,948	81,200	6,214,937	141,323	6,356,260
92-87-5	** Benzidine	98	4	38	0	0	0	38	0	38
		99	6	13	0	0	0	13	165	178
		00	6	12	0	0	0	12	10	22
		01	4	17	255	0	0	272	260	532
98-07-7	** Benzoic trichloride	98	8	2,255	0	0	0	2,255	440	2,695
		99	10	2,184	0	0	0	2,184	572	2,756
		00	6	1,846	0	0	0	1,846	300	2,146
		01	8	613	0	0	0	613	631	1,244
191-24-2	*** Benzo(g,h,i) perylene	98	NR	NR	NR	NR	NR	NR	NR	NR
		99	NR	NR	NR	NR	NR	NR	NR	NR
		00	1,427	40,723.30	554.83	0.00	6,152.68	47,430.81	116,706.21	164,137.03
		01	1,509	31,455.26	685.17	2.65	8,569.61	40,712.69	86,240.63	126,953.32
98-88-4	Benzoyl chloride	98	26	11,993	0	0	0	11,993	3,980	15,973
		99	24	10,425	0	0	0	10,425	2,393	12,818
		00	23	11,124	0	0	0	11,124	2,006	13,130
		01	24	9,377	0	0	0	9,377	900	10,277
94-36-0	* Benzoyl peroxide	98	67	803	250	0	736	1,789	6,046	7,835
		99	63	251	250	0	117	618	5,425	6,043
		00	63	2,658	250	0	60	2,968	16,321	19,289
		01	62	2,767	250	0	5,351	8,368	10,607	18,975
100-44-7	Benzyl chloride	98	48	26,929	597	150	261	27,937	4,507	32,444
		99	44	26,301	1,208	270	214	27,993	1,437	29,430
		00	39	19,048	87	450	263	19,848	3,043	22,891
		01	42	9,828	44	0	263	10,135	4,821	14,956
7440-41-7	** Beryllium	98	19	799	26	0	57,818	58,643	20,404	79,047
		99	22	769	57	0	53,271	54,097	20,081	74,178
		00	23	360	309	0	84,484	85,153	2,916	88,069
		01	22	1,116	31	0	304,733	305,880	601	306,481
--	** Beryllium compounds	98	61	21,382	1,865	0	733,229	756,476	98,087	854,563
		99	73	7,816	3,510	4,100	822,947	838,373	54,868	893,241
		00	60	10,809	8,512	0	798,268	817,589	45,683	863,272
		01	55	3,888	10,255	5,200	570,828	590,171	43,604	633,775
82657-04-3	* Bifenthrin	98	6	760	5	0	0	765	19	784
		99	5	546	0	0	0	546	0	546
		00	6	1,012	0	0	0	1,012	0	1,012
		01	8	1,272	0	0	0	1,272	0	1,272
92-52-4	* Biphenyl	98	136	537,237	4,106	29,574	1,224	572,141	49,935	622,076
		99	140	673,635	8,949	4,177	27	686,788	59,473	746,261
		00	134	584,321	5,830	1,100	183	591,434	36,383	627,817
		01	132	454,508	3,096	3,985	102	461,691	28,249	489,940

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** PBT chemical added to list for 2000 reporting year. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
Benzamide	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
*,** Benzene	98	37,791,735	1,231,107	17,231,356	9,446,599	52,623,884	4,114,327	8,861,645	131,300,653	86,711
	99	38,770,637	760,189	23,084,783	2,614,700	55,709,320	4,213,873	8,778,884	133,932,386	90,589
	00	22,176,732	1,595,369	43,150,982	2,599,886	69,600,386	2,269,988	7,705,586	149,098,929	40,711
	01	19,714,092	2,477,950	40,711,084	1,553,307	46,896,645	2,618,812	6,617,827	120,589,717	65,760
** Benzidine	98	0	0	0	0	101,123	58	34	101,215	0
	99	0	0	89,000	0	316,990	60	171	406,221	0
	00	0	0	0	0	291,547	781	17	292,345	0
	01	0	0	330	372	229,583	19	75	230,379	0
** Benzoic trichloride	98	0	0	0	20,000	175,768	34,870	2,669	233,307	0
	99	0	0	0	20,000	286,025	1,608	2,750	310,383	0
	00	0	0	0	0	231,409	1,214	2,128	234,751	0
	01	0	0	330	1,335	220,494	4,984	1,060	228,203	0
*** Benzo(g,h,i) perylene	98	NR	NR	NR	NR	NR	NR	NR	NR	NR
	99	NR	NR	NR	NR	NR	NR	NR	NR	NR
	00	79,332.32	12,435.97	1,835,315.93	5,659.33	282,304.34	2,661.73	165,206.35	2,382,915.98	639.52
	01	140,586.01	37,229.40	808,168.96	3,744.11	199,443.74	1,911.27	122,772.28	1,313,855.78	1,565.82
Benzoyl chloride	98	0	0	0	0	2,581,969	498,362	15,971	3,096,302	0
	99	0	0	0	0	2,874,379	336,441	12,839	3,223,659	0
	00	0	0	0	1,319	3,293,661	306,258	11,986	3,613,224	0
	01	0	0	250	7,971	2,173,475	203,893	9,712	2,395,301	0
* Benzoyl peroxide	98	10,364	0	0	1,191	98,989	49,139	8,972	168,655	0
	99	6,935	0	0	1,885	139,403	91,458	6,478	246,159	0
	00	9,153	0	0	290	82,082	78,180	21,261	190,966	0
	01	6,824	0	0	3,187	66,158	34,397	18,848	129,414	0
Benzyl chloride	98	4,800	0	17,000	420,878	734,857	76,610	31,426	1,285,571	0
	99	0	0	0	392,457	847,767	37,127	28,748	1,306,099	0
	00	208	0	0	520,751	752,711	5,731	22,193	1,301,594	18
	01	197	0	0	580,170	608,554	7,812	14,313	1,211,046	0
** Beryllium	98	160,399	84,146	0	0	10	8	63,356	307,919	0
	99	101,065	24,154	0	0	0	966	66,436	192,621	0
	00	622,263	66,837	0	0	9	1,319	89,904	780,332	40
	01	107,160	158,428	0	0	0	865	312,782	579,235	113
** Beryllium compounds	98	9,700	26,450	0	0	194	1,090	848,766	886,200	300
	99	9,700	38,384	0	0	0	1,349	906,201	955,634	0
	00	9,709	33,768	0	0	0	486	874,112	918,075	0
	01	11,657	29,220	0	0	0	85	642,450	683,412	2,043
* Bifenthrin	98	0	0	0	0	11,275	402	249	11,926	0
	99	0	0	0	0	1	2,069	71	2,141	0
	00	0	0	0	0	1	3,592	178	3,771	0
	01	4,400	0	0	0	11	1,141	255	5,807	0
* Biphenyl	98	306,564	288,334	1,079,699	144,786	774,971	765,225	627,268	3,986,847	3,938
	99	446,648	273,973	2,017,273	192,637	1,373,492	613,545	762,458	5,680,026	4,194
	00	230,846	727,786	1,864,140	126,895	4,079,546	599,713	644,984	8,273,910	4,543
	01	483,000	863,740	2,190,205	168,445	1,767,841	619,675	500,390	6,593,296	5,667

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** PBT chemical added to list for 2000 reporting year. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
111-91-1	Bis (2-chloroethoxy) methane	98	2	1,434	0	930	1,024	3,388	0	3,388
		99	2	1,314	1	3,697	0	5,012	4	5,016
		00	3	1,335	0	9,302	0	10,637	455	11,092
		01	4	2,290	5	8,593	0	10,888	505	11,393
111-44-4	* Bis(2-chloroethyl) ether	98	14	844	4	0	0	848	1	849
		99	15	364	24	0	0	388	313	701
		00	14	472	2	0	0	474	6,130	6,604
		01	14	576	15	0	0	591	521	1,112
542-88-1	** Bis(chloromethyl) ether	98	2	0	0	0	0	0	0	0
		99	3	4	0	0	0	4	153	157
		00	2	0	5	0	0	5	0	5
		01	2	0	0	0	0	0	0	0
108-60-1	Bis(2-chloro-1-methylethyl) ether	98	2	3,360	46	0	2	3,408	0	3,408
		99	2	4,110	2	0	2	4,114	0	4,114
		00	4	2,922	2	0	4	2,928	0	2,928
		01	3	2,512	2	0	6	2,520	0	2,520
56-35-9	* Bis(tributyltin) oxide	98	3	0	6	0	2	8	3,372	3,380
		99	5	10	6	0	1	17	3,923	3,940
		00	4	0	7	0	1	8	22,745	22,753
		01	3	0	6	0	1	7	3,476	3,483
10294-34-5	Boron trichloride	98	5	750	0	0	0	750	0	750
		99	8	350	0	0	0	350	0	350
		00	12	605	0	0	0	605	0	605
		01	11	626	0	0	0	626	0	626
7637-07-2	Boron trifluoride	98	22	37,802	5	0	0	37,807	0	37,807
		99	23	16,725	0	0	0	16,725	0	16,725
		00	26	11,595	0	0	0	11,595	250	11,845
		01	22	11,496	0	0	0	11,496	0	11,496
314-40-9	* Bromacil	98	2	35	0	0	0	35	0	35
		99	2	10	0	0	0	10	0	10
		00	2	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
53404-19-6	* Bromacil, lithium salt	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
7726-95-6	* Bromine	98	56	109,167	7,110	7	7,705	123,989	5	123,994
		99	50	247,423	15	0	7,705	255,143	37,868	293,011
		00	49	268,604	10	0	58,505	327,119	936	328,055
		01	47	322,726	765	0	10,260	333,751	152	333,903
35691-65-7	* 1-Bromo-1-(bromomethyl)-1,3-propane-dicarbonitrile	98	2	0	0	0	0	0	0	0
		99	4	0	0	0	0	0	0	0
		00	5	0	0	0	0	0	0	0
		01	5	0	0	0	0	0	0	0
353-59-3	Bromochloro-difluoromethane (Halon 1211)	98	4	3,673	0	0	0	3,673	0	3,673
		99	4	3,979	0	0	0	3,979	0	3,979
		00	6	2,737	0	0	0	2,737	0	2,737
		01	4	1,080	0	0	0	1,080	0	1,080

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
Bis (2-chloroethoxy) methane	98	0	0	0	0	0	15	3,388	3,403	0
	99	0	0	0	0	28,000	0	5,011	33,011	0
	00	0	0	0	0	32,371	801	11,103	44,275	0
	01	0	0	330	22,074	42,698	488	11,409	76,999	0
* Bis(2-chloroethyl) ether	98	0	159,909	426,404	9,541	550,609	349,619	853	1,496,935	0
	99	0	142,932	1,280,773	6,127	1,842,598	455,565	410	3,728,405	0
	00	0	0	927,539	5,321	1,628,247	625,940	483	3,187,530	0
	01	0	0	923,862	98,686	2,045,950	122,160	711	3,191,369	0
** Bis(chloromethyl) ether	98	0	0	0	0	36,500	0	0	36,500	0
	99	0	0	0	0	145,933	0	157	146,090	0
	00	0	0	0	0	104,878	0	3	104,881	0
	01	0	0	0	0	79,474	0	0	79,474	0
Bis(2-chloro-1-methylethyl) ether	98	8,900,000	0	6,000,000	0	1,410,000	0	3,500	16,313,500	0
	99	2,800,000	0	7,210,000	0	5,149,000	0	4,100	15,163,100	0
	00	0	0	5,433,123	0	202,102,743	771	2,930	207,539,567	0
	01	1,451,713	0	9,925,905	2,489,000	11,815,309	0	2,520	25,684,447	0
* Bis(tributyltin) oxide	98	0	58,478	0	0	336	0	3,380	62,194	0
	99	0	35,864	0	0	346	530	4,367	41,107	0
	00	0	49,641	0	0	257	0	22,752	72,650	7,834
	01	0	43,200	0	0	457	0	5,119	48,776	1,636
Boron trichloride	98	6,700	0	0	0	53,000	0	335	60,035	2
	99	9,100	0	0	0	16,000	10,000	145	35,245	0
	00	85,596	0	0	0	16,761	0	347	102,704	2
	01	50,626	0	0	0	28,034	0	348	79,008	1
Boron trifluoride	98	0	0	0	35	462,635	15,255	35,056	512,981	449
	99	0	0	0	0	509,864	1,130	16,455	527,449	181
	00	0	0	0	31	748,803	1,148	11,232	761,214	25
	01	0	0	0	0	703,647	2,307	11,229	717,183	111
* Bromacil	98	0	0	0	0	32,434	0	1,217	33,651	0
	99	0	0	0	0	17,343	0	850	18,193	0
	00	0	0	0	0	20,647	0	0	20,647	0
	01	0	0	0	0	27,555	1	0	27,556	0
* Bromacil, lithium salt	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Bromine	98	5,670,000	230	0	162,356	18,624,717	20,781	127,419	24,605,503	194
	99	130,800	3,421	0	0	918,137	483,028	261,790	1,797,176	798
	00	319,700	1,697,423	0	0	578,967	347,171	327,149	3,270,410	94
	01	908,800	426	0	0	489,191	169,403	320,022	1,887,842	22,425
* 1-Bromo-1-(bromomethyl)-1,3-propane-dicarbonitrile	98	0	0	0	0	11,000	9,824	0	20,824	0
	99	0	0	0	0	0	9,595	0	9,595	0
	00	0	0	0	0	0	9,570	0	9,570	0
	01	0	0	0	0	0	9,413	0	9,413	0
Bromochloro-difluoromethane (Halon 1211)	98	501,947	0	0	0	0	0	3,673	505,620	174
	99	485,900	0	0	0	0	0	3,827	489,727	152
	00	241,000	0	0	0	0	2,389	2,737	246,126	847
	01	45,000	0	0	0	0	0	914	45,914	166

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
75-25-2	Bromoform	98	3	3	0	0	0	3	0	3
		99	2	7	1	0	0	8	4	12
		00	4	12	0	0	0	12	5	17
		01	1	7	0	0	0	7	0	7
74-83-9	* Bromomethane	98	47	1,556,612	30	230	11	1,556,883	0	1,556,883
		99	47	1,431,753	29	0	4	1,431,786	1,603	1,433,389
		00	50	954,871	37	5	9	954,922	5	954,927
		01	42	723,519	139	29,653	6,048	759,359	3,441	762,800
75-63-8	Bromotrifluoromethane (Halon 1301)	98	6	26,842	0	0	0	26,842	0	26,842
		99	6	30,825	0	0	0	30,825	0	30,825
		00	7	27,899	0	0	0	27,899	0	27,899
		01	6	13,451	0	0	0	13,451	0	13,451
1689-84-5	* Bromoxynil	98	2	506	0	0	0	506	1,483	1,989
		99	3	3	0	0	0	3	790	793
		00	2	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
1689-99-2	* Bromoxynil octanoate	98	5	1,566	0	0	0	1,566	14,420	15,986
		99	6	519	0	0	0	519	8,926	9,445
		00	6	37	0	15,462	0	15,499	0	15,499
		01	4	0	0	0	0	0	0	0
357-57-3	Brucine	98	1	0	0	0	0	0	0	0
		99	2	4	0	0	0	4	153	157
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
106-99-0	** 1,3-Butadiene	98	200	2,771,886	8,834	732	7,998	2,789,450	2,567	2,792,017
		99	202	2,062,683	1,931	720	127	2,065,461	2,571	2,068,032
		00	201	2,117,926	1,163	850	60,140	2,180,079	185,861	2,365,940
		01	200	2,145,152	1,507	49,062	57,491	2,253,212	62,670	2,315,882
141-32-2	Butyl acrylate	98	170	212,785	7,790	0	546	221,121	48,054	269,175
		99	169	245,013	8,747	156	546	254,462	32,208	286,670
		00	167	233,013	14,566	271	245	248,095	22,782	270,877
		01	163	151,953	152	0	27	152,132	17,293	169,425
71-36-3	n-Butyl alcohol	98	1,207	21,707,849	94,523	3,230,606	5,579	25,038,557	398,919	25,437,476
		99	1,151	20,701,979	56,287	3,189,043	4,626	23,951,935	730,471	24,682,406
		00	1,128	19,347,222	35,909	3,839,648	63,477	23,286,256	370,900	23,657,156
		01	1,012	16,851,702	40,175	834,584	2,128	17,728,589	1,262,133	18,990,722
78-92-2	* sec-Butyl alcohol	98	154	1,010,436	3,950	169,243	13,007	1,196,636	16,585	1,213,221
		99	148	905,211	11,020	145,995	13,708	1,075,934	17,436	1,093,370
		00	144	774,879	11,924	119,420	12,474	918,697	17,424	936,121
		01	130	787,478	7,025	725,164	11	1,519,678	10,040	1,529,718
75-65-0	* tert-Butyl alcohol	98	110	444,928	30,351	861,956	8,444	1,345,679	182,246	1,527,925
		99	118	400,931	17,334	770,634	756	1,189,655	78,307	1,267,962
		00	113	775,480	9,459	766,198	502	1,551,639	115,374	1,667,013
		01	121	512,122	19,778	614,070	53	1,146,023	51,146	1,197,169
106-88-7	** 1,2-Butylene oxide	98	14	10,582	8,401	0	0	18,983	0	18,983
		99	14	11,629	2,402	0	0	14,031	0	14,031
		00	15	7,817	5,700	0	40	13,557	0	13,557
		01	17	6,139	934	0	0	7,073	0	7,073

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
Bromoform	98	0	0	0	0	10,594	2	3	10,599	0
	99	0	0	0	0	18,216	2	2	18,220	0
	00	0	0	0	0	37,797	775	15	38,587	0
	01	0	0	0	0	25,984	1,611	7	27,602	0
* Bromomethane	98	12,780	0	222,300	280	491,592	30	1,553,095	2,280,077	14,067
	99	295,500	0	273,800	160	1,125,601	2,455	1,346,274	3,043,790	15,326
	00	85,403	0	267,700	2,800	1,078,592	807	953,986	2,389,288	15
	01	21,710	0	255,702	0	2,302,388	621	760,936	3,341,357	210
Bromotrifluoromethane (Halon 1301)	98	583,803	0	0	0	0	0	26,592	610,395	6,468
	99	647,796	0	0	0	0	0	29,446	677,242	1,629
	00	210,854	0	0	0	0	0	26,231	237,085	1,873
	01	162,068	6,749	0	0	0	0	10,797	179,614	2,534
* Bromoxynil	98	0	0	0	0	0	0	1,244	1,244	0
	99	0	0	0	0	0	0	790	790	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
* Bromoxynil octanoate	98	0	0	0	0	0	40	21,215	21,255	0
	99	0	0	0	0	0	397	13,525	13,922	0
	00	0	0	0	0	0	171	18,689	18,860	0
	01	0	0	0	0	0	722	0	722	0
Brucine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	94,553	0	157	94,710	0
	00	0	0	0	0	67,901	0	0	67,901	0
	01	0	0	0	0	41,188	0	0	41,188	0
** 1,3-Butadiene	98	5,428,139	15,575,833	15,244,040	479,609	53,603,455	3,927,742	2,754,997	97,013,815	776,815
	99	5,488,890	11,539,996	38,304,604	460,901	54,190,421	309,263	2,093,924	112,387,999	59,750
	00	5,231,395	10,902,156	23,915,854	826,580	423,309,451	410,780	2,154,235	466,750,451	59,799
	01	4,456,061	10,851,688	15,604,022	572,433	67,559,004	901,275	2,197,823	102,142,306	12,089
Butyl acrylate	98	270,060	950	3,912,299	1,023,562	11,904,948	87,942	232,863	17,432,624	6,129
	99	330,066	1,466	3,058,697	661,536	2,929,487	181,935	268,977	7,432,164	1,422
	00	334,515	197	1,461,786	659,125	1,635,982	191,595	257,364	4,540,564	215
	01	36,195	4	1,901,135	201,352	1,206,628	473,280	167,956	3,986,550	1,038
n-Butyl alcohol	98	9,987,297	2,589,149	29,259,817	18,138,506	44,571,246	6,242,842	25,701,730	136,490,587	58,866
	99	11,752,536	2,288,294	33,343,813	13,359,119	35,199,526	5,958,606	24,822,533	126,724,427	21,589
	00	11,575,871	2,116,734	25,227,636	12,558,115	34,772,758	5,178,159	24,133,065	115,562,338	8,316
	01	8,927,925	1,935,281	25,681,561	12,447,831	34,996,925	4,873,723	20,642,906	109,506,152	58,479
* sec-Butyl alcohol	98	172,123	9,319	10,701,253	1,258,820	1,532,725	489,996	1,223,276	15,387,512	0
	99	380,581	76,228	12,708,755	1,409,442	1,446,464	175,759	1,100,391	17,297,620	0
	00	414,303	17,826	11,128,795	991,871	1,961,488	325,349	946,413	15,786,045	1,105
	01	361,442	69,337	17,804,921	1,067,576	1,627,836	444,138	1,599,508	22,974,758	135
* tert-Butyl alcohol	98	693,964	231,409	37,637,302	11,348,179	2,461,322	1,852,842	1,515,800	55,740,818	73
	99	747,403	20,193	38,801,186	9,006,874	1,935,642	1,789,688	1,601,437	53,902,423	21,125
	00	1,255,200	13,016	18,304,607	8,560,177	3,476,523	2,219,446	1,647,961	35,476,930	2,828
	01	618,442	224,709	28,981,995	8,812,257	4,722,734	1,830,258	1,140,456	46,330,851	1,262
** 1,2-Butylene oxide	98	1	0	0	275,493	498,660	342	18,816	793,312	0
	99	2	0	0	282,209	382,501	620	14,295	679,627	0
	00	0	0	0	316,641	154,942	730	13,631	485,944	0
	01	5	0	261,895	348,640	52,105	593	20,201	683,439	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1988, 1995 and 1998-2000

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
123-72-8	* Butyraldehyde	98	33	289,956	618	29,000	1,478	321,052	1,666	322,718
		99	34	295,543	466	29,003	149,000	474,012	6,827	480,839
		00	31	403,531	3,670	29,003	0	436,204	12,204	448,408
		01	31	439,797	942	29,003	0	469,742	7,595	477,337
7440-43-9	** Cadmium	98	70	3,427	402	166,607	2,441,086	2,611,522	159,392	2,770,914
		99	65	4,297	291	61,000	1,660,677	1,726,265	301,634	2,027,899
		00	65	2,271	532	69,000	661,690	733,493	7,746	741,239
		01	61	1,672	279	72,000	652,422	726,373	117,964	844,337
--	** Cadmium compounds	98	135	85,302	2,281	226,908	8,691,212	9,005,703	1,601,415	10,607,118
		99	132	33,861	2,666	100,023	10,491,679	10,628,229	870,258	11,498,487
		00	133	30,067	9,015	110,284	6,149,907	6,299,273	2,582,310	8,881,583
		01	124	20,746	2,507	90,292	12,492,456	12,606,001	2,561,930	15,167,931
156-62-7	* Calcium cyanamide	98	4	134	0	0	0	134	0	134
		99	4	250	0	0	0	250	0	250
		00	3	250	0	0	0	250	0	250
		01	2	86	0	0	0	86	0	86
133-06-2	* Captan	98	14	9,213	5	0	0	9,218	1,899	11,117
		99	14	5,111	5	0	0	5,116	1,097	6,213
		00	14	4,120	5	0	0	4,125	1,985	6,110
		01	15	2,668	10	0	0	2,678	2,328	5,006
63-25-2	* Carbaryl	98	25	7,831	10	0	100	7,941	9,288	17,229
		99	18	5,280	5	0	20,148	25,433	41,403	66,836
		00	17	4,590	5	0	0	4,595	4,085	8,680
		01	21	6,944	5	0	0	6,949	5,747	12,696
1563-66-2	* Carbofuran	98	7	2,937	1	0	0	2,938	2	2,940
		99	6	834	112	0	0	946	23	969
		00	6	1,628	5	0	0	1,633	0	1,633
		01	7	1,435	5	0	0	1,440	0	1,440
75-15-0	* Carbon disulfide	98	113	43,448,281	4,691	16,599	1,651	43,471,222	5,825	43,477,047
		99	119	35,919,874	6,552	16,110	256	35,942,792	2,763	35,945,555
		00	118	40,574,701	3,706	17,456	2,874	40,598,737	3,220	40,601,957
		01	121	18,157,289	30,619	16,745	3,623	18,208,276	3,355	18,211,631
56-23-5	*, ** Carbon tetrachloride	98	71	275,342	2,836	23,168	1,679	303,025	20,251	323,276
		99	70	232,988	85	27,548	938	261,559	16,566	278,125
		00	62	284,301	184	62,203	837	347,525	2,548	350,073
		01	58	290,082	85	113,881	5,929	409,977	3,543	413,520
463-58-1	Carbonyl sulfide	98	93	19,869,719	0	0	0	19,869,719	0	19,869,719
		99	107	21,351,947	0	0	0	21,351,947	0	21,351,947
		00	109	21,907,039	0	0	0	21,907,039	0	21,907,039
		01	106	18,165,335	0	0	0	18,165,335	0	18,165,335
5234-68-4	* Carboxin	98	3	5	0	0	0	5	17	22
		99	4	5	0	0	0	5	154	159
		00	4	4	0	0	0	4	118	122
		01	4	2	0	0	0	2	68	70
120-80-9	** Catechol	98	144	5,349	24,422	0	1,032	30,803	938	31,741
		99	140	7,037	29,119	0	968	37,124	3,042	40,166
		00	141	7,870	18,165	0	605	26,640	2,624	29,264
		01	132	7,656	17,190	0	2,348	27,194	919	28,113

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Butyraldehyde	98	1,500	31,000	2,136,982	40,710	1,928,784	651,535	317,838	5,108,349	5,207
	99	1,500	1,200	4,909,209	40,812	7,983,588	176,272	409,140	13,521,721	81,117
	00	0	1,200	3,177,064	544,327	2,198,817	503,656	477,280	6,902,344	831
	01	0	1,900	2,471,672	11,415	2,600,986	528,138	475,568	6,089,679	164
** Cadmium	98	1,101,823	321,749	0	0	27,779	63,036	2,688,393	4,202,780	9,410
	99	231,447	326,999	0	0	29,363	11,573	1,758,914	2,358,296	10
	00	17,347	147,964	0	0	28,617	15,460	803,306	1,012,694	0
	01	7,710	51,053	0	0	3,118	5,886	877,953	945,720	915
** Cadmium compounds	98	2,566,537	722,234	0	5,236	6,225	52,112	11,587,132	14,939,476	59,703
	99	3,081,739	670,466	0	212	4,654	21,021	8,529,626	12,307,718	160,626
	00	3,342,325	812,756	0	0	75,121	109,942	8,840,137	13,180,281	79,937
	01	1,987,292	537,375	0	0	2,459	1,036	14,160,676	16,688,838	220,697
* Calcium cyanamide	98	0	0	0	0	0	0	130	130	0
	99	0	0	0	0	0	0	26	26	0
	00	0	0	0	0	0	0	43	43	0
	01	0	0	0	0	0	0	90	90	0
* Captan	98	2,697	0	0	0	77,416	3,944	11,437	95,494	0
	99	2,314	0	0	0	75,081	17,910	9,949	105,254	0
	00	1,947	0	0	0	87,768	6,529	8,240	104,484	0
	01	1,836	0	0	0	102,257	3,691	5,644	113,428	0
* Carbaryl	98	80,456	0	79,931	0	443,809	24,121	14,617	642,934	100
	99	71,825	97	64	0	506,541	11,446	19,681	609,654	0
	00	96,000	0	5	0	514,273	18,519	14,839	643,636	0
	01	112,001	0	151,892	0	469,232	10,951	13,059	757,135	0
* Carbofuran	98	0	0	0	0	243,293	35,601	2,937	281,831	275
	99	0	0	0	0	162,525	19,615	14,136	196,276	0
	00	38,200	0	0	0	106,969	34,542	1,074	180,785	0
	01	0	0	0	0	106,951	39,332	886	147,169	0
* Carbon disulfide	98	30,024,800	1,985	10,895,966	242,037	34,314,909	251,698	43,261,258	118,992,653	24,332
	99	25,913,004	1,067	11,332,692	99,958	41,970,122	454,153	35,869,549	115,640,545	22,514
	00	32,143,299	494	11,070,081	115,546	47,936,880	147,625	40,603,238	132,017,163	22,401
	01	18,568,342	109	12,720,194	64,281	41,307,860	145,647	31,775,361	104,581,794	23,582
*** Carbon tetrachloride	98	2,223,265	2,075,495	1,277,378	320,867	16,050,925	3,042,723	303,924	25,294,577	4,827
	99	7,066,850	3,197,695	869,742	91,975	18,126,761	725,638	230,752	30,309,413	28,179
	00	2,131,751	2,695,645	2,658,397	22,462	351,830,194	588,903	338,405	360,265,757	30,690
	01	2,577,719	328,474	2,796,974	38,159	15,078,872	757,447	468,608	22,046,253	25,013
Carbonyl sulfide	98	0	0	2,759,669	0	20,273,532	0	20,021,053	43,054,254	2
	99	0	0	4,189,794	0	79,163,220	0	21,530,378	104,883,392	5,711
	00	0	0	3,909,451	0	81,788,605	0	22,063,175	107,761,231	6,001
	01	120,000	0	5,471,567	0	36,226,510	0	18,190,898	60,008,975	27,350
* Carboxin	98	1,110	0	0	0	0	218	22	1,350	0
	99	1,538	0	0	0	0	60	159	1,757	0
	00	1,162	0	0	0	0	596	120	1,878	0
	01	688	0	0	0	0	30	70	788	0
** Catechol	98	0	0	9,720,992	117,794	4,447,791	50,640	35,139	14,372,356	0
	99	0	4,594	10,920,586	140,011	3,850,404	100,528	82,919	15,099,042	1
	00	0	35,136	6,293,994	72,241	2,294,441	174,898	28,706	8,899,416	54
	01	0	28,586	4,962,351	57,100	2,078,468	61,673	27,811	7,215,989	9

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
2439-01-2 *	Chinomethionat	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
133-90-4 *	Chloramben	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
57-74-9 *,**	Chlordane	98	7	45	0	20,106	25,548	45,699	22	45,721
		99	4	8	1	0	0	9	40	49
		00	20	13.70	0.00	0.00	8,947.74	8,961.44	46.59	9,008.03
		01	20	15.49	80.00	0.00	3,630.30	3,725.79	331.61	4,057.40
115-28-6 **	Chlorendic acid	98	2	30	0	0	0	30	0	30
		99	2	32	0	0	0	32	0	32
		00	2	34	0	0	0	34	0	34
		01	3	53	0	0	0	53	5	58
90982-32-4 *	Chlorimuron ethyl	98	2	3	0	0	0	3	0	3
		99	2	27	0	0	0	27	0	27
		00	2	12	0	0	0	12	0	12
		01	2	12	0	0	0	12	0	12
7782-50-5 *	Chlorine	98	1,352	59,689,567	432,868	114,341	210,602	60,447,378	30,260	60,477,638
		99	1,258	49,220,391	408,373	75,710	110,679	49,815,153	67,112	49,882,265
		00	1,207	45,589,230	285,008	167,321	252,220	46,293,779	52,868	46,346,647
		01	1,125	16,001,912	221,803	169,803	49,524	16,443,042	45,275	16,488,317
10049-04-4 *	Chlorine dioxide	98	122	1,018,717	581	0	0	1,019,298	0	1,019,298
		99	118	974,051	873	0	5	974,929	0	974,929
		00	118	742,791	584	0	0	743,375	0	743,375
		01	116	582,005	310	0	0	582,315	0	582,315
79-11-8 *	Chloroacetic acid	98	26	3,585	16	0	0	3,601	500	4,101
		99	21	4,565	17	0	0	4,582	328	4,910
		00	23	3,183	17	0	300	3,500	250	3,750
		01	25	3,699	753	0	0	4,452	260	4,712
532-27-4 *	2-Chloroaceto-phenone	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
4080-31-3 *	1-(3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride	98	16	437	11	0	653	1,101	5,138	6,239
		99	12	217	10	0	509	736	5,769	6,505
		00	13	107	10	0	349	466	14,240	14,706
		01	13	13	10	0	0	23	4,382	4,405
106-47-8 *,**	p-Chloroaniline	98	5	6,201	12	0	0	6,213	0	6,213
		99	5	132	337	0	0	469	0	469
		00	7	446	60	0	0	506	5	511
		01	7	551	45	0	17,425	18,021	8,513	26,534
108-90-7 *	Chlorobenzene	98	93	775,232	912	184,356	16	960,516	21,633	982,149
		99	93	694,145	1,684	175,544	214	871,587	31,670	903,257
		00	90	698,411	474	217,867	1,206	917,958	17,593	935,551
		01	85	691,985	685	106,453	23	799,146	5,390	804,536

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT Chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Chinomethionat	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Chloramben	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
*,**Chlordane	98	0	0	0	25,778	187,264	35	45,721	258,798	0
	99	0	0	0	0	470,719	114	46	470,879	0
	00	0.00	0.00	230.00	0.00	812,322.92	4,904.05	9,007.26	826,464.23	0.00
	01	0.00	0.00	244.00	0.00	463,839.30	457.00	4,024.29	468,564.59	0.00
** Chlorendic acid	98	0	0	0	0	0	567	30	597	0
	99	0	0	0	0	0	157	32	189	0
	00	0	0	0	0	0	691	34	725	0
	01	0	0	0	2	27,044	3,702	46	30,794	0
* Chlorimuron ethyl	98	0	0	0	0	0	33,861	3	33,864	0
	99	0	0	0	0	0	11,885	27	11,912	0
	00	2,612	0	0	0	0	5,388	12	8,012	0
	01	2,612	0	0	0	0	4,452	12	7,076	0
* Chlorine	98	72,240,957	88,349	0	50,291	254,282,903	969,312	60,462,093	388,093,905	9,841
	99	71,647,869	83,825	2	60,545	215,968,859	818,038	49,793,886	338,373,024	20,568
	00	191,692,658	20,685	14,176,058	3,984	747,938,290	779,057	46,228,895	1,000,839,627	4,704
	01	155,857,244	14,303	14,646,699	50,600	364,287,065	535,275	16,700,285	552,091,471	126,642
* Chlorine dioxide	98	2,725,788	0	0	0	48,701,526	6,000	1,063,516	52,496,830	860
	99	722,759	0	0	0	48,746,241	0	998,505	50,467,505	260
	00	700,467	0	0	0	22,907,298	0	760,349	24,368,114	2,589
	01	761,426	0	0	0	42,669,420	0	581,774	44,012,620	174
* Chloroacetic acid	98	85,721	0	0	0	1,219,307	568	3,250	1,308,846	0
	99	83,319	0	0	0	867,368	1,419	4,768	956,874	0
	00	46,315	0	63,818	0	1,137,587	1,933	3,182	1,252,835	0
	01	39,220	0	0	0	1,095,415	1,775	3,941	1,140,351	0
* 2-Chloroaceto-phenone	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* 1-(3-Chloroallyl)-3,5,7-triaza-1-azoniaadaman-tane chloride	98	78,111	0	0	0	2,310	12,150	6,753	99,324	0
	99	31,211	0	0	0	1,834	331,049	6,541	370,635	0
	00	26,419	0	0	0	1,414	28,161	16,153	72,147	0
	01	25,644	0	0	0	857	28,459	4,638	59,598	0
*,**p-Chloroaniline	98	0	0	46,000	520	25,861	6,424	16,117	94,922	0
	99	0	0	570,000	1,372	19,048	7,396	472	598,288	0
	00	0	0	74,005	55,813	19,920	10,947	503	161,188	0
	01	0	0	253,860	2,429	15,169	7,352	26,297	305,107	0
* Chlorobenzene	98	1,367,757	976,071	5,511,387	3,557,689	12,153,264	4,805,423	985,846	29,357,437	831
	99	4,838,112	6,186,066	4,363,580	1,850,965	8,869,212	1,680,763	864,813	28,653,511	16,466
	00	2,518,468	974,100	4,699,260	2,122,490	12,004,015	1,307,064	930,387	24,555,784	191
	01	2,332,100	875,243	3,692,734	1,586,940	9,074,613	1,501,846	802,518	19,865,994	257

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT Chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
510-15-6 *	Chlorobenzilate	98	1	0	0	0	0	0	0	0
		99	1	2	1	0	0	3	10	13
		00	2	0	0	0	0	0	10	10
		01	2	0	0	0	0	0	260	260
75-68-3	1-Chloro-1,1-difluoroethane (HCFC-142b)	98	31	5,529,855	40	0	0	5,529,895	5,593	5,535,488
		99	35	5,644,160	44	0	0	5,644,204	5,108	5,649,312
		00	30	5,654,567	34	0	0	5,654,601	4,693	5,659,294
		01	31	5,510,995	15	0	0	5,511,010	9,732	5,520,742
75-45-6 *	Chlorodifluoromethane (HCFC-22)	98	251	9,201,751	3,652	0	1	9,205,404	50,648	9,256,052
		99	265	8,622,691	3,652	0	1	8,626,344	67,799	8,694,143
		00	264	8,671,088	2,891	0	1	8,673,980	57,036	8,731,016
		01	253	8,722,907	2,891	0	36,000	8,761,798	50,777	8,812,576
75-00-3	Chloroethane	98	61	2,199,019	1,024	67	50	2,200,160	3,903	2,204,063
		99	56	2,134,114	261	130	0	2,134,505	2,309	2,136,814
		00	60	2,067,847	693	110	0	2,068,650	34,649	2,103,299
		01	57	1,301,471	1,033	0	5	1,302,509	50,548	1,353,057
67-66-3 *,**	Chloroform	98	161	6,291,839	127,319	44,107	12,349	6,475,614	46,078	6,521,692
		99	155	5,265,650	86,239	123,696	11,776	5,487,361	91,880	5,579,241
		00	132	3,444,413	56,341	226,742	13,779	3,741,275	11,270	3,752,545
		01	104	1,427,683	18,995	146,747	8,713	1,602,138	25,686	1,627,824
74-87-3 *	Chloromethane	98	112	2,654,828	1,747	294,101	62	2,950,738	959	2,951,697
		99	110	2,778,378	2,159	158,680	8,281	2,947,498	6,650	2,954,148
		00	109	1,910,918	1,182	164,495	1,232	2,077,827	9,613	2,087,440
		01	96	1,738,062	1,004	169,412	12,259	1,920,737	6,778	1,927,515
107-30-2 **	Chloromethyl methyl ether	98	3	1,000	0	0	0	1,000	0	1,000
		99	5	1,370	1	0	0	1,371	169	1,540
		00	4	1,600	0	0	0	1,600	10	1,610
		01	4	1,841	0	0	0	1,841	260	2,101
563-47-3 **	3-Chloro-2-methyl-1-propene	98	3	7,353	0	0	0	7,353	0	7,353
		99	4	8,716	0	0	0	8,716	0	8,716
		00	3	8,540	0	0	0	8,540	0	8,540
		01	3	7,917	0	0	0	7,917	0	7,917
--	Chlorophenols	98	12	4,885	81	73,548	0	78,514	12,188	90,702
		99	12	3,525	120	59,159	2	62,806	3,624	66,430
		00	8	606	100	31,593	1	32,300	1,816	34,116
		01	11	832	28	40,903	6,365	48,128	4,625	52,753
104-12-1	p-Chlorophenyl isocyanate	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
76-06-2 *	Chloropicrin	98	17	7,564	0	0	0	7,564	270	7,834
		99	16	6,651	0	0	0	6,651	1	6,652
		00	14	7,650	0	0	0	7,650	0	7,650
		01	11	7,480	0	0	0	7,480	0	7,480
126-99-8 **	Chloroprene	98	15	978,218	0	100,000	0	1,078,218	1	1,078,219
		99	11	907,146	0	29,000	0	936,146	0	936,146
		00	14	974,421	0	47,000	0	1,021,421	0	1,021,421
		01	17	852,009	0	62,000	67,000	981,009	0	981,009

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Chlorobenzilate	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	41,000	0	9	41,009	0
	00	0	0	0	0	53,702	874	8	54,584	0
	01	0	0	330	268	87,104	113	69	87,884	0
1-Chloro-1,1-di-fluoroethane (HCFC-142b)	98	67	0	0	5,400	671,283	165,589	5,538,107	6,380,446	102
	99	12,089,067	0	0	142,321	1,128,410	190,798	5,577,181	19,127,777	12
	00	48,356,067	0	0	101,208	1,289,639	142,684	5,671,815	55,561,413	3,815
	01	48,356,082	0	0	27,768	1,412,130	148,939	5,483,368	55,428,287	35
* Chlorodifluoro-methane (HCFC-22)	98	698,765	168,042	0	237	505,214	291,198	9,350,346	11,013,802	127,066
	99	867,735	506,388	0	2,422	359,463	204,516	8,716,127	10,656,651	28,168
	00	1,159,592	523,180	0	1,884	549,878	743,079	8,747,437	11,725,050	102,948
	01	1,134,519	517,831	2	40	457,236	304,036	8,696,613	11,110,277	186,166
Chloroethane	98	5,135,802	170,083	13,263,574	17,934	35,547,916	337,226	2,206,782	56,679,317	134
	99	535,427	429,824	22,516,043	119,801	28,690,272	504,451	2,135,609	54,931,427	1,400
	00	485,765	260,018	37,990,489	238,935	22,965,104	475,183	2,072,145	64,487,639	543
	01	691,700	2,238	35,104,901	64,005	12,826,001	545,601	1,305,302	50,539,748	3,946
*,** Chloroform	98	6,785,284	1,887,187	5,135,376	461,943	22,151,133	4,128,642	6,488,716	47,038,281	21,625
	99	9,158,233	2,771,608	1,624,788	557,712	27,717,442	2,212,418	5,466,705	49,508,906	51,663
	00	8,175,408	2,033,975	3,803,728	294,764	132,136,466	2,006,659	3,680,517	152,131,516	32,396
	01	7,834,746	696,259	3,636,710	298,893	18,332,567	2,332,433	1,635,589	34,767,197	41,432
* Chloromethane	98	3,447,064	23,740	4,261,426	17,950	8,711,360	2,289,660	2,936,003	21,687,203	12,001
	99	3,323,864	1	5,274,618	2,063	14,091,248	234,595	2,951,070	25,877,459	36,410
	00	2,500,325	0	5,631,302	69,978	118,480,361	120,870	2,067,939	128,870,775	8,398
	01	3,999,667	0	4,113,646	42,634	8,319,643	223,806	1,923,489	18,622,885	5,558
** Chloromethyl methyl ether	98	0	0	0	0	280	0	1,000	1,280	0
	99	0	0	0	0	164,969	0	1,535	166,504	0
	00	0	0	0	0	133,017	791	1,465	135,273	0
	01	0	0	330	372	467,477	16	1,734	469,929	0
** 3-Chloro-2-methyl-1-propene	98	0	0	0	0	637,973	344	7,353	645,670	0
	99	0	0	0	0	550,770	16,664	8,525	575,959	0
	00	0	0	0	0	538,391	7,504	8,329	554,224	0
	01	0	0	0	0	1,304,638	15,111	7,917	1,327,666	0
** Chlorophenols	98	2,737,000	0	1,009	62,967	578,888	17,452	89,720	3,487,036	725
	99	2,148,700	0	2,837	78,708	1,929,421	3,710	65,357	4,228,733	1,070
	00	1,838,000	0	2,456	2,991	367,336	3,534	32,958	2,247,275	858
	01	3,780,252	0	2,178	2,217	502,715	3,327	55,203	4,345,892	341
p-Chlorophenyl isocyanate	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Chloropicrin	98	2,250	1,064	0	0	1,110	483	7,548	12,455	0
	99	2,206	914	0	0	4,233	412	6,651	14,416	10
	00	2,112	0	0	905	4,620	942	7,650	16,229	0
	01	8,034	0	0	0	1,225	6,814	7,614	23,687	56
** Chloroprene	98	0	306,514	2,150,000	79,591	8,962,700	209,357	1,077,993	12,786,155	10
	99	0	584,238	1,945,200	798	8,773,757	115,522	935,904	12,355,419	0
	00	7,264	642,816	1,959,118	29,272	5,818,742	59,694	1,021,419	9,538,325	0
	01	140,000	202,653	1,108,175	0	4,122,930	29,503	980,801	6,584,062	1

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
542-76-7	3-Chloropropionitrile	98	No reports							
		99	2	4	0	0	0	4	153	157
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
63938-10-3	Chlorotetrafluoroethane	98	1	0	0	0	0	0	0	0
		99	2	129,800	0	0	0	129,800	0	129,800
		00	1	40,043	0	0	0	40,043	0	40,043
		01	1	0	0	0	0	0	0	0
354-25-6	1-Chloro-1,1,2,2-tetrafluoroethane (HCFC-124a)	98	3	23,336	0	0	0	23,336	0	23,336
		99	3	59,525	0	0	0	59,525	0	59,525
		00	4	48,929	0	0	0	48,929	0	48,929
		01	6	47,509	0	0	0	47,509	0	47,509
2837-89-0	2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	98	24	751,326	5	0	0	751,331	0	751,331
		99	23	604,372	5	0	0	604,377	0	604,377
		00	23	580,413	5	0	0	580,418	0	580,418
		01	21	677,469	5	0	0	677,474	0	677,474
1897-45-6	*,** Chlorothalonil	98	26	9,236	35	5	32,000	41,276	301,806	343,082
		99	20	5,106	7	0	0	5,113	280,116	285,229
		00	21	4,882	44	0	0	4,926	201,402	206,328
		01	19	7,225	179	0	0	7,404	290,303	297,707
95-69-2	** p-Chloro-o-toluidine	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
75-88-7	2-Chloro-1,1,1-trifluoroethane (HCFC-133a)	98	4	162,775	52	0	0	162,827	0	162,827
		99	3	23,950	30	0	0	23,980	0	23,980
		00	3	77,750	0	0	0	77,750	0	77,750
		01	6	52,837	34	0	0	52,871	500	53,371
75-72-9	Chlorotrifluoromethane (CFC-13)	98	1	14,700	5	0	0	14,705	0	14,705
		99	2	10,790	5	0	0	10,795	0	10,795
		00	3	17,101	5	0	0	17,106	0	17,106
		01	5	54,074	5	0	0	54,079	0	54,079
460-35-5	3-Chloro-1,1,1-trifluoropropane (HCFC-253fb)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
5598-13-0	* Chlorpyrifos methyl	98	5	500	0	0	0	500	0	500
		99	4	10	0	0	0	10	24,197	24,207
		00	4	10	0	0	0	10	80,821	80,831
		01	2	0	0	0	0	0	0	0
64902-72-3	* Chlorsulfuron	98	1	1	0	0	0	1	0	1
		99	1	1	0	0	0	1	0	1
		00	1	1	0	0	0	1	0	1
		01	1	1	0	0	0	1	0	1
7440-47-3	Chromium	98	2,114	713,379	38,281	260,457	15,823,485	16,835,601	14,527,534	31,363,136
		99	2,156	670,436	31,600	38,306	11,784,728	12,525,070	16,906,623	29,431,693
		00	2,146	517,613	13,926	348	6,547,140	7,079,026	8,048,482	15,127,508
		01	2,010	296,698	15,230	83,763	4,827,123	5,222,815	9,151,477	14,374,292

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
3-Chloropropionitrile	98	No reports								
	99	0	0	0	0	106,854	0	157	107,011	0
	00	0	0	0	0	55,812	0	0	55,812	0
	01	0	0	0	0	31,065	0	0	31,065	0
Chlorotetrafluoroethane	98	0	0	0	0	29,571	0	0	29,571	0
	99	0	0	0	0	47,355	0	129,800	177,155	0
	00	0	0	0	0	0	0	40,043	40,043	0
	01	0	0	0	0	36,829	0	0	36,829	0
1-Chloro-1,1,2,2-tetrafluoroethane (HCFC-124a)	98	0	0	0	0	165,890	0	23,136	189,026	0
	99	0	0	0	0	457,049	0	59,325	516,374	0
	00	0	0	0	0	680,013	0	48,729	728,742	0
	01	0	0	0	0	970,393	62,700	47,107	1,080,200	476
2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	98	44,530	282,345	0	0	501,437	0	750,815	1,579,127	30
	99	110,249	246,089	0	0	263,090	1,085	604,320	1,224,833	40
	00	135,092	346,497	0	0	445,998	0	580,653	1,508,240	371
	01	361,692	99,773	0	0	4,035,576	6,456	677,703	5,181,200	14,677
*,**Chlorothalonil	98	4,726	0	0	0	65,406	195,241	343,120	608,493	419
	99	25,082	0	0	0	77,915	149,720	285,866	538,583	1,614
	00	15,267	0	0	0	44,246	114,543	206,322	380,378	24
	01	13,720	0	0	0	53,916	505,497	505,766	1,078,899	931
** p-Chloro-o-toluidine	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
2-Chloro-1,1,1-trifluoroethane (HCFC-133a)	98	0	0	0	0	33,000	0	162,925	195,925	4
	99	0	0	0	0	250,000	0	23,700	273,700	0
	00	0	0	0	0	310,000	3,600	77,500	391,100	0
	01	0	0	0	0	1,271,983	54,600	52,816	1,379,399	441
Chlorotrifluoromethane (CFC-13)	98	0	0	0	0	0	0	14,705	14,705	0
	99	0	33,339	0	0	0	0	10,795	44,134	0
	00	0	18,000	0	0	57,159	0	17,106	92,265	0
	01	0	15,600	0	0	35,300	0	54,079	104,979	0
3-Chloro-1,1,1-trifluoropropane (HCFC-253fb)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Chlorpyrifos methyl	98	2,000	0	0	0	0	4,990	285	7,275	0
	99	4,000	0	0	0	0	0	8	4,008	0
	00	4,000	0	0	0	0	0	80,824	84,824	0
	01	0	0	0	0	0	0	0	0	0
* Chlorsulfuron	98	0	0	0	0	0	10,508	1	10,509	0
	99	0	0	0	0	0	2,221	1	2,222	0
	00	0	0	0	0	0	4,078	1	4,079	0
	01	0	0	0	0	0	650	1	651	0
Chromium	98	88,171,850	93,142,064	86,318	17,198	835,345	1,239,055	30,255,826	213,747,656	55,099
	99	28,740,065	99,011,362	0	1,555	468,411	1,048,208	24,573,633	153,843,234	3,888,698
	00	23,423,445	95,016,722	376,580	20	177,536	509,591	15,266,685	134,770,580	71,738
	01	16,371,912	90,302,380	0	5	114,307	169,234	13,540,474	120,498,312	2,499,500

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
--	** Chromium compounds	98	1,852	628,699	228,657	1,542,550	93,054,932	95,454,838	19,513,222	114,968,060
		99	1,821	743,915	196,962	1,545,417	154,382,566	156,868,860	17,199,127	174,067,987
		00	1,874	732,845	225,209	3,502,875	125,027,704	129,488,633	19,786,183	149,274,816
		01	1,770	671,106	178,352	2,240,166	96,718,636	99,808,260	16,725,832	116,534,092
4680-78-8	C.I. Acid Green 3	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
6459-94-5	** C.I. Acid Red 114	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	No reports							
569-64-2	* C.I. Basic Green 4	98	4	5	0	0	0	5	750	755
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	No reports							
989-38-8	C.I. Basic Red 1	98	1	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	2	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
1937-37-7	** C.I. Direct Black 38	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
28407-37-6	C.I. Direct Blue 218	98	6	0	10	0	5	15	2,142	2,157
		99	8	0	10	0	0	10	2,259	2,269
		00	8	0	20	0	1,704	1,724	3,848	5,572
		01	5	0	0	0	0	0	2,500	2,500
2602-46-2	** C.I. Direct Blue 6	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
16071-86-6	** C.I. Direct Brown 95	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
2832-40-8	C.I. Disperse Yellow 3	98	3	205	25	0	0	230	876	1,106
		99	3	50	25	0	0	75	900	975
		00	3	31	25	0	0	56	450	506
		01	1	250	0	0	0	250	250	500
3761-53-3	** C.I. Food Red 5	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
81-88-9	C.I. Food Red 15	98	2	0	0	0	0	0	0	0
		99	3	0	0	0	0	0	0	0
		00	4	0	0	0	23,886	23,886	0	23,886
		01	2	0	0	0	14,223	14,223	0	14,223

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For chromium compounds, applies only to chromium (VI) compounds.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** Chromium compounds	98	37,465,632	33,765,261	10,015	55,547	1,228,418	2,931,965	114,025,424	189,482,262	185,974
	99	27,144,022	36,832,948	2,000	64,829	8,889,310	1,494,501	131,580,698	206,008,308	44,444,962
	00	20,418,205	32,949,749	6,819	22,274	10,768,040	1,581,786	131,647,397	197,394,270	19,271,440
	01	13,650,741	27,868,512	5,052	26,501	2,463,858	843,012	117,396,576	162,254,252	378,943
C.I. Acid Green 3	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** C.I. Acid Red 114	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
* C.I. Basic Green 4	98	0	0	0	0	0	998	20	1,018	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
C.I. Basic Red 1	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
** C.I. Direct Black 38	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
C.I. Direct Blue 218	98	0	260	0	0	312	1,417	2,144	4,133	0
	99	0	450	0	0	53	1,622	2,262	4,387	0
	00	0	1,100	0	0	13,326	1,984	2,249	18,659	0
	01	0	550	0	0	0	1,352	2,461	4,363	0
** C.I. Direct Blue 6	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** C.I. Direct Brown 95	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
C.I. Disperse Yellow 3	98	0	0	0	0	0	1,882	1,106	2,988	0
	99	0	0	0	0	0	0	950	950	0
	00	0	0	0	0	0	0	506	506	0
	01	0	0	0	0	0	0	347	347	0
** C.I. Food Red 5	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
C.I. Food Red 15	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	23,886	23,886	0
	01	0	0	0	0	0	0	14,223	14,223	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For chromium compounds, applies only to chromium (VI) compounds.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
3118-97-6	C.I. Solvent Orange 7	98	No reports							
		99	1	0	0	0	0	0	0	0
		00	No reports							
		01	No reports							
97-56-3	** C.I. Solvent Yellow 3	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	No reports							
842-07-9	C.I. Solvent Yellow 14	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
492-80-8	*,** C.I. Solvent Yellow 34	98	1	0	0	0	0	0	0	0
		99	3	5	0	0	0	5	157	162
		00	3	0	0	0	0	0	0	0
		01	3	0	0	0	0	0	0	0
128-66-5	C.I. Vat Yellow 4	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
7440-48-4	** Cobalt	98	283	42,618	3,604	0	218,794	265,016	433,801	698,817
		99	264	25,450	5,600	0	88,918	119,968	320,379	440,347
		00	286	32,102	3,963	2	60,123	96,190	366,682	462,872
		01	284	24,612	3,123	0	575,946	603,681	379,638	983,319
--	** Cobalt compounds	98	445	87,347	59,419	44,956	13,131,037	13,322,759	818,068	14,140,827
		99	448	95,211	83,774	47,422	14,818,816	15,045,223	924,994	15,970,217
		00	460	80,163	76,885	56,126	15,557,759	15,770,933	1,006,033	16,776,966
		01	444	64,496	47,966	35,530	14,065,530	14,213,522	1,244,198	15,457,720
7440-50-8	* Copper	98	2,958	1,304,889	55,098	79,845	280,082,263	281,522,095	11,739,541	293,261,636
		99	2,915	2,081,923	36,445	62,372	14,617,580	16,798,320	11,817,202	28,615,521
		00	2,904	1,120,253	39,743	70,577	7,961,089	9,191,662	13,694,211	22,885,873
		01	2,811	821,838	46,559	53,846	10,168,637	11,090,881	8,268,966	19,359,847
--	Copper compounds	98	1,995	4,127,028	465,629	1,562,046	1,285,621,559	1,291,776,262	13,408,397	1,305,184,659
		99	2,001	2,073,439	361,587	1,521,336	1,752,494,687	1,756,451,049	13,979,051	1,770,430,100
		00	2,029	1,654,782	426,931	1,737,251	1,346,080,047	1,349,899,011	18,165,775	1,368,064,786
		01	1,994	1,416,114	418,663	894,183	998,260,861	1,000,989,821	17,096,211	1,018,086,032
8001-58-9	*,** Creosote	98	92	782,351	24,842	0	2,188,743	2,995,936	1,148,219	4,144,155
		99	90	736,624	22,319	0	1,208,983	1,967,926	632,924	2,600,850
		00	93	704,754	24,824	0	218,856	948,434	1,057,402	2,005,836
		01	88	516,899	2,464	0	363,262	882,625	153,776	1,036,401
120-71-8	** p-Cresidine	98	4	2,400	0	0	0	2,400	0	2,400
		99	3	1,730	410	0	0	2,140	0	2,140
		00	4	1,732	224	0	0	1,956	12,249	14,205
		01	3	1,080	0	0	0	1,080	0	1,080
108-39-4	* m-Cresol	98	30	45,008	141	502,670	4,655	552,474	632	553,106
		99	31	42,008	671	401,261	3,096	447,036	1,034	448,070
		00	34	39,742	42	543,220	40	583,044	1,685	584,729
		01	30	51,458	85	420,377	0	471,920	1,275	473,195

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
C.I. Solvent Orange 7	98	No reports								
	99	0	0	0	0	0	0	0	0	0
	00	No reports								
	01	No reports								
** C.I. Solvent Yellow 3	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
C.I. Solvent Yellow 14	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
*,** C.I. Solvent Yellow 34	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	129,504	0	162	129,666	0
	00	0	0	0	0	107,973	787	0	108,760	0
	01	0	0	330	1,440	78,458	82	0	80,310	0
C.I. Vat Yellow 4	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** Cobalt	98	4,273,633	7,997,671	0	10,000	14,107	32,472	483,832	12,811,715	295
	99	4,539,554	8,001,583	0	0	5,886	14,217	332,657	12,893,897	23
	00	4,162,386	8,866,422	0	0	17,127	16,005	314,679	13,376,620	102
	01	2,451,508	7,410,832	0	0	817	1,259	924,297	10,788,713	17
** Cobalt compounds	98	191,148	1,675,930	0	7,985	1,470,626	37,272	14,146,663	17,529,624	5,594
	99	899,256	1,466,325	117	14,204	1,157,119	72,378	15,953,758	19,563,157	3,776
	00	2,017,554	1,536,193	0	6,203	1,631,672	28,329	16,726,356	21,946,307	576
	01	1,344,985	1,392,035	0	4,167	2,042,190	30,938	15,473,043	20,287,358	107,691
* Copper	98	541,603,543	597,026,473	189,372	499,061	45,035,980	1,454,516	290,400,181	1,476,209,126	952,169
	99	470,902,462	629,945,848	0	331	395,074	1,711,216	23,764,384	1,126,719,315	239,509
	00	647,751,933	673,495,116	49,383	188,811	474,319	3,894,570	20,908,127	1,346,762,258	1,623,598
	01	489,376,136	573,888,780	0	2,128	331,409	936,215	23,466,362	1,088,001,030	812,440
Copper compounds	98	191,659,753	154,893,102	0	23,292	3,257,445	1,999,760	1,302,895,172	1,654,728,524	4,446,894
	99	222,038,955	153,229,500	1,200	324,339	10,352,456	1,976,638	1,445,979,192	1,833,902,280	334,455,777
	00	209,361,243	162,903,053	0	18,278	868,138	1,982,553	1,210,558,828	1,585,692,093	164,178,605
	01	143,657,931	106,728,311	0	12,305	421,761	632,410	1,012,319,638	1,263,772,355	9,414,992
*,** Creosote	98	11,514,469	717,808	2,626,362	130,557	1,363,687	944,406	3,995,897	21,293,186	541,740
	99	6,427,378	696,540	2,144,276	163,477	1,923,025	1,051,957	2,539,931	14,946,584	519,697
	00	10,151,880	0	2,531,307	292,799	9,033,454	1,436,967	2,101,536	25,547,943	576,812
	01	6,692,859	0	4,100,330	767,402	7,686,962	614,207	1,075,810	20,937,570	288,687
** p-Cresidine	98	0	0	0	0	0	29,000	2,400	31,400	0
	99	0	0	0	0	1,106	5,700	1,387	8,193	0
	00	0	0	0	0	528	25,949	1,956	28,433	0
	01	0	0	0	0	0	4,019	1,080	5,099	0
* m-Cresol	98	1,769,226	1,064,540	649,489	64,402	281,132	8,216	554,577	4,391,582	719
	99	32,821	943,956	691,506	65,656	797,647	7,763	452,180	2,991,529	667
	00	1,398,437	1,660,747	686,588	22,475	843,146	8,353	587,133	5,206,879	94
	01	652,486	1,655,022	1,198,864	62,314	643,258	9,540	472,085	4,693,569	308

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
95-48-7	o-Cresol	98	27	9,282	16	466,578	20	475,896	39,525	515,421
		99	32	11,776	20	381,626	11,790	405,212	3,417	408,629
		00	30	10,721	14	502,115	13	512,863	5,023	517,886
		01	28	6,163	20	391,737	7	397,927	762	398,689
106-44-5	p-Cresol	98	35	57,016	43	299,485	0	356,544	50,556	407,100
		99	36	44,966	423	245,084	68	290,541	33,106	323,647
		00	36	41,996	398	321,803	5	364,202	33,566	397,768
		01	32	46,684	38	251,649	0	298,371	10,526	308,897
1319-77-3 *	Cresol (mixed isomers)	98	169	1,563,084	8,625	417,783	24,856	2,014,348	19,813	2,034,161
		99	172	1,426,424	5,070	899,887	73,277	2,404,658	134,505	2,539,163
		00	176	1,289,382	6,023	732,846	69,732	2,097,983	95,446	2,193,429
		01	184	1,165,462	9,065	613,148	3,716	1,791,391	9,484	1,800,875
4170-30-3 *	Crotonaldehyde	98	7	29,584	3,800	1,300	0	34,684	0	34,684
		99	11	28,883	37,298	1,350	0	67,531	176	67,707
		00	12	24,628	36,838	1,400	10	62,876	10	62,886
		01	12	12,762	1,770	90	1	14,623	505	15,128
98-82-8	Cumene	98	411	1,396,582	665	1,040	35,854	1,434,141	33,544	1,467,685
		99	394	1,446,471	3,152	1,271	35,209	1,486,103	18,306	1,504,409
		00	380	1,300,260	665	642	46,413	1,347,980	98,072	1,446,052
		01	363	1,259,720	1,190	795	1,733	1,263,438	10,256	1,273,694
80-15-9	Cumene hydroperoxide	98	45	75,036	79	210,000	40,023	325,138	10,756	335,894
		99	52	63,403	120	330,000	40,023	433,546	24,178	457,724
		00	51	60,538	94	130,000	40,023	230,655	9,389	240,044
		01	45	41,416	100	69,000	0	110,516	6,458	116,974
135-20-6 **	Cupferron	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	2	0	343	0	0	343	0	343
		01	1	0	0	0	0	0	0	0
21725-46-2 *	Cyanazine	98	7	202	0	0	12,000	12,202	0	12,202
		99	3	144	0	0	81,464	81,608	0	81,608
		00	1	33	0	0	0	33	7,900	7,933
		01	4	12	0	0	39,754	39,766	505	40,271
--	Cyanide compounds	98	333	764,839	57,628	3,781,134	3,990,639	8,594,240	158,612	8,752,852
		99	313	957,013	70,468	3,478,749	2,497,983	7,004,213	83,670	7,087,883
		00	295	641,059	72,247	3,920,932	1,796,760	6,430,998	87,386	6,518,384
		01	282	480,029	102,668	3,949,978	2,809,960	7,342,635	26,631	7,369,266
1134-23-2 *	Cycloate	98	3	97	113	77	0	287	4	291
		99	3	625	113	89	0	827	684	1,511
		00	2	14	0	53	0	67	164	231
		01	1	0	0	0	0	0	0	0
110-82-7 *	Cyclohexane	98	583	6,331,898	13,749	356,858	1,608	6,704,113	68,085	6,772,198
		99	575	5,366,718	13,353	334,424	7,472	5,721,967	114,837	5,836,804
		00	577	4,912,875	18,086	296,644	4,118	5,231,723	49,922	5,281,645
		01	577	4,309,434	15,061	206,386	4,846	4,535,727	38,914	4,574,641
108-93-0 *	Cyclohexanol	98	30	300,667	298	4,307,800	0	4,608,765	1,503	4,610,268
		99	31	161,533	41	3,730,307	0	3,891,881	1,062	3,892,943
		00	36	146,930	4,983	3,867,623	311,600	4,331,136	4,857	4,335,993
		01	37	173,951	6,147	2,956,777	0	3,136,875	1,034	3,137,909

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
o-Cresol	98	95,701	0	339,395	46,742	265,533	17,724	516,778	1,281,873	376
	99	29,734	75	250,748	69,107	728,004	18,496	409,035	1,505,199	89
	00	101,940	0	255,956	75,292	676,737	4,341	516,682	1,630,948	65
	01	6,920	0	400,662	149,696	504,983	6,903	397,336	1,466,500	233
p-Cresol	98	83,138	654,268	449,080	122,235	1,214,690	54,263	408,678	2,986,352	280
	99	21,521	471,978	409,814	150,975	1,905,298	45,727	322,512	3,327,825	230
	00	12,896	817,983	547,928	129,287	1,945,694	5,971	397,627	3,857,386	150
	01	10,504	1,655,022	937,310	94,806	931,388	13,651	307,808	3,950,489	182
* Cresol (mixed isomers)	98	125,174	681,073	7,298,232	3,122,331	16,916,516	418,779	2,040,242	30,602,347	3
	99	288,823	816,203	5,770,024	3,305,210	18,526,087	337,950	2,578,585	31,622,882	1,707
	00	812,482	1,322,568	4,773,875	892,816	11,498,011	376,748	2,229,721	21,906,221	963
	01	783,546	727,533	3,120,954	717,469	11,854,496	609,310	1,798,977	19,612,285	398
* Crotonaldehyde	98	0	0	1,837,500	0	569,220	16	34,884	2,441,620	0
	99	0	0	1,823,660	7,492	1,508,161	1,552	67,099	3,407,964	0
	00	0	0	2,156,006	1,620	1,423,970	799	62,546	3,644,941	0
	01	0	0	1,617,918	7,381	330,762	95	14,513	1,970,669	0
Cumene	98	19,348,952	171,769	9,245,221	1,470,333	16,893,435	228,311	1,573,770	48,931,791	1,764
	99	21,371,054	82,596	5,593,591	1,761,187	13,243,924	145,579	1,571,600	43,769,531	543
	00	558,280,896	115,999	3,860,482	1,517,251	7,942,699	108,798	1,489,884	573,316,009	1,937
	01	817,515,105	122,530	5,041,374	1,276,359	7,167,513	132,066	1,315,128	832,570,075	3,467
Cumene hydroperoxide	98	0	0	0	1,066	399,343	278,331	333,832	1,012,572	0
	99	0	6	500	51,159	1,207,308	464,451	453,613	2,177,037	0
	00	0	0	400	798	1,557,155	371,483	239,164	2,169,000	0
	01	0	0	0	2,663	702,761	146,345	123,949	975,718	100
** Cupferron	98	0	0	13,228	659	0	0	0	13,887	0
	99	0	0	3,750	9,623	0	0	0	13,373	0
	00	0	0	15,075	0	3,432	0	343	18,850	0
	01	0	0	12,965	0	0	0	0	12,965	0
* Cyanazine	98	0	0	0	0	43,000	27,576	12,453	83,029	0
	99	0	0	0	0	0	75,400	157,031	232,431	0
	00	0	0	0	0	0	27,430	27,430	54,860	0
	01	0	0	0	0	28,576	12,910	40,194	81,680	0
Cyanide compounds	98	6,467,589	58,277	7,029,028	2,380	34,241,538	779,104	8,633,758	57,211,674	2,500
	99	1,559,117	24,093	5,174,351	147	25,228,314	1,080,231	7,144,343	40,210,596	52,368
	00	1,464,044	10,232	4,949,571	12,381	19,579,957	825,248	6,535,442	33,376,875	2,457
	01	1,394,137	33,789	4,557,346	2,604	24,388,231	762,211	7,375,880	38,514,198	5,636
* Cycloate	98	0	0	0	0	1,148	3,574	289	5,011	0
	99	0	0	0	0	1,097	2,054	600	3,751	1,652
	00	0	0	0	0	53	0	230	283	0
	01	0	0	0	0	0	0	0	0	0
* Cyclohexane	98	67,480,363	640,515	18,372,608	8,293,304	25,297,588	4,629,055	6,561,887	131,275,320	9,190
	99	44,316,651	1,025,390	15,678,779	4,690,406	25,920,813	2,318,811	5,854,091	99,804,941	177,184
	00	36,850,993	895,985	23,095,054	11,623,278	230,547,417	2,034,155	5,211,818	310,258,700	73,372
	01	20,014,561	325,021	16,990,560	8,749,306	22,507,761	1,337,862	4,946,877	74,871,948	24,106
* Cyclohexanol	98	0	0	3,021,113	75,805	162,781	104,240	4,649,094	8,013,033	0
	99	0	100	1,781,743	64,476	237,950	89,275	3,871,928	6,045,472	0
	00	0	2,170	3,097,376	169,351	467,955	97,320	4,039,779	7,873,951	0
	01	35,151	0	2,251,145	922,762	680,329	25,936	3,164,452	7,079,775	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
68359-37-5 *	Cyfluthrin	98	3	4	1	0	0	5	0	5
		99	5	16	72	0	0	88	0	88
		00	3	3	22	0	0	25	0	25
		01	3	1	11	0	0	12	0	12
68085-85-8 *	Cyhalothrin	98	No reports							
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	No reports							
94-75-7 *,**	2,4-D (acetic acid)	98	34	3,988	88	31,209	1,798	37,083	3,156	40,239
		99	35	7,913	74	22,290	1,798	32,075	11,906	43,981
		00	30	6,816	256	250	1,831	9,153	23,964	33,117
		01	28	2,247	13	250	1,509	4,019	9,597	13,616
533-74-4 *	Dazomet	98	14	0	0	0	0	0	1,274	1,274
		99	15	250	450	0	5	705	250	955
		00	19	2,792	600	13,515	0	16,907	0	16,907
		01	14	0	280	0	0	280	1,950	2,230
53404-60-7 *	Dazomet, sodium salt	98	2	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	2	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
94-82-6 *	2,4-DB	98	3	17	0	0	0	17	0	17
		99	2	17	0	0	0	17	0	17
		00	3	20	0	0	0	20	0	20
		01	2	17	0	0	0	17	0	17
1929-73-3 *,**	2,4-D butoxyethyl ester	98	2	255	0	0	0	255	0	255
		99	3	255	0	0	0	255	0	255
		00	4	255	0	0	0	255	0	255
		01	3	4,900	0	0	0	4,900	0	4,900
94-80-4 *,**	2,4-D butyl ester	98	2	1	0	0	0	1	0	1
		99	2	0	1	0	0	1	0	1
		00	2	4	1	0	0	5	0	5
		01	2	1,201	1	0	0	1,202	0	1,202
2971-38-2 **	2,4-D chlorocrotyl ester	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
1163-19-5	Decabromodiphenyl oxide	98	147	31,114	3,168	0	501,253	535,535	756,054	1,291,589
		99	149	116,241	2,701	0	746,169	865,111	894,293	1,759,404
		00	154	106,262	9,006	0	888,246	1,003,514	989,139	1,992,653
		01	142	97,198	6,471	0	545,872	649,541	787,927	1,437,468
13684-56-5 *	Desmedipham	98	1	94	0	0	0	94	0	94
		99	1	62	0	0	0	62	0	62
		00	1	52	0	0	0	52	0	52
		01	No reports							
1928-43-4 *,**	2,4-D 2-Ethylhexyl ester	98	10	4,722	5	0	0	4,727	1,735	6,462
		99	10	4,672	5	0	0	4,677	927	5,604
		00	10	4,237	0	0	0	4,237	250	4,487
		01	9	2,311	0	0	0	2,311	750	3,061

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Cyfluthrin	98	0	0	0	0	19,412	964	5	20,381	0
	99	0	0	0	0	16,807	1,623	83	18,513	0
	00	0	0	0	0	14,245	790	25	15,060	0
	01	0	0	0	0	12,750	1,313	11	14,074	0
* Cyhalothrin	98	No reports								
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
*,** 2,4-D (acetic acid)	98	87,757	0	0	11	236,875	59,436	40,156	424,235	0
	99	94,815	0	0	0	504,552	63,712	48,304	711,383	0
	00	15,559	0	0	769	553,647	30,092	39,139	639,206	0
	01	12,447	0	0	31	632,771	45,258	11,360	701,867	0
* Dazomet	98	0	0	0	0	100	2,100	1,400	3,600	0
	99	0	0	0	0	13,093	9,803	602	23,498	0
	00	0	0	0	0	40,100	20,671	16,915	77,686	0
	01	0	0	0	0	4,048	7,884	464	12,396	0
* Dazomet, sodium salt	98	0	0	0	0	73	12,620	90	12,783	0
	99	0	0	0	0	38	12,165	4	12,207	0
	00	0	0	0	0	72	12,060	8	12,140	0
	01	0	0	0	0	38	4,605	4	4,647	0
* 2,4-DB	98	0	0	0	21,140	0	14	17	21,171	0
	99	0	0	0	0	0	8	17	25	0
	00	0	0	0	0	0	19	10	29	0
	01	0	0	0	0	0	57	17	74	0
*,** 2,4-D butoxyethyl ester	98	0	0	0	0	0	0	76	76	0
	99	0	0	0	0	0	0	26	26	0
	00	0	0	0	0	0	0	89	89	0
	01	0	0	0	0	0	0	4,500	4,500	0
*,** 2,4-D butyl ester	98	0	0	0	0	9,400	0	1	9,401	0
	99	0	0	0	0	11,000	0	1	11,001	0
	00	0	0	0	0	11,900	0	4	11,904	0
	01	0	0	0	0	12	0	1,202	1,214	0
** 2,4-D chlorocrotyl ester	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
Decabromodiphenyl oxide	98	264,731	88,843	385	3,214	43,588	262,535	1,261,455	1,924,751	0
	99	368,187	29,609	6,600	8,732	88,196	389,557	1,721,004	2,611,885	0
	00	342,183	234,295	0	8,927	123,853	294,412	1,929,954	2,933,624	26
	01	322,244	90,890	0	6,602	44,688	280,374	1,505,826	2,250,624	5,763
* Desmedipham	98	0	0	0	0	0	1,150	94	1,244	0
	99	0	0	0	0	0	691	62	753	0
	00	0	0	0	0	0	205	52	257	0
	01	No reports								
*,** 2,4-D 2-Ethylhexyl ester	98	7,870	0	0	0	0	14,179	6,334	28,383	0
	99	13,250	0	0	0	0	9,898	6,150	29,298	0
	00	21,312	0	0	0	0	9,956	4,933	36,201	0
	01	5,175	0	0	0	0	2,802	3,072	11,049	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
53404-37-8	*,** 2,4-D 2-Ethyl-4-methylpentyl ester	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
2303-16-4	* Diallylate	98	1	0	0	0	0	0	0	0
		99	3	7	1	0	0	8	170	178
		00	3	6	0	0	0	6	10	16
		01	3	6	0	0	0	6	260	266
615-05-4	** 2,4-Diamino-anisole	98	No reports							
		99	No reports							
		00	No reports							
		01	1	0	0	0	0	0	0	0
39156-41-7	** 2,4-Diamino-anisole sulfate	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
101-80-4	** 4,4'-Diaminodiphenyl ether	98	3	22	340	0	0	362	55	417
		99	3	169	449	0	0	618	41	659
		00	3	336	359	0	0	695	0	695
		01	3	246	361	0	0	607	0	607
95-80-7	** 2,4-Diaminotoluene	98	5	1,959	0	0	0	1,959	54,062	56,021
		99	6	664	0	0	0	664	774	1,438
		00	5	470	0	0	0	470	127	597
		01	8	953	5	0	0	958	500	1,458
25376-45-8	** Diaminotoluene (mixed isomers)	98	15	13,533	5,785	13,000	205	32,523	12,531	45,054
		99	17	10,668	28,634	6,200	14	45,516	16,942	62,458
		00	18	9,216	1,929	23,000	13	34,158	9,413	43,571
		01	18	11,022	5,934	13,000	5	29,961	16,455	46,416
333-41-5	* Diazinon	98	34	13,579	11	0	0	13,590	2,112	15,702
		99	37	26,547	13	0	0	26,560	2,401	28,961
		00	34	13,109	1,313	0	0	14,422	2,326	16,748
		01	34	7,998	14	0	0	8,012	2,603	10,615
334-88-3	Diazomethane	98	No reports							
		99	1	4	0	0	0	4	0	4
		00	No reports							
		01	No reports							
132-64-9	Dibenzofuran	98	44	94,230	29	0	56,670	150,929	13,304	164,233
		99	39	57,747	20	0	40	57,807	16,837	74,644
		00	45	33,392	16	0	0	33,408	11,370	44,778
		01	44	16,918	13	0	2	16,933	42,902	59,835
96-12-8	*,** 1,2-Dibromo-3-chloropropane	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	6	6
		00	2	6	0	0	0	6	10	16
		01	2	6	0	0	0	6	505	511
106-93-4	*,** 1,2-Dibromoethane	98	14	12,858	6	0	1	12,865	0	12,865
		99	16	12,019	12	0	7	12,038	35,519	47,557
		00	19	12,827	11	69	0	12,907	1,834	14,741
		01	16	10,428	6	0	0	10,434	260	10,694

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
*,** 2,4-D 2-Ethyl-4-methylpentyl ester	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Diallylate	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	176,396	0	175	176,571	0
	00	0	0	0	0	149,555	773	11	150,339	0
	01	0	0	0	371	149,129	20	77	149,597	0
** 2,4-Diamino-anisole	98	No reports								
	99	No reports								
	00	No reports								
	01	0	0	0	0	0	0	0	0	0
** 2,4-Diamino-anisole sulfate	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** 4,4'-Diaminodiphenyl ether	98	0	0	0	0	140	4,483	357	4,980	0
	99	0	0	0	0	62	138	613	813	0
	00	0	0	0	0	158	6,798	695	7,651	0
	01	0	0	0	0	125	4,367	607	5,099	0
** 2,4-Diaminotoluene	98	0	0	0	0	107,940	162,547	56,018	326,505	0
	99	0	0	0	0	787,673	0	1,419	789,092	0
	00	0	0	0	0	538,639	250	846	539,735	0
	01	0	0	0	0	809,064	27	876	809,967	0
** Diaminotoluene (mixed isomers)	98	0	0	2,714,193	4,298,060	1,631,064	1,072,322	44,237	9,759,876	255
	99	0	82,392	2,202,232	9,084,481	1,559,794	519,486	74,334	13,522,719	9
	00	0	0	2,815,016	10,033,437	2,265,882	911,084	41,851	16,067,270	12
	01	0	0	2,197,662	10,964,906	1,479,427	836,656	45,142	15,523,793	0
* Diazinon	98	53,095	0	0	0	218,685	33,653	15,180	320,613	0
	99	63,631	97	0	0	381,264	57,255	26,818	529,065	0
	00	27,782	0	0	0	394,144	66,248	16,723	504,897	0
	01	32,498	0	0	0	184,531	47,662	10,151	274,842	0
Diazomethane	98	No reports								
	99	0	0	0	0	232	0	4	236	0
	00	No reports								
	01	No reports								
Dibenzofuran	98	131,734	4,920	475	1,445,541	61,261	5,981	119,647	1,769,559	1,300
	99	109,749	1,450	10,545	96,365	109,570	1,885	77,461	407,025	0
	00	182,354	290	0	23,827	107,047	53,569	43,968	411,055	0
	01	148,249	90,731	13,000	23,043	122,763	1,777	55,792	455,355	3,168
*,** 1,2-Dibromo-3-chloropropane	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	29,000	0	3	29,003	0
	00	0	0	0	0	40,411	775	7	41,193	0
	01	0	0	0	0	40,892	390	265	41,547	0
*,** 1,2-Dibromoethane	98	0	0	0	8,701	35,054	863	12,699	57,317	0
	99	0	0	0	120,000	125,564	58,073	12,133	315,770	791
	00	87	0	20,180	156,034	122,649	3,575	12,393	314,918	22
	01	57	2,109	0	4,831	126,389	7,260	10,772	151,418	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
124-73-2	Dibromotetrafluoroethane (Halon 2402)	98	1	10	0	0	0	10	0	10
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	615	0	0	0	615	0	615
84-74-2	* Dibutyl phthalate	98	171	34,411	206	210,000	5,480	250,097	26,236	276,333
		99	188	36,732	279	290,000	33,301	360,312	50,348	410,660
		00	192	89,328	131	150,250	26,460	266,169	23,449	289,618
		01	171	27,414	170	60,005	55,097	142,686	29,349	172,035
1918-00-9	* Dicamba	98	11	1,217	59	32,000	0	33,276	2,177	35,453
		99	15	1,261	37	18,600	0	19,898	227	20,125
		00	18	1,163	6	4,500	0	5,669	227	5,896
		01	17	1,033	5	8,500	0	9,538	3,373	12,911
99-30-9	* Dichloran	98	4	0	0	0	0	0	0	0
		99	4	0	0	0	0	0	0	0
		00	3	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
95-50-1	* 1,2-Dichlorobenzene	98	46	209,499	2,357	3,805	1,245	216,906	6,686	223,592
		99	45	310,278	2,070	2,500	66,068	380,916	9,486	390,402
		00	41	121,147	1,206	1,850	778	124,981	10,342	135,323
		01	45	123,723	832	4,805	0	129,360	1,152	130,512
541-73-1	1,3-Dichlorobenzene	98	8	4,023	203	0	0	4,226	0	4,226
		99	10	3,649	808	0	0	4,457	30	4,487
		00	13	6,077	210	0	0	6,287	484	6,771
		01	8	1,102	578	0	0	1,680	1,006	2,686
106-46-7	*,** 1,4-Dichlorobenzene	98	30	182,316	1,706	3,100	460	187,582	81	187,663
		99	29	178,254	1,881	7,300	1,370	188,805	18	188,823
		00	25	117,884	1,198	8,201	181	127,464	268	127,732
		01	24	81,071	1,134	9,780	4	91,989	1,517	93,506
25321-22-6	** Dichlorobenzene (mixed isomers)	98	14	14,537	250	0	0	14,787	1,506	16,293
		99	12	13,848	0	0	0	13,848	357	14,205
		00	12	10,411	0	0	0	10,411	751	11,162
		01	9	7,308	0	0	0	7,308	1,197	8,505
91-94-1	** 3,3'-Dichlorobenzidine	98	4	261	0	0	0	261	41,600	41,861
		99	6	20	0	0	0	20	44,306	44,326
		00	5	27	0	0	0	27	24,005	24,032
		01	4	15	5	100,000	0	100,020	462	100,482
612-83-9	** 3,3'-Dichlorobenzidine dihydrochloride	98	16	250	5	0	0	255	6,790	7,045
		99	16	7	5	0	0	12	3,400	3,412
		00	16	16	5	0	0	21	2,300	2,321
		01	15	21	5	0	0	26	7,200	7,226
64969-34-2	** 3,3'-Dichlorobenzidine sulfate	98	1	0	0	0	0	0	260	260
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	No reports							
75-27-4	** Dichlorobromomethane	98	1	2,370	0	0	90	2,460	0	2,460
		99	2	3,405	0	0	80	3,485	0	3,485
		00	3	5,074	0	0	168	5,242	0	5,242
		01	1	5,024	0	0	218	5,242	0	5,242

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
Dibromotetrafluoroethane (Halon 2402)	98	127,308	0	0	0	0	0	10	127,318	0
	99	130,692	0	0	0	0	0	0	130,692	0
	00	139,173	0	0	0	0	0	0	139,173	0
	01	175,493	0	0	0	0	0	615	176,108	0
* Dibutyl phthalate	98	12,100	12,207	1,028,453	500,225	267,566	96,999	280,871	2,198,421	0
	99	27,022	5,499	913,586	203,247	684,862	189,335	391,486	2,415,037	531
	00	6,480	7,055	545,460	229,203	801,851	104,352	284,353	1,978,754	0
	01	7,395	34,269	447,860	173,117	679,546	121,066	166,429	1,629,682	0
* Dicamba	98	0	0	0	0	59,780	65,900	35,453	161,133	0
	99	0	0	0	0	66,973	42,080	20,129	129,182	0
	00	0	0	0	0	83,861	8,214	6,840	98,915	0
	01	2,000	0	0	31	107,385	2,015	10,103	121,534	0
* Dichloran	98	0	0	0	0	39,948	0	0	39,948	0
	99	0	0	0	0	55,619	0	0	55,619	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
* 1,2-Dichlorobenzene	98	14,226,697	2,222,086	1,395,694	555,964	1,028,398	5,213,069	218,076	24,859,984	64
	99	13,599,130	1,378,067	3,964,446	590,007	2,017,015	1,811,188	394,733	23,754,586	311
	00	13,757,219	968	3,373,373	960,279	2,118,769	880,777	135,641	21,227,026	29
	01	9,927,305	796,731	443,958	883,341	2,242,479	1,139,571	137,669	15,571,054	10
1,3-Dichlorobenzene	98	1,988	950	0	0	20,087	2,757	4,261	30,043	1
	99	2,129	930	68,399	0	268,451	3,169	4,476	347,554	5
	00	10,193	930	25,323	0	325,581	48,552	6,405	416,984	1
	01	1,628	4,742	2,754	1,523	421,413	113	2,101	434,274	0
*,** 1,4-Dichlorobenzene	98	2,638,621	0	134,273	155,941	378,101	300,875	186,236	3,794,047	108
	99	1,955,834	0	416,356	11,008	676,831	390,803	188,384	3,639,216	49,309
	00	1,871,164	0	0	1,824	634,738	350,963	126,667	2,985,356	27
	01	1,501,238	17,634	16,163	1,541	922,298	125,058	91,612	2,675,544	0
** Dichlorobenzene (mixed isomers)	98	0	4,724	193,157	712,902	569,234	7,048	16,075	1,503,140	0
	99	0	0	1,567,613	665,533	207,958	13,402	13,950	2,468,456	11
	00	0	0	249,490	856,897	415,813	6,641	10,454	1,539,295	1,210
	01	0	0	662,063	915	660,446	2,741	7,598	1,333,763	3,700
** 3,3'-Dichlorobenzidine	98	0	0	0	0	75,021	45,063	42,002	162,086	0
	99	0	0	0	0	248,850	64,065	44,164	357,079	0
	00	0	0	0	150,000	213,901	24,785	19,018	407,704	1
	01	0	0	330	1,335	153,962	87	100,042	255,756	0
** 3,3'-Dichlorobenzidine dihydrochloride	98	0	0	0	0	6,716	48,000	6,801	61,517	0
	99	0	0	0	0	4,644	85,002	3,402	93,048	0
	00	0	0	0	17,000	7,077	37,400	2,303	63,780	0
	01	0	0	0	0	1,160	120,044	7,204	128,408	0
** 3,3'-Dichlorobenzidine sulfate	98	0	0	0	0	0	6,000	260	6,260	0
	99	0	0	0	0	0	12,000	0	12,000	0
	00	0	0	0	6,800	0	5,700	0	12,500	0
	01	No reports								
** Dichlorobromomethane	98	0	0	0	0	0	0	2,400	2,400	0
	99	0	0	0	0	470	4	3,501	3,975	0
	00	0	0	0	0	7,870	0	5,162	13,032	0
	01	0	0	0	0	1,741	0	5,242	6,983	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
764-41-0	1,4-Dichloro-2-butene	98	5	1,713	0	5,700	0	7,413	0	7,413
		99	5	936	1	1,200	0	2,137	4	2,141
		00	7	1,165	0	1,100	0	2,265	5	2,270
		01	5	783	0	3,700	0	4,483	0	4,483
110-57-6	trans-1,4-Dichloro-2-butene	98	1	1	0	0	0	1	0	1
		99	3	256	0	0	0	256	158	414
		00	2	255	0	0	0	255	0	255
		01	2	271	0	0	0	271	0	271
1649-08-7	1,2-Dichloro-1,1-difluoroethane (HCFC-132b)	98	3	842	48	0	0	890	0	890
		99	3	17,320	45	0	0	17,365	5	17,370
		00	3	9,235	45	0	0	9,280	5	9,285
		01	6	7,640	26	0	0	7,666	500	8,166
75-71-8	* Dichlorodifluoromethane (CFC-12)	98	61	753,592	13,005	250	0	766,847	107	766,954
		99	51	736,328	6	0	0	736,334	8,700	745,034
		00	44	553,111	6	0	0	553,117	1	553,118
		01	42	322,731	5	0	0	322,736	0	322,736
107-06-2	*,** 1,2-Dichloroethane	98	91	710,621	2,608	58,994	886	773,109	128,872	901,981
		99	89	548,798	904	65,465	2,983	618,150	667,994	1,286,144
		00	93	525,356	839	171,423	2,271	699,889	412,266	1,112,155
		01	92	446,854	2,227	13,463	141	462,685	14,464	477,149
540-59-0	1,2-Dichloroethylene	98	18	6,209	44	0	0	6,253	387	6,640
		99	17	6,440	391	0	0	6,831	13,282	20,113
		00	18	4,945	585	0	0	5,530	644	6,174
		01	16	5,102	232	0	0	5,334	513	5,847
1717-00-6	1,1-Dichloro-1-fluoroethane (HCFC-141b)	98	247	8,047,118	54	0	30,256	8,077,428	232,021	8,309,449
		99	242	8,040,399	419	0	23,955	8,064,773	305,309	8,370,082
		00	246	8,075,991	173	0	25,843	8,102,007	296,243	8,398,249
		01	231	7,410,272	665	0	24,816	7,435,753	250,601	7,686,354
75-43-4	Dichlorofluoromethane (HCFC-21)	98	7	129,471	0	0	0	129,471	8,984	138,455
		99	6	128,664	0	0	75,231	203,895	10,910	214,805
		00	7	123,314	0	0	37,076	160,390	10,570	170,960
		01	7	125,047	0	0	16,893	141,940	18,450	160,390
75-09-2	*,** Dichloromethane	98	845	40,924,485	15,754	490,664	183,719	41,614,622	362,757	41,977,379
		99	710	35,654,617	12,072	166,859	61,949	35,895,497	538,474	36,433,971
		00	641	30,932,028	10,292	199,809	838,113	31,980,242	356,192	32,336,434
		01	565	21,557,347	4,895	218,992	63,523	21,844,757	372,694	22,217,451
127564-92-5	Dichloropentafluoropropane	98	1	6,520	0	0	0	6,520	8,900	15,420
		99	1	9,890	0	0	0	9,890	4,600	14,490
		00	1	11,560	0	0	0	11,560	4,600	16,160
		01	1	7,890	0	0	0	7,890	0	7,890
13474-88-9	1,1-Dichloro-1,2,2,3,3-pentafluoropropane (HCFC-225cc)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
111512-56-2	1,1-Dichloro-1,2,3,3,3-pentafluoropropane (HCFC-225eb)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
1,4-Dichloro-2-butene	98	1,800,000	0	150,000	0	3,753,000	124,000	7,413	5,834,413	0
	99	0	0	170,000	0	5,860,000	13,390	2,136	6,045,526	0
	00	0	0	170,000	0	7,061,972	106,778	2,071	7,340,821	0
	01	1,832,478	0	2,002,904	66,107	2,923,029	918	4,483	6,829,919	0
trans-1,4-Dichloro-2-butene	98	0	0	0	0	12,000	0	1	12,001	0
	99	0	0	0	0	142,737	0	206	142,943	0
	00	0	0	0	0	101,587	0	86	101,673	0
	01	0	0	0	0	100,322	0	111	100,433	0
1,2-Dichloro-1,1-difluoroethane (HCFC-132b)	98	0	0	0	0	359,584	61,573	883	422,040	0
	99	0	0	0	0	397,318	91,532	17,012	505,862	0
	00	0	0	0	15,735	615,032	78,758	9,229	718,754	0
	01	0	0	0	3,200	325,535	243,250	7,903	579,888	0
* Dichlorodifluoromethane (CFC-12)	98	80,253	213,260	0	0	238,680	79,132	769,333	1,380,658	0
	99	246,309	178,692	0	0	292,704	142,971	676,647	1,537,323	10,653
	00	260,863	155,985	0	0	204,478	161,465	552,728	1,335,519	196
	01	14,400	168,496	0	0	114,488	133,661	323,036	754,081	996
*,** 1,2-Dichloroethane	98	435,903,074	11,350,396	55,200,316	195,180	61,010,058	1,892,068	895,412	566,446,504	69,874
	99	397,978,130	14,982,020	35,620,845	313,672	79,020,126	2,282,295	1,142,883	531,339,971	11,336
	00	434,205,728	12,290,493	39,223,474	348,322	292,691,833	2,415,025	1,133,497	782,308,372	19,860
	01	430,010,562	2,343,199	34,886,848	750,931	90,547,449	2,855,698	465,782	561,860,469	21,893
1,2-Dichloroethylene	98	1,560,000	1,617,199	621,000	0	10,059,750	2,803	6,228	13,866,980	143
	99	4,505,988	1,463,455	313,000	411,928	16,047,134	7,235	8,790	22,757,530	131
	00	485,971	345,271	311,600	337,796	11,570,880	6,608	4,748	13,062,874	1,972
	01	1,479,159	381,609	701,674	0	8,489,308	1,024	5,249	11,058,023	1,223
1,1-Dichloro-1-fluoroethane (HCFC-141b)	98	512,035	150,881	0	660,808	1,073,051	426,221	8,098,260	10,921,256	75,867
	99	451,201	190,488	0	753,110	1,232,526	878,562	8,393,405	11,899,292	0
	00	640,124	177,464	2,121	577,931	1,819,141	1,111,926	8,305,839	12,634,546	0
	01	483,105	114,778	0	736,852	1,916,729	578,979	7,673,236	11,503,679	16,415
Dichlorofluoromethane (HCFC-21)	98	0	0	0	0	288,607	5,670	138,080	432,357	0
	99	0	0	0	0	38,313	13,104	214,889	266,306	0
	00	0	0	0	0	44,583	228	170,962	215,773	0
	01	0	0	0	0	15,251	70	160,390	175,711	0
*,** Dichloromethane	98	154,690,500	17,314,148	8,886,403	8,424,575	29,483,483	21,628,039	41,912,573	282,339,721	102,756
	99	160,894,551	12,572,004	7,939,444	14,920,166	460,936,627	23,744,482	35,861,875	716,869,149	705,957
	00	148,861,173	11,166,827	7,036,415	16,092,895	109,761,046	22,509,120	31,848,625	347,276,101	805,390
	01	168,292,828	12,100,129	7,763,028	13,413,286	33,726,939	22,490,895	22,394,732	280,181,837	34,114
Dichloropentafluoropropane	98	0	0	0	0	0	8,900	6,500	15,400	0
	99	0	0	0	0	0	4,600	9,900	14,500	0
	00	0	0	0	0	0	4,600	11,000	15,600	0
	01	0	0	0	0	0	4,900	7,800	12,700	0
1,1-Dichloro-1,2,2,3,3-pentafluoropropane (HCFC-225cc)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
1,1-Dichloro-1,2,3,3,3-pentafluoropropane (HCFC-225eb)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
422-44-6	1,2-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225bb)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
431-86-7	1,2-Dichloro-1,1,3,3,3-pentafluoropropane (HCFC-225da)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
507-55-1	1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	98	4	70,043	0	0	0	70,043	0	70,043
		99	3	43,310	0	0	0	43,310	0	43,310
		00	2	23,573	0	0	0	23,573	0	23,573
		01	1	11,578	0	0	0	11,578	0	11,578
136013-79-1	1,3-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225ea)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
128903-21-9	2,2-Dichloro-1,1,1,3,3-pentafluoropropane (HCFC-225aa)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
422-48-0	2,3-Dichloro-1,1,1,2,3-pentafluoropropane (HCFC-225ba)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
422-56-0	3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)	98	4	57,258	0	0	0	57,258	0	57,258
		99	3	36,012	0	0	0	36,012	0	36,012
		00	2	18,693	0	0	0	18,693	0	18,693
		01	1	8,700	0	0	0	8,700	0	8,700
97-23-4	* Dichlorophene	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
120-83-2	2,4-Dichlorophenol	98	8	598	0	9,000	0	9,598	0	9,598
		99	7	522	31	9,700	1	10,254	19	10,273
		00	6	854	51	5,700	0	6,605	10	6,615
		01	6	506	30	6,600	1	7,137	3,799	10,936
78-87-5	* 1,2-Dichloropropane	98	15	298,158	1,122	0	32	299,312	267	299,579
		99	15	249,678	9,243	0	30	258,951	6,869	265,820
		00	17	264,196	436	5	382	265,019	16	265,035
		01	16	161,015	458	0	6,608	168,081	6,407	174,488
10061-02-6	** trans-1,3-Dichloropropene	98	4	1,740	0	0	1	1,741	0	1,741
		99	7	597	0	0	0	597	0	597
		00	7	621	0	0	0	621	0	621
		01	7	777	0	0	6,372	7,149	3,115	10,264
78-88-6	* 2,3-Dichloropropene	98	6	644	490	0	0	1,134	1,200	2,334
		99	5	357	900	0	0	1,257	0	1,257
		00	5	315	290	0	200	805	0	805
		01	4	5,451	356	0	0	5,807	0	5,807

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
1,2-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225bb)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
1,2-Dichloro-1,1,3,3,3-pentafluoropropane (HCFC-225da)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	98	4,747	500	0	0	0	0	70,318	75,565	7,000
	99	39,675	450	0	390	0	1,700	43,160	85,375	0
	00	12,000	6,914	0	4	0	0	23,555	42,473	0
	01	8,675	0	0	0	0	0	11,578	20,253	0
1,3-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225ea)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
2,2-Dichloro-1,1,1,3,3-pentafluoropropane (HCFC-225aa)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
2,3-Dichloro-1,1,1,2,3-pentafluoropropane (HCFC-225ba)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)	98	3,851	410	0	0	0	0	57,598	61,859	5,700
	99	32,023	365	0	400	0	1,400	36,053	70,241	0
	00	10,000	4,061	0	4	0	0	18,679	32,744	0
	01	9,500	0	0	840	0	0	8,700	19,040	0
* Dichlorophene	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
2,4-Dichlorophenol	98	1,400	0	3	48,026	216,217	600	9,543	275,789	0
	99	1,100	0	0	8,497	332,164	181	10,215	352,157	0
	00	920	0	3	0	339,880	872	6,651	348,326	0
	01	1,000	0	331	931	325,168	94	10,966	338,490	0
* 1,2-Dichloropropane	98	26,800,000	0	10,700,000	0	16,299,727	1,161,438	301,905	55,263,070	10
	99	9,200,000	0	5,109,000	2	22,761,986	3,604,795	260,926	40,936,709	10
	00	84,350,000	52	15,981,364	93,118	196,097,715	344,834	266,610	297,133,693	0
	01	5,923,803	19	34,756,655	336,304	14,175,658	796,011	172,713	56,161,163	0
** trans-1,3-Dichloropropene	98	7,900	0	5,210,238	9	20,505	430	1,710	5,240,792	0
	99	50,000	0	0	180	6,845,015	242	595	6,896,032	0
	00	36,000	0	11,328	360	20,005	1,911	621	70,225	0
	01	20,135	0	28,031	26	6,446	2,409	10,888	67,935	0
* 2,3-Dichloropropene	98	960,000	0	1,100,000	0	712,306	1,086,000	1,134	3,859,440	0
	99	2,300,000	0	0	0	3,670,000	410,000	1,290	6,381,290	0
	00	3,200,000	0	2,217,065	3	6,800,000	330	550,806	12,768,204	0
	01	562,512	0	7,055,017	0	790,287	400,000	5,813	8,813,629	1

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
542-75-6	*,** 1,3-Dichloro-propylene	98	18	11,566	61	0	1	11,628	0	11,628
		99	20	6,600	68	0	0	6,668	168	6,836
		00	19	10,295	288	2	200	10,785	10	10,795
		01	19	13,062	460	0	0	13,522	505	14,027
76-14-2	* Dichlorotetra-fluoroethane (CFC-114)	98	14	827,613	5	0	0	827,618	1	827,619
		99	13	933,664	5	0	0	933,669	0	933,669
		00	12	917,858	5	0	0	917,863	0	917,863
		01	15	959,088	5	0	0	959,093	0	959,093
34077-87-7	Dichlorotri-fluoroethane	98	2	1,704	0	0	0	1,704	2	1,706
		99	1	12	0	0	0	12	2	14
		00	No reports							
		01	1	8	0	0	0	8	0	8
90454-18-5	Dichloro-1,1,2-trifluoroethane	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
812-04-4	1,1-Dichloro-1,2,2-trifluoro-ethane (HCFC-123b)	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
354-23-4	1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)	98	1	101,118	5	0	0	101,123	0	101,123
		99	1	107,479	5	0	0	107,484	0	107,484
		00	1	108,513	5	0	0	108,518	0	108,518
		01	2	20,251	5	0	0	20,256	0	20,256
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (HCFC-123)	98	17	212,773	10	0	0	212,783	226	213,009
		99	13	105,447	5	0	0	105,452	0	105,452
		00	12	130,968	755	0	0	131,723	0	131,723
		01	15	121,787	5	0	0	121,792	500	122,292
62-73-7	*,** Dichlorvos	98	5	255	5	0	0	260	9	269
		99	6	258	6	0	0	264	5	269
		00	6	260	5	0	0	265	0	265
		01	6	267	5	0	0	272	505	777
51338-27-3	* Diclofop methyl	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
115-32-2	* Dicofol	98	4	1,000	0	0	0	1,000	0	1,000
		99	6	1,011	0	0	0	1,011	0	1,011
		00	6	1,000	0	0	0	1,000	0	1,000
		01	4	2	0	0	0	2	0	2
77-73-6	Dicyclopentadiene	98	89	350,077	14,943	1,081,201	597	1,446,818	6,162	1,452,980
		99	97	351,816	11,818	973,928	10	1,337,572	3,162	1,340,734
		00	98	284,737	12,706	813,332	29	1,110,804	1,494	1,112,298
		01	93	264,264	3,845	268,140	80	536,329	14,161	550,490
1464-53-5	** Diepoxybutane	98	1	70	0	0	0	70	0	70
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
*,** 1,3-Dichloro-propylene	98	1,932,000	0	6,000,000	30,754	1,173,568	42,814	11,227	9,190,363	0
	99	870,000	0	0	26,166	1,186,670	120,890	9,340	2,213,066	0
	00	2,943,000	0	24,000,000	191,953	8,294,051	23,199	9,901	35,462,104	0
	01	862,027	0	21,856,645	25,792	608,868	157,564	13,198	23,524,094	6
* Dichlorotetra-fluoroethane (CFC-114)	98	231,484	17,299	0	0	1,022,895	39,052	827,470	2,138,200	0
	99	195,012	13,065	0	0	38,821	134,587	918,711	1,300,196	18,960
	00	148,891	7,996	0	0	69,931	110,162	918,010	1,254,990	0
	01	74,600	25,899	0	0	1,606,924	195,397	959,944	2,862,764	614
Dichlorotri-fluoroethane	98	0	0	0	0	64,974	0	1,706	66,680	0
	99	0	0	0	0	47,879	0	14	47,893	0
	00	No reports								
	01	0	0	0	0	27,211	1	8	27,220	0
Dichloro-1,1,2-trifluoroethane	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
1,1-Dichloro-1,2,2-trifluoroethane (HCFC-123b)	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)	98	0	0	0	0	0	0	101,123	101,123	0
	99	0	0	0	0	0	0	107,484	107,484	0
	00	0	0	0	0	0	0	108,518	108,518	0
	01	0	0	0	0	72,570	4,095	20,256	96,921	18
2,2-Dichloro-1,1,1-trifluoroethane (HCFC-123)	98	0	0	0	0	74,202	6,066	211,401	291,669	955
	99	0	0	0	0	32,559	15,178	105,097	152,834	0
	00	0	0	0	0	4,330	10,996	130,068	145,394	1,500
	01	0	0	0	0	753,743	26,855	121,314	901,912	3,002
*,** Dichlorvos	98	0	0	0	0	14,968	1,130	517	16,615	0
	99	0	97	0	0	26,909	1,984	265	29,255	0
	00	0	3	0	328	12,924	2,432	261	15,948	0
	01	0	0	0	0	55,432	2,233	713	58,378	0
* Diclofop methyl	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Dicofol	98	0	0	0	0	0	895	229	1,124	0
	99	148	0	0	0	28,375	1,166	134	29,823	0
	00	0	0	0	0	25,898	1,355	113	27,366	0
	01	0	0	0	0	29,592	0	2	29,594	0
Dicyclopentadiene	98	457,481	54,182	1,055,862	790,262	558,315	226,565	1,482,794	4,625,461	7,570
	99	341,739	31,448	4,454,966	1,018,604	1,173,363	93,130	1,345,708	8,458,958	3,506
	00	502,962	270,004	3,656,320	632,259	1,405,954	178,807	1,115,106	7,761,412	1,446
	01	384,578	330,001	2,523,516	503,883	1,759,561	179,675	560,281	6,241,495	260
** Diepoxybutane	98	0	0	0	148,733	0	0	70	148,803	0
	99	0	0	0	0	11,634	0	0	11,634	0
	00	0	0	0	0	14,419	772	0	15,191	0
	01	0	0	330	774	13,335	44	0	14,483	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
111-42-2	Diethanolamine	98	431	437,785	63,158	340,517	282,685	1,124,145	212,154	1,336,299
		99	417	376,144	35,086	354,606	144,789	910,625	237,278	1,147,903
		00	406	291,055	150,275	258,865	131,886	832,081	453,253	1,285,334
		01	391	240,287	47,535	120,689	30,556	439,067	380,580	819,647
38727-55-8 *	Diethyl ethyl	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
117-81-7 *,**	Di(2-ethylhexyl) phthalate	98	367	220,906	669	0	24,184	245,759	1,208,283	1,454,042
		99	363	232,377	2,880	0	32,334	267,591	1,037,996	1,305,587
		00	366	243,299	597	250	6,188	250,334	1,150,136	1,400,470
		01	331	316,496	765	0	33,074	350,335	1,003,457	1,353,792
64-67-5 **	Diethyl sulfate	98	35	6,188	0	0	0	6,188	177	6,365
		99	31	3,737	0	0	0	3,737	34,518	38,255
		00	33	7,873	0	0	0	7,873	621	8,494
		01	34	17,048	0	0	0	17,048	666	17,714
35367-38-5 *	Diflubenzuron	98	2	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	2	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
101-90-6 **	Diglycidyl resorcinol ether	98	3	20	0	0	0	20	0	20
		99	3	20	0	0	0	20	0	20
		00	4	10	0	0	0	10	0	10
		01	5	15	0	0	0	15	1,070	1,085
94-58-6 **	Dihydrosafrole	98	5	12,018	0	0	0	12,018	0	12,018
		99	6	273	0	0	0	273	167	440
		00	6	260	0	0	0	260	10	270
		01	5	256	0	0	0	256	260	516
--	Diisocyanates	98	1,423	448,990	28	0	1,058,920	1,507,938	1,068,921	2,576,859
		99	1,444	281,045	22	0	712,916	993,983	1,048,442	2,042,425
		00	1,445	301,688	16	0	869,101	1,170,805	1,916,389	3,087,194
		01	1,415	328,796	8	0	981,733	1,310,537	1,531,254	2,841,791
55290-64-7 *	Dimethipin	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	2	250	0	0	0	250	0	250
		01	3	250	0	0	0	250	0	250
60-51-5 *	Dimethoate	98	8	57	5	0	19,975	20,037	69	20,106
		99	9	51	5	0	0	56	177	233
		00	9	36	255	0	0	291	0	291
		01	9	27	5	0	0	32	620	652
119-90-4 **	3,3'-Dimethoxybenzidine	98	1	0	0	0	0	0	0	0
		99	3	7	1	0	0	8	162	170
		00	3	0	0	0	0	0	5	5
		01	4	0	0	0	0	0	260	260
20325-40-0 **	3,3'-Dimethoxybenzidine dihydrochloride	98	7	0	0	0	0	0	0	0
		99	8	12	220	0	0	232	0	232
		00	7	16	36	0	0	52	0	52
		01	5	8	33	0	0	41	0	41

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
Diethanolamine	98	56,218	289,382	280,874	875,890	2,918,919	2,698,496	3,086,132	10,205,911	80
	99	0	72,622	779,443	429,493	2,746,915	1,470,236	1,521,426	7,020,135	55,474
	00	36,064	115,049	602,968	134,198	12,008,406	1,329,969	2,358,803	16,585,457	5,077
	01	765	79,021	560,007	118,083	2,141,298	3,181,449	591,010	6,671,633	488
* Diethyl ethyl	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
*,**Di(2-ethylhexyl) phthalate	98	5,157,020	1,897,252	464,843	1,682,746	409,433	310,550	1,212,233	11,134,077	561
	99	4,044,097	3,178,784	344,691	211,818	374,506	246,077	1,246,784	9,646,757	10,141
	00	3,965,259	3,276,932	481,682	242,701	4,400,961	193,157	1,427,492	13,988,184	1,458
	01	3,421,804	3,058,111	534,065	227,417	353,938	298,772	1,325,155	9,219,262	13,674
** Diethyl sulfate	98	0	0	0	6,887,636	4,489	2,510	6,509	6,901,144	5
	99	0	0	0	7,660,910	3,705	459	42,668	7,707,742	0
	00	0	0	0	5,843,800	1,328	4,879	10,720	5,860,727	0
	01	0	0	0	6,608,218	4,921	2,886	32,097	6,648,122	0
* Diflubenzuron	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
** Diglycidyl resorcinol ether	98	0	0	0	300	0	0	6	306	0
	99	0	0	0	1,100	0	0	6	1,106	0
	00	0	0	0	0	0	0	1	1	0
	01	0	0	0	0	0	0	964	964	0
** Dihydrosafrole	98	0	0	0	0	0	10	12,028	12,038	0
	99	0	0	0	0	189,324	10	249	189,583	0
	00	0	0	0	0	152,308	795	90	153,193	0
	01	0	0	330	880	138,154	44	126	139,534	0
Diisocyanates	98	1,352,830	450,903	573,125	1,960,329	3,167,493	1,563,510	2,189,075	11,257,265	9,892
	99	112,052	563,101	125,596	549,383	6,584,088	1,694,135	2,008,004	11,636,359	20,376
	00	145,962	360,717	195,025	877,887	2,845,078	1,677,538	3,012,369	9,114,576	7,302
	01	65,846	248,704	90,841	547,054	2,102,999	2,335,564	2,954,298	8,345,306	57,911
* Dimethipin	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	2,596	229	2,825	0
	01	0	0	0	98	0	30,370	301	30,769	0
* Dimethoate	98	433	0	0	0	63,138	4,105	28,041	95,717	0
	99	0	0	0	0	210,152	8,691	5,067	223,910	0
	00	0	0	0	10,000	173,804	14,795	5,246	203,845	0
	01	101	0	0	0	157,956	5,476	27	163,560	0
** 3,3'-Dimethoxy-benzidine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	178,511	0	164	178,675	0
	00	0	0	0	0	147,966	787	2	148,755	0
	01	0	0	330	931	153,705	50	16	155,032	0
** 3,3'-Dimethoxy-benzidine dihydrochloride	98	0	0	0	0	15	0	0	15	0
	99	0	0	0	0	1,115	0	232	1,347	0
	00	0	0	0	0	153	0	52	205	0
	01	0	0	0	0	120	0	41	161	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
111984-09-9 **	3,3'-Dimethoxybenzidine hydrochloride	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
124-40-3	Dimethylamine	98	81	446,977	35,629	26,250	3,788	512,644	127	512,771
		99	81	417,067	30,069	24,250	2,735	474,121	440	474,561
		00	86	390,113	22,005	16,200	3,440	431,758	3,581	435,339
		01	76	490,785	19,354	14,443	3,465	528,047	802	528,849
2300-66-5 *	Dimethylamine dicamba	98	3	250	0	0	0	250	0	250
		99	5	250	0	0	0	250	0	250
		00	8	255	0	250	0	505	0	505
		01	8	541	0	250	0	791	0	791
60-11-7 **	4-Dimethylaminoazobenzene	98	No reports							
		99	No reports							
		00	1	0	0	0	0	0	0	0
		01	2	250	0	0	0	250	505	755
121-69-7	N,N-Dimethylaniline	98	23	32,509	850	0	0	33,359	7,523	40,882
		99	25	27,808	349	0	0	28,157	2,744	30,901
		00	21	20,196	719	0	0	20,915	142	21,057
		01	20	5,235	50	0	0	5,285	1,892	7,177
119-93-7 **	3,3'-Dimethylbenzidine	98	2	10	0	0	0	10	0	10
		99	4	17	1	0	0	18	171	189
		00	4	10	0	0	0	10	10	20
		01	4	5	0	0	0	5	265	270
612-82-8 **	3,3'-Dimethylbenzidine dihydrochloride	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
41766-75-0 **	3,3'-Dimethylbenzidine dihydrofluoride	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
79-44-7 **	Dimethylcarbaryl chloride	98	2	98	0	0	0	98	0	98
		99	4	99	1	0	0	100	173	273
		00	4	107	0	0	0	107	10	117
		01	4	106	0	0	0	106	260	366
2524-03-0	Dimethyl chlorothiophosphate	98	3	77	0	4,300	0	4,377	0	4,377
		99	1	2	1	0	0	3	4	7
		00	No reports							
		01	No reports							
68-12-2 *	N,N-Dimethylformamide	98	217	989,949	43,057	284,182	14,976	1,332,164	663,383	1,995,547
		99	216	778,543	28,304	127,125	5	933,977	817,069	1,751,046
		00	220	731,231	20,506	109,984	1,000	862,721	1,730,089	2,592,810
		01	198	534,812	37,561	87,100	25,959	685,432	1,299,161	1,984,593
57-14-7 *,**	1,1-Dimethylhydrazine	98	5	496	0	0	0	496	0	496
		99	7	433	1	0	0	434	564	998
		00	7	668	0	0	0	668	82	750
		01	7	703	0	0	0	703	760	1,463

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

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** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** 3,3'-Dimethoxy-benzidine hydrochloride	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
Dimethylamine	98	574,603	0	28,500	151,423	3,970,912	450,473	512,176	5,688,087	65
	99	716,804	0	8,510	6,127	3,318,106	538,310	477,734	5,065,591	77
	00	413,215	294	11,989	3,833	4,892,687	824,088	434,599	6,580,705	0
	01	460,554	440	14,967	10,190	8,895,728	741,127	522,625	10,645,631	430
* Dimethylamine dicamba	98	0	0	0	0	0	0	88	88	0
	99	0	0	0	0	0	0	32	32	0
	00	0	0	0	0	0	0	500	500	0
	01	0	0	0	0	20	612	618	1,250	0
** 4-Dimethylamino-azobenzene	98	No reports								
	99	No reports								
	00	0	0	0	0	13,740	781	0	14,521	0
	01	0	0	330	372	72,847	26	443	74,018	0
N,N-Dimethyl-aniline	98	46,000	21,000	0	826,721	19,620	166,523	31,305	1,111,169	0
	99	52,678	19,000	33,536	719,800	172,741	167,708	28,184	1,193,647	2
	00	43,000	0	0	62,296	130,099	47,334	21,144	303,873	0
	01	3,000	4,350	13,501	54,604	99,117	114,152	5,380	294,104	1,111
** 3,3'-Dimethyl-benzidine	98	0	0	0	505	48,005	0	5	48,515	0
	99	0	0	0	0	207,475	146	173	207,794	0
	00	0	0	0	1,288	194,983	3	6	196,280	0
	01	0	0	330	372	186,320	17	28	187,067	0
** 3,3'-Dimethyl-benzidine dihydrochloride	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** 3,3'-Dimethyl-benzidine dihydrofluoride	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** Dimethylcarbaryl chloride	98	0	0	0	0	27,113	0	98	27,211	0
	99	0	0	0	0	247,799	0	271	248,070	0
	00	0	0	0	0	191,621	791	115	192,527	0
	01	0	0	330	216	173,817	24	183	174,570	0
Dimethyl chloro-thiophosphate	98	0	0	0	0	1,960	0	4,331	6,291	0
	99	0	0	0	0	16,000	0	1	16,001	0
	00	No reports								
	01	No reports								
* N,N-Dimethyl-formamide	98	9,779,243	260,230	9,774,280	8,314,426	14,014,846	5,261,240	1,610,944	49,015,209	1,449
	99	9,264,611	191,429	11,042,710	12,844,462	12,930,112	8,650,924	1,753,048	56,677,296	2,086
	00	14,406,865	227,944	14,130,891	17,481,416	14,375,427	12,016,979	2,301,346	74,940,868	196
	01	6,901,102	176,169	12,029,467	17,683,609	11,576,724	13,495,356	1,453,983	63,316,410	320
*,** 1,1-Dimethyl hydrazine	98	0	0	0	300	1,218	3,913	493	5,924	0
	99	0	0	0	320	549,769	7,687	990	558,766	0
	00	0	0	0	0	395,623	2,380	597	398,600	0
	01	0	0	330	2,075	278,516	565	735	282,221	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
105-67-9 *	2,4-Dimethylphenol	98	28	36,025	56	187,076	0	223,157	1,177	224,334
		99	31	32,439	123	156,592	0	189,154	2,216	191,370
		00	35	32,066	1,314	201,020	0	234,400	1,543	235,943
		01	29	26,861	1,134	158,026	0	186,021	4,976	190,997
131-11-3 *	Dimethyl phthalate	98	126	264,050	627	2,950	827	268,454	39,088	307,542
		99	117	417,241	806	1,900	15,014	434,961	38,868	473,829
		00	128	290,275	852	1,905	33,085	326,117	35,180	361,297
		01	117	235,879	98	2,200	36,413	274,590	42,364	316,954
77-78-1 **	Dimethyl sulfate	98	36	10,831	46	0	0	10,877	1,010	11,887
		99	34	9,873	4	0	0	9,877	187	10,064
		00	37	7,501	22	0	40	7,563	255	7,818
		01	32	6,805	1	0	0	6,806	506	7,312
99-65-0	m-Dinitrobenzene	98	2	383	517	0	516	1,416	0	1,416
		99	4	385	442	0	49	876	100	976
		00	2	355	466	0	134	955	0	955
		01	3	316	412	0	0	728	0	728
528-29-0	o-Dinitrobenzene	98	2	49	66	0	66	181	0	181
		99	2	49	63	0	0	112	0	112
		00	1	45	60	0	0	105	0	105
		01	1	40	53	0	0	93	0	93
100-25-4	p-Dinitrobenzene	98	1	13	18	0	18	49	0	49
		99	1	14	17	0	0	31	0	31
		00	1	12	81	0	0	93	0	93
		01	1	11	72	0	0	83	0	83
88-85-7 *	Dinitrobutyl phenol	98	7	1,057	0	0	0	1,057	6,888	7,945
		99	6	1,005	0	0	50	1,055	16,848	17,903
		00	8	1,208	0	0	0	1,208	8,850	10,058
		01	9	883	0	0	0	883	0	883
534-52-1 *	4,6-Dinitro-o-cresol	98	8	234	0	0	10,801	11,035	125,332	136,367
		99	10	259	0	0	43,655	43,914	160,665	204,579
		00	11	434	5	250	14,499	15,188	115,106	130,294
		01	11	1,416	5	5	56,960	58,386	39,705	98,091
51-28-5 *	2,4-Dinitrophenol	98	8	524	23,617	0	11,000	35,141	1,632	36,773
		99	9	197	23,287	0	46,938	70,422	26,063	96,485
		00	9	728	23,292	250	31,156	55,426	1,325	56,751
		01	9	1,569	500	250	65,603	67,922	31,900	99,822
121-14-2 **	2,4-Dinitrotoluene	98	13	1,995	187	0	10,000	12,182	1,408	13,590
		99	15	2,287	169	0	43,420	45,876	49,295	95,171
		00	16	1,931	177	250	27,609	29,967	19,601	49,568
		01	17	2,190	10	5	665,529	667,734	28,132	695,866
606-20-2 **	2,6-Dinitrotoluene	98	3	472	62	0	0	534	0	534
		99	7	660	43	0	15,287	15,990	16,909	32,899
		00	8	513	32	250	0	795	2,030	2,825
		01	7	740	0	0	1,298,442	1,299,182	5,355	1,304,537
25321-14-6	Dinitrotoluene (mixed isomers)	98	11	13,439	1	36,005	0	49,445	1,403	50,848
		99	16	9,657	1	1,100	0	10,758	322	11,080
		00	19	10,423	4	3,300	696	14,423	22,098	36,521
		01	22	10,089	8	3,000	15	13,112	696	13,808

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* 2,4-Dimethyl-phenol	98	6,240	93,314	1,491,389	42,851	549,119	29,711	224,075	2,436,699	193
	99	19,796	65,907	2,268,009	20,395	743,427	23,241	189,661	3,330,436	183
	00	8,208	74,248	1,955,017	17,349	931,927	29,790	238,363	3,254,902	29
	01	7,386	20,595	1,543,558	13,670	648,288	24,698	188,700	2,446,895	153
* Dimethyl phthalate	98	1,300	11	401,458	241,859	1,131,708	25,487	322,611	2,124,434	264
	99	22,721	274	1,514,650	190,265	1,711,112	20,888	373,021	3,832,931	0
	00	22,397	634	952,968	119,513	1,447,434	93,408	377,952	3,014,306	0
	01	24,130	31,798	2,590,752	133,021	1,459,425	155,678	317,501	4,712,305	201
** Dimethyl sulfate	98	0	260,865	32,693	0	221,659	861	10,613	526,691	0
	99	0	131,338	0	0	330,640	9,400	9,952	481,330	0
	00	0	62,518	0	0	427,552	212,794	7,342	710,206	40
	01	0	200,628	466	106,891	413,326	103	6,972	728,386	0
m-Dinitrobenzene	98	0	0	0	0	516,692	0	1,416	518,108	0
	99	0	0	0	0	614,959	0	975	615,934	0
	00	0	0	0	0	465,539	473	955	466,967	0
	01	0	0	0	0	459,887	280	728	460,895	0
o-Dinitrobenzene	98	0	0	0	0	66,089	0	181	66,270	0
	99	0	0	0	0	62,743	0	112	62,855	0
	00	0	0	0	0	59,324	61	105	59,490	0
	01	0	13,902	0	0	52,672	36	93	66,703	0
p-Dinitrobenzene	98	0	0	0	0	18,024	0	49	18,073	0
	99	0	0	0	0	17,112	0	31	17,143	0
	00	0	0	0	0	16,179	17	93	16,289	0
	01	0	3,791	0	0	14,307	10	83	18,191	0
* Dinitrobutyl phenol	98	0	0	310,000	0	59,853	0	7,942	377,795	0
	99	0	0	323,000	0	69,847	1,000	17,898	411,745	0
	00	0	0	309,000	0	99,544	84	10,204	418,832	0
	01	0	0	368,524	25,641	80,924	193	883	476,165	0
* 4,6-Dinitro-o-cresol	98	0	0	1,466,262	10,696	31,360	6,075	134,791	1,649,184	0
	99	0	0	1,664,037	165,913	97,669	19,081	192,128	2,138,828	0
	00	0	0	1,757,338	58,751	75,256	64,353	130,185	2,085,883	0
	01	0	3,185	966,833	15,173	45,080	28,937	98,091	1,157,299	0
* 2,4-Dinitrophenol	98	0	0	562,709	29,118	2,017,113	53	36,991	2,645,984	0
	99	0	0	301,737	317,192	1,883,063	72	96,481	2,598,545	0
	00	0	0	290,282	58,571	1,168,874	183,793	56,653	1,758,173	0
	01	0	3,184	496,746	15,186	1,941,803	96,432	105,875	2,659,226	0
** 2,4-Dinitrotoluene	98	0	0	41,135	9,706	160,606	1,785	14,090	227,322	0
	99	0	0	32,234	952	1,071,719	21,382	90,182	1,216,469	0
	00	0	0	34,248	58	3,240,864	1,630	54,482	3,331,282	0
	01	0	3,557	26,483	7,706	1,541,485	25,252	925,284	2,529,767	0
** 2,6-Dinitrotoluene	98	0	0	0	0	48,264	155	530	48,949	0
	99	0	0	3,451	0	127,681	5,200	24,417	160,749	0
	00	0	0	44,072	76	375,816	914	7,900	428,778	0
	01	0	0	27,327	1,452	121,702	594	1,325,328	1,476,403	0
Dinitrotoluene (mixed isomers)	98	0	202,569	0	12	201,181	587,330	50,179	1,041,271	8,700
	99	0	0	0	0	858,109	806,158	11,489	1,675,756	3,200
	00	0	0	0	0	1,048,383	1,515,526	35,961	2,599,870	696
	01	0	0	0	359,727	874,506	1,481,756	13,790	2,729,779	60

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
39300-45-3 *	Dinocap	98	1	255	0	0	0	255	0	255
		99	No reports							
		00	No reports							
		01	1	0	0	0	0	0	0	0
123-91-1 **	1,4-Dioxane	98	54	112,597	144,534	250	14,405	271,786	478,141	749,927
		99	64	164,883	168,128	250	52,972	386,233	666,121	1,052,354
		00	63	107,519	163,776	0	18,131	289,426	357,652	647,078
		01	55	112,584	81,278	0	63,135	256,997	678,752	935,749
-- ** ***	Dioxin and dioxin-like compounds	98	NR	NR	NR	NR	NR	NR	NR	NR
		99	NR	NR	NR	NR	NR	NR	NR	NR
		00	1,309	8.35	4.55	0.89	84.31	98.10	120.29	218.39
		01	1,320	6.37	4.08	0.33	116.36	127.14	200.88	328.01
--	In grams	98	1,309	3,789.081	2,061.866	405.192	38,235.732	44,491.872	54,552.867	99,044.739
		99	1,320	6.37	4.08	0.33	116.36	127.14	200.88	328.01
		00	1,320	2,887.566	1,850.869	148.151	52,771.401	57,657.988	91,100.805	148,758.793
		01	1,320	2,887.566	1,850.869	148.151	52,771.401	57,657.988	91,100.805	148,758.793
957-51-7 *	Diphenamid	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
122-39-4 *	Diphenylamine	98	30	61,978	25	9,665	250	71,918	43,599	115,517
		99	37	51,072	32	5,772	10,380	67,256	48,975	116,231
		00	32	28,280	33	7,986	13,250	49,549	28,285	77,834
		01	35	60,084	29	6,890	32,678	99,681	44,074	143,755
122-66-7 **	1,2-Diphenylhydrazine	98	2	5	0	0	0	5	0	5
		99	2	7	1	0	0	8	4	12
		00	3	0	0	0	0	0	5	5
		01	2	0	5	0	0	5	260	265
2164-07-0 *	Dipotassium endothall	98	2	20	0	0	0	20	0	20
		99	1	10	0	0	0	10	0	10
		00	2	20	0	0	0	20	0	20
		01	1	10	0	0	0	10	0	10
136-45-8 *	Dipropyl isocinchomeronate	98	1	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	250	0	0	0	250	0	250
138-93-2 *	Disodium cyano-dithioimido-carbonate	98	5	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	4	0	0	0	0	0	0	0
		01	4	0	0	0	0	0	0	0
94-11-1 *,**	2,4-D isopropyl ester	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
541-53-7 *	2,4-Dithiobiuret	98	No reports							
		99	2	11	0	0	0	11	333	344
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For dioxin and dioxin-like compounds, applies only to 2,3,7,8-Tetrachlorodibenzo-p-dioxin.

*** PBT Chemicals added to list for 2000 reporting year. See Chapter 3 for more information

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Dinocap	98	0	0	0	0	0	109	8	117	0
	99	No reports								
	00	No reports								
	01	0	0	0	0	0	0	0	0	0
** 1,4-Dioxane	98	1,120,000	4,101	595,806	1,126,560	1,827,490	422,076	747,531	5,843,564	18
	99	1,549,078	13,401	1,811,182	1,511,434	2,368,009	373,265	1,058,427	8,684,796	11
	00	1,842,597	7,601	3,487,906	1,702,760	2,051,505	387,669	645,836	10,125,874	4
	01	960,000	3,384	902,375	1,083,729	1,896,403	254,520	934,958	6,035,369	195
, * Dioxin and dioxin-like compounds	98	NR	NR	NR	NR	NR	NR	NR	NR	NR
	99	NR	NR	NR	NR	NR	NR	NR	NR	NR
	00	9.81	0.05	0.05	4.40	550.24	70.88	217.73	853.16	59.14
	In grams 00	4,448.624	21.942	21.426	1,994.612	249,543.109	32,144.789	98,745.115	386,919.617	26,821.006
In grams	01	3.27	0.23	0.03	6.09	516.62	118.13	340.50	984.86	29.13
	01	1,484.197	102.870	11.524	2,760.403	234,296.365	53,572.009	154,421.201	446,648.570	13,212.890
* Diphenamid	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Diphenylamine	98	199,400	35,131	4,769,102	823,607	246,295	77,905	86,356	6,237,796	5,700
	99	155,450	879	5,216,863	800,381	397,903	84,462	96,751	6,752,689	1
	00	9,000	595	4,852,949	1,021,087	234,208	81,606	71,588	6,271,033	0
	01	10,000	1,752	3,543,989	1,028,741	220,164	186,384	88,788	5,079,818	0
** 1,2-Diphenylhydrazine	98	0	0	0	0	5,485	55	1	5,541	0
	99	0	0	0	0	37,267	53	2	37,322	0
	00	0	0	0	0	45,137	871	2	46,010	0
	01	0	0	330	1,491	72,797	140	18	74,776	0
* Dipotassium endothall	98	0	0	0	0	1,900	5,400	201	7,501	0
	99	0	0	0	0	0	3,400	400	3,800	0
	00	0	0	0	0	0	103,424	200	103,624	0
	01	0	0	0	0	0	58,045	0	58,045	0
* Dipropyl isocinchomeronate	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	25	26	51	26
* Disodium cyano-dithioimido-carbonate	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
*, ** 2,4-D isopropyl ester	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* 2,4-Dithiobiuret	98	No reports								
	99	0	0	0	0	122,493	0	342	122,835	0
	00	0	0	0	0	55,816	0	0	55,816	0
	01	0	0	0	0	55,816	0	0	55,816	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For dioxin and dioxin-like compounds, applies only to 2,3,7,8-Tetrachlorodibenzo-p-dioxin.

*** PBT Chemicals added to list for 2000 reporting year. See Chapter 3 for more information



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
330-54-1	* Diuron	98	12	3,323	260	0	35,756	39,339	14,100	53,439
		99	9	4,919	260	0	0	5,179	2	5,181
		00	10	4,506	255	0	0	4,761	0	4,761
		01	14	1,574	258	0	13,550	15,382	30	15,412
2439-10-3	* Dodine	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	No reports							
120-36-5	*,** 2,4-DP	98	3	0	0	0	0	0	0	0
		99	6	70	0	0	0	70	54	124
		00	3	0	0	0	0	0	0	0
		01	3	0	0	0	0	0	0	0
1320-18-9	*,** 2,4-D propylene glycol butyl ether ester	98	No reports							
		99	No reports							
		00	1	0	0	0	0	0	0	0
		01	No reports							
2702-72-9	*,** 2,4-D sodium salt	98	1	0	0	0	0	0	0	0
		99	1	0	30	0	0	30	0	30
		00	1	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
106-89-8	*,** Epichlorohydrin	98	83	199,100	434	12,162	2,167	213,863	16,603	230,466
		99	82	147,771	306	0	1,745	149,822	2,892	152,714
		00	78	202,645	389	0	3,950	206,984	11,113	218,097
		01	79	208,058	7,619	13,998	4,576	234,251	2,794	237,045
13194-48-4	* Ethoprop	98	7	34	0	0	116,444	116,478	6	116,484
		99	8	1	0	0	121,886	121,887	27	121,914
		00	7	46	0	0	104,984	105,030	0	105,030
		01	4	7	0	0	77,376	77,383	500	77,883
110-80-5	2-Ethoxyethanol	98	40	138,314	1	0	0	138,315	2,989	141,304
		99	46	151,979	378	0	17	152,374	84,634	237,008
		00	39	120,583	385	0	10,470	131,438	2,020	133,458
		01	35	103,469	44	0	552	104,065	3,377	107,442
140-88-5	** Ethyl acrylate	98	110	127,134	110	0	524	127,768	12,283	140,051
		99	109	131,120	112	810	15,165	147,207	29,652	176,859
		00	110	111,403	100	403	12,765	124,671	9,906	134,577
		01	107	104,482	86	0	18	104,586	80,291	184,877
100-41-4	** Ethylbenzene	98	1,662	8,707,538	9,940	762,893	214,921	9,695,292	168,457	9,863,749
		99	1,652	8,821,358	9,243	880,299	39,867	9,750,767	340,680	10,091,447
		00	1,657	8,370,176	15,421	563,006	49,691	8,998,294	129,611	9,127,905
		01	1,627	6,547,375	8,713	652,222	18,428	7,226,738	377,304	7,604,042
541-41-3	Ethyl chloroformate	98	5	2,259	5	0	5	2,269	0	2,269
		99	4	2,200	5	0	5	2,210	0	2,210
		00	5	1,846	5	0	5	1,856	0	1,856
		01	5	5,513	5	0	5	5,523	0	5,523
759-94-4	* Ethyl dipropylthiocarbamate	98	6	2,008	115	2,088	0	4,211	4,565	8,776
		99	4	2,574	156	903	0	3,633	3,570	7,203
		00	4	2,034	95	6,083	0	8,212	2,798	11,010
		01	3	2,034	99	1,146	0	3,279	1,655	4,934

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Diuron	98	250	0	0	0	0	20,767	43,048	64,065	125
	99	250	0	0	0	18,317	4,336	26,198	49,101	5
	00	250	0	0	0	20,836	46	4,294	25,426	0
	01	250	0	0	0	43,725	14,562	16,075	74,612	0
* Dodine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
*,**2,4-DP	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	9,954	0	124	10,078	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
*,**2,4-D propylene glycol butyl ether ester	98	No reports								
	99	No reports								
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
*,**2,4-D sodium salt	98	0	0	0	0	4,600	0	0	4,600	0
	99	0	0	0	0	20,000	0	30	20,030	0
	00	0	0	0	0	17,700	0	0	17,700	0
	01	0	0	0	0	14,300	0	0	14,300	0
*,**Epichlorohydrin	98	10,499,178	17,715	4,859,842	85,210	25,251,899	953,525	225,006	41,892,375	0
	99	11,169,456	0	4,121,093	103,015	33,496,844	489,349	153,387	49,533,144	0
	00	9,730,583	29	4,588,509	120,177	271,275,698	314,667	674,955	286,704,618	383
	01	10,579,033	0	10,614,320	342,211	11,886,065	1,773,333	208,289	35,403,251	88
* Ethoprop	98	95	0	0	0	12,176	4,943	116,484	133,698	0
	99	69	0	0	0	50,057	20,347	137,068	207,541	0
	00	0	0	0	0	27,193	3,344	105,026	135,563	0
	01	0	0	0	0	12,394	1,428	77,442	91,264	0
2-Ethoxyethanol	98	1,400	26,052	584,971	3,033,018	585,072	863,044	162,849	5,256,406	10,515
	99	1,246,836	87,571	12,992,481	2,048,621	2,050,700	2,435,150	164,459	21,025,818	10
	00	1,200	0	2,643,347	364,738	1,379,052	262,667	151,540	4,802,544	0
	01	1,360	0	3,430,755	270,389	1,598,737	151,463	118,082	5,570,786	0
** Ethyl acrylate	98	381,888	9,460	8,430,381	2,405,597	1,431,129	353,984	142,046	13,154,485	4,152
	99	606,528	260	10,064,209	1,726,887	1,341,616	402,531	185,424	14,327,455	2,509
	00	979,107	70	7,531,839	1,387,308	1,578,535	602,567	144,117	12,223,543	1,749
	01	1,566,902	4	5,780,792	1,355,087	1,942,156	725,129	121,596	11,491,666	3,905
** Ethylbenzene	98	31,224,164	6,745,120	36,817,834	28,919,758	18,745,512	3,698,313	10,200,294	136,350,995	155,099
	99	27,938,254	5,706,882	33,496,251	14,641,980	20,349,586	2,678,784	10,105,316	114,917,053	59,225
	00	23,019,140	5,299,883	31,192,474	15,048,235	22,417,686	2,376,888	9,396,018	108,750,324	16,520
	01	20,506,557	5,337,683	28,559,219	15,990,844	22,884,406	2,323,161	7,989,286	103,591,156	92,082
Ethyl chloroformate	98	0	0	0	0	53,660	0	2,035	55,695	0
	99	0	0	0	0	21,445	0	1,998	23,443	0
	00	0	42	0	0	52,398	160	1,875	54,475	0
	01	0	0	0	123	169,913	92,050	5,436	267,522	0
* Ethyl dipropylthiocarbamate	98	0	0	0	0	82,335	33,089	8,528	123,952	524
	99	0	0	0	0	859	14,694	7,119	22,672	1,508
	00	0	0	0	0	819	61,045	10,163	72,027	9,222
	01	0	0	0	0	505	6,438	4,308	11,251	6

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
74-85-1	* Ethylene	98	325	31,172,324	3,059	4,217	83	31,179,683	1,815	31,181,498
		99	317	25,833,707	918	65,158	71,624	25,971,407	361	25,971,768
		00	314	22,593,385	889	31,447	0	22,625,721	395	22,626,116
		01	309	23,918,535	1,394	6,682	4	23,926,615	116	23,926,731
--	Ethylenebisdithiocarbamic acid, salts and esters	98	5	164	0	0	0	164	513	677
		99	6	261	0	0	0	261	159	420
		00	8	400	0	0	0	400	25	425
		01	10	3,583	0	0	0	3,583	760	4,343
107-21-1	* Ethylene glycol	98	1,674	6,130,990	808,243	542,188	1,001,840	8,483,261	1,898,263	10,381,524
		99	1,648	5,567,538	530,817	1,224,809	1,109,108	8,432,272	2,527,693	10,959,965
		00	1,645	4,661,035	719,726	581,939	1,126,540	7,089,240	6,256,233	13,345,473
		01	1,546	4,870,364	656,701	152,765	1,889,968	7,569,798	1,925,668	9,495,465
151-56-4	** Ethyleneimine	98	2	34	0	0	0	34	0	34
		99	3	10	0	0	0	10	153	163
		00	2	3	0	0	0	3	0	3
		01	2	8	0	0	0	8	0	8
75-21-8	*,** Ethylene oxide	98	156	690,691	372	22,561	1,751	715,375	1,860	717,235
		99	150	495,134	1,158	10,796	1,750	508,838	60,924	569,762
		00	156	466,452	6,912	226	401	473,991	56,820	530,811
		01	150	494,158	4,692	0	16	498,866	17,495	516,361
96-45-7	*,** Ethylene thiourea	98	16	299	5	0	0	304	6,387	6,691
		99	17	293	5	0	0	298	6,195	6,493
		00	16	275	10	0	0	285	2,024	2,309
		01	13	21	5	0	0	26	2,262	2,288
75-34-3	Ethylidene dichloride	98	13	44,468	0	0	0	44,468	8	44,476
		99	11	82,398	1	0	3	82,402	9	82,411
		00	16	15,209	0	0	0	15,209	17	15,226
		01	13	17,530	26	0	0	17,556	1,011	18,567
52-85-7	* Famphur	98	3	5	0	0	0	5	9,200	9,205
		99	3	5	0	0	0	5	5,612	5,617
		00	2	5	0	0	0	5	0	5
		01	1	0	0	0	0	0	0	0
60168-88-9	* Fenarimol	98	2	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
13356-08-6	* Fenbutatin oxide	98	2	664	0	660	0	1,324	0	1,324
		99	2	664	0	660	0	1,324	0	1,324
		00	2	664	0	1,260	0	1,924	0	1,924
		01	2	664	0	780	0	1,444	0	1,444
66441-23-4	* Fenoxaprop ethyl	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
72490-01-8	* Fenoxycarb	98	1	0	0	0	0	0	1	1
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Ethylene	98	123,826,795	0	487,307,269	12,978,078	509,690,125	3,013,379	29,462,891	1,166,278,537	1,428,754
	99	146,725,271	317	360,906,102	11,136,191	568,875,269	4,761,444	26,924,609	1,119,329,203	393,952
	00	203,136,424	318	525,713,123	17,008,011	670,878,430	1,751,486	22,017,312	1,440,505,104	313,655
	01	127,322,652	442	469,015,809	16,270,592	612,552,699	8,052,470	23,591,956	1,256,806,620	473,294
Ethylenebisdithiocarbamic acid, salts and esters	98	0	0	0	0	0	3,329	672	4,001	0
	99	0	0	0	0	129,960	8,070	520	138,550	0
	00	0	0	1,057	2,290	160,622	18,092	196	182,257	0
	01	0	0	14,179	3,075	177,584	6,948	3,920	205,706	0
* Ethylene glycol	98	471,754,870	59,901,293	6,695,918	22,125,054	66,506,276	31,968,406	10,793,957	669,745,774	832,225
	99	477,382,074	71,806,367	8,427,689	16,466,419	52,374,629	29,543,071	11,768,372	667,768,621	932,352
	00	426,666,641	74,259,381	5,403,146	16,176,417	79,196,008	30,406,974	11,969,575	644,078,142	177,963
	01	376,084,469	75,745,755	4,184,282	14,351,166	56,603,714	28,816,768	10,186,122	565,972,276	95,255
** Ethyleneimine	98	0	0	0	31,069	24,000	0	34	55,103	0
	99	0	0	0	0	130,040	0	163	130,203	0
	00	0	0	0	0	74,812	0	3	74,815	0
	01	0	0	0	0	46,743	0	8	46,751	0
*,** Ethylene oxide	98	16,698	1,140	14,521	1,043,190	11,154,805	190,063	660,945	13,081,362	54,419
	99	33,020	7,400	149,402	16	11,639,343	166,613	563,090	12,558,884	4,618
	00	263,388	20,000	178,077	5	18,503,554	144,207	519,119	19,628,350	9,531
	01	281,327	16,527	1,406,707	1,280	14,200,584	131,738	514,315	16,552,478	9,786
*,** Ethylene thiourea	98	430	565	0	0	0	8,632	6,635	16,262	0
	99	2,700	800	0	0	690,152	3,650	6,521	703,823	0
	00	2,750	580	0	0	85,108	3,771	2,351	94,560	0
	01	1,450	520	330	1,490	393,356	7,092	442	404,680	2
Ethylidene dichloride	98	1,600,000	0	2,981,278	10,275	2,368,003	4,551,900	44,442	11,555,898	89
	99	2,190,000	0	2,712,610	456	3,639,405	10,830	82,324	8,635,625	80
	00	1,400,000	103,754	4,746,196	347	2,324,500	15,759	15,054	8,605,610	96
	01	1,300,000	0	3,631,528	1,561	1,242,443	84,104	18,100	6,277,736	78
* Famphur	98	0	0	0	0	25,761	46,000	7	71,768	9
	99	0	0	0	0	25,757	2,200	4	27,961	5,612
	00	0	0	0	0	12,789	2,900	5	15,694	0
	01	0	0	0	0	0	5,550	0	5,550	0
* Fenarimol	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
* Fenbutatin oxide	98	0	0	0	0	0	0	1,324	1,324	0
	99	0	0	0	33,822	0	0	1,324	35,146	0
	00	0	0	0	0	0	0	1,924	1,924	0
	01	0	0	0	0	0	0	1,444	1,444	0
* Fenoxaprop ethyl	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Fenoxycarb	98	0	0	0	0	40,000	0	1	40,001	0
	99	0	0	0	0	28,000	0	0	28,000	0
	00	0	0	0	0	23,000	0	0	23,000	0
	01	0	0	0	0	14,000	0	0	14,000	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
39515-41-8 *	Fenpropathrin	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	No reports							
55-38-9 *	Fenthion	98	1	1	0	0	0	1	0	1
		99	No reports							
		00	1	1	0	0	0	1	0	1
		01	No reports							
51630-58-1 *	Fenvalerate	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
14484-64-1 *	Ferbam	98	No reports							
		99	No reports							
		00	No reports							
		01	2	6	0	0	0	6	505	511
69806-50-4 *	Fluazifop butyl	98	1	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
2164-17-2 *	Fluometuron	98	5	782	0	0	0	782	745	1,527
		99	4	263	0	0	0	263	0	263
		00	3	15	0	0	0	15	0	15
		01	6	10	0	0	0	10	0	10
7782-41-4	Fluorine	98	12	121,020	49,857	0	90,778	261,655	0	261,655
		99	16	86,979	54,153	0	105,417	246,549	0	246,549
		00	14	8,764	40,274	0	174,979	224,017	70,009	294,026
		01	12	8,952	49,704	0	107,282	165,938	0	165,938
51-21-8	Fluorouracil	98	1	0	0	0	250	250	250	500
		99	1	0	0	0	250	250	500	750
		00	1	0	0	0	250	250	250	500
		01	1	0	0	0	250	250	250	500
69409-94-5 *	Fluvalinate	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	2	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
133-07-3 *	Folpet	98	8	56	10	0	0	66	4,103	4,169
		99	6	36	10	0	0	46	3,023	3,069
		00	7	823	10	0	0	833	3,033	3,866
		01	5	16	0	0	0	16	1,887	1,903
72178-02-0	Fomesafen	98	3	884	1,532	0	0	2,416	9,191	11,607
		99	3	1,210	1,149	0	0	2,359	7,976	10,335
		00	3	1,298	1,176	0	0	2,474	6,740	9,214
		01	1	574	1,155	0	0	1,729	1,520	3,249
50-00-0 *,**	Formaldehyde	98	871	12,003,476	422,949	9,724,794	287,172	22,438,391	362,009	22,800,400
		99	859	12,398,989	430,424	10,880,865	313,776	24,024,054	191,813	24,215,867
		00	879	11,647,900	409,673	12,228,880	108,247	24,394,700	235,130	24,629,829
		01	799	10,582,327	336,112	9,872,146	150,327	20,940,912	530,774	21,471,686

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Fenpropathrin	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
* Fenthion	98	0	0	0	0	0	960	1	961	0
	99	No reports								
	00	0	0	0	0	0	1,976	1	1,977	0
	01	No reports								
* Fenvalerate	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Ferbam	98	No reports								
	99	No reports								
	00	No reports								
	01	0	0	0	0	24,522	629	433	25,584	0
* Fluazifop butyl	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
* Fluometuron	98	0	0	0	0	25,000	8,541	1,385	34,926	0
	99	0	0	0	0	37,000	2,512	1,680	41,192	0
	00	0	0	0	0	18,000	2,600	2,600	23,200	0
	01	0	0	0	0	19,000	0	10	19,010	0
Fluorine	98	0	0	0	0	17,450	36,510	261,654	315,614	3
	99	0	0	0	0	58,420	20,435	246,339	325,194	32
	00	262,000	0	0	0	31,625	11,331	293,923	598,879	7
	01	0	0	0	0	18,973	240,196	166,237	425,406	1
Fluorouracil	98	964	0	0	0	0	0	0	964	0
	99	1,188	0	0	0	0	0	0	1,188	0
	00	1,271	0	0	0	0	0	0	1,271	0
	01	1,205	0	0	0	0	0	0	1,205	0
* Fluvalinate	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
* Folpet	98	2	0	0	0	2,100	0	4,121	6,223	0
	99	943	0	0	0	2,000	627	3,069	6,639	0
	00	1,630	0	0	0	0	728	3,741	6,099	0
	01	638	0	0	0	222	863	1,792	3,515	0
Fomesafen	98	0	0	0	0	68,821	8,845	12,776	90,442	0
	99	0	0	0	0	79,083	1,522	11,035	91,640	0
	00	0	0	0	0	24,699	1,522	9,558	35,779	0
	01	0	0	0	0	6,061	6,552	3,249	15,862	0
*,** Formaldehyde	98	101,307,900	591,297	14,716,713	1,955,107	94,285,500	3,688,822	22,253,049	238,798,388	16,008
	99	106,805,796	429,652	15,557,606	507,389	84,913,341	4,331,958	23,896,181	236,441,923	15,220
	00	94,280,657	252,231	23,233,920	722,584	179,860,139	6,445,977	25,107,229	329,902,737	4,498
	01	72,789,023	107,949	15,654,787	533,976	67,703,244	7,195,481	21,990,667	185,975,127	8,736

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
64-18-6	* Formic acid	98	328	958,986	96,187	11,168,924	68,923	12,293,020	50,010	12,343,030
		99	317	772,956	172,935	11,455,031	3,622	12,404,544	52,817	12,457,361
		00	324	768,799	278,857	8,645,752	4,270	9,697,678	56,348	9,754,026
		01	307	509,662	224,881	7,733,220	3,770	8,471,533	50,114	8,521,647
76-13-1	Freon 113	98	49	942,049	1,627	0	0	943,676	5,033	948,709
		99	37	841,256	1,933	0	9,955	853,144	5,480	858,624
		00	33	676,310	1,292	0	0	677,602	755	678,357
		01	31	574,408	1,295	0	15,165	590,868	7,889	598,757
--	Glycol ethers	98	2,331	38,406,614	193,192	1,620	58,318	38,659,744	711,121	39,370,865
		99	2,240	35,867,378	106,699	716	73,584	36,048,377	1,245,918	37,294,295
		00	2,225	31,425,960	111,511	45,224	65,402	31,648,097	3,969,734	35,617,831
		01	2,037	27,915,583	311,789	7,748	114,016	28,349,136	1,087,902	29,437,038
76-44-8	*,** Heptachlor	98	6	137	0	5	0	142	12	154
		99	4	5	1	0	0	6	14	20
		00	15	6.60	0.00	0.00	2,372.56	2,379.16	221.87	2,601.03
		01	15	6.04	0.00	0.00	271.69	277.73	28.24	305.97
118-74-1	*,** Hexachloro-benzene	98	17	386	4	0	96	486	13,328	13,814
		99	20	571	8	0	13,023	13,602	1,506	15,108
		00	100	1,993.93	331.37	48.39	22,700.20	25,073.88	3,366.04	28,439.92
		01	99	1,199.39	321.61	22.02	23,524.57	25,067.59	11,107.40	36,174.98
87-68-3	Hexachloro-1,3-butadiene	98	14	2,660	255	5	0	2,920	990	3,910
		99	12	4,427	2	0	22	4,451	100	4,551
		00	12	4,256	0	250	4	4,510	274	4,784
		01	11	1,599	5	5	1	1,610	1,086	2,696
319-84-6	** alpha-Hexachloro-cyclohexane	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
77-47-4	* Hexachlorocyclopentadiene	98	8	5,801	0	250	5,520	11,571	1,067	12,638
		99	7	1,114	2	0	0	1,116	1,196	2,312
		00	9	1,310	0	0	0	1,310	2,186	3,496
		01	7	1,229	0	0	0	1,229	849	2,078
67-72-1	*,** Hexachloroethane	98	22	45,812	0	295	0	46,107	1,324	47,431
		99	24	42,593	1	320	9,274	52,188	18,389	70,577
		00	21	33,444	5	612	3	34,064	2,558	36,622
		01	22	41,214	5	232	12,576	54,027	7,211	61,238
1335-87-1	Hexachloro-naphthalene	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
70-30-4	* Hexachlorophene	98	1	0	0	0	0	0	0	0
		99	3	7	1	0	0	8	165	173
		00	3	0	0	0	0	0	5	5
		01	4	5	0	0	0	5	760	765
680-31-9	** Hexamethylphosphoramide	98	No reports							
		99	No reports							
		00	1	0	0	0	0	0	0	0
		01	No reports							

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year. NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Formic acid	98	808,843	14	5,818,086	3,748,327	157,752,379	1,603,048	12,581,299	182,311,996	0
	99	710,746	10	6,613,867	1,732,416	137,624,348	1,392,709	12,664,055	160,738,151	100
	00	739,637	10	4,947,522	2,086,993	166,606,778	337,481	9,870,496	184,588,917	0
	01	819,420	862	7,643,418	2,472,681	145,659,437	400,235	8,516,176	165,512,229	837
Freon 113	98	483,320	74,026	39,916	118,829	1,171,267	5,306,608	938,704	8,132,670	6,305
	99	302,758	97,758	37,035	27,602	862,862	153,992	792,293	2,274,300	65,286
	00	107,843	159,715	0	13,515	858,942	150,354	677,360	1,967,729	179
	01	103,800	36,862	22,400	9,800	1,093,963	221,460	592,516	2,080,801	7,795
Glycol ethers	98	142,479,306	4,236,156	33,081,994	15,279,069	33,861,407	10,271,354	40,472,815	279,682,101	382,752
	99	166,616,127	4,259,872	45,009,889	14,773,014	45,479,647	10,740,314	38,392,777	325,271,640	12,375
	00	190,181,646	3,558,736	23,092,948	15,361,423	47,760,045	10,608,444	36,755,732	327,318,974	76,615
	01	168,887,650	2,755,475	22,470,532	14,502,861	42,702,429	8,905,822	30,290,997	290,515,766	120,006
*,** Heptachlor	98	0	0	0	0	443,474	35	153	443,662	0
	99	0	0	0	0	217,288	114	15	217,417	0
	00	0.00	0.00	42.00	0.00	237,739.73	3,773.30	2,391.03	243,946.06	0.00
	01	0.00	0.00	45.00	334.00	751,861.74	173.00	305.73	752,719.47	0.02
*,** Hexachloro-benzene	98	8,100	1	114,000	54,632	1,663,762	18,252	13,724	1,872,471	0
	99	6,601	26,253	98,000	40,950	5,630,476	22,986	27,188	5,852,454	7
	00	6,000.50	12,039.00	140,662.00	56,585.00	6,154,926.17	19,461.15	39,342.58	6,429,016.40	22,915.02
	01	5,400.10	1,432.00	369,749.64	2,132.80	6,269,768.60	41,542.86	48,534.45	6,738,560.45	9,310.49
Hexachloro-1,3-butadiene	98	0	0	15,200	0	4,572,141	162,354	3,013	4,752,708	410
	99	280,000	0	0	0	9,270,705	52,784	4,531	9,608,020	36,000
	00	250,000	0	26,548	69	332,474,140	29,574	4,285	332,784,616	13,350
	01	220,000	0	24,831	59	7,932,612	14,888	2,477	8,194,867	78,000
** alpha-Hexachloro-cyclohexane	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Hexachlorocyclopentadiene	98	0	0	0	552	904,715	2,795,884	6,762	3,707,913	4,800
	99	0	0	0	388	537,591	10,813	2,157	550,949	84,000
	00	0	0	21,237	447	959,027	35,304	2,065	1,018,080	100,000
	01	0	0	19,863	47	340,460	28,345	2,066	390,781	38,000
*,** Hexachloroethane	98	1,100,000	0	1,134,700	87,615	4,162,437	52,879	46,344	6,583,975	36
	99	2,068,553	164,072	740,000	211,659	3,332,512	44,784	56,675	6,618,255	365
	00	970,000	57,963	422,097	68,539	116,210,518	48,981	36,563	117,814,661	1,141
	01	850,000	0	421,345	116,911	5,092,930	139,316	65,461	6,685,963	4,120
Hexachloro-naphthalene	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Hexachlorophene	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	219,953	0	168	220,121	0
	00	0	0	0	733	164,589	56	2	165,380	0
	01	0	0	330	1,491	202,871	84	109	204,885	0
** Hexamethylphosphoramide	98	No reports								
	99	No reports								
	00	0	0	0	0	0	0	0	0	0
	01	No reports								

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
110-54-3	n-Hexane	98	1,480	68,734,268	15,788	26,506	22,062	68,798,624	143,271	68,941,895
		99	1,457	56,561,924	14,197	41,994	7,988	56,626,103	76,727	56,702,830
		00	1,446	54,046,251	16,911	114,666	12,327	54,190,155	110,448	54,300,603
		01	1,372	47,644,345	10,531	69,663	9,943	47,734,482	427,958	48,162,440
51235-04-2 *	Hexazinone	98	5	266	2,215	0	0	2,481	750	3,231
		99	5	264	6,297	0	0	6,561	250	6,811
		00	4	2	1,874	0	0	1,876	0	1,876
		01	6	317	1,324	0	0	1,641	11,126	12,767
67485-29-4 *	Hydramethylnon	98	1	0	0	0	0	0	0	0
		99	2	10	0	0	750	760	0	760
		00	2	10	0	0	5	15	0	15
		01	2	10	0	0	5	15	0	15
302-01-2 **	Hydrazine	98	64	11,198	188	26,811	371	38,568	1,160	39,728
		99	62	10,278	642	88,378	372	99,670	522	100,192
		00	66	4,856	1,156	0	370	6,382	10	6,392
		01	57	3,068	57	0	120	3,245	260	3,505
10034-93-2 **	Hydrazine sulfate	98	1	0	0	200,000	0	200,000	0	200,000
		99	1	0	0	190,000	0	190,000	0	190,000
		00	1	0	0	150,000	0	150,000	0	150,000
		01	1	0	0	24,000	0	24,000	0	24,000
7647-01-0 *	Hydrochloric acid	98	1,528	612,369,433	2,576	100,099	22,266	612,494,374	1,029,678	613,524,052
		99	1,526	669,937,158	506	36,795	28,881	670,003,340	751,461	670,754,801
		00	1,524	654,455,553	96,763	54,125	15,459	654,621,900	1,313,609	655,935,509
		01	1,473	587,134,079	2,445	48,570	188,608	587,373,702	746,442	588,120,144
74-90-8 *	Hydrogen cyanide	98	77	2,076,148	308	590,597	112,523	2,779,576	2,729	2,782,305
		99	70	1,616,775	290	1,433,776	1,935	3,052,776	1,371	3,054,147
		00	67	1,587,147	281	688,362	761	2,276,551	2,125	2,278,676
		01	74	1,191,298	235	1,698,997	934	2,891,464	698	2,892,162
7664-39-3 *	Hydrogen fluoride	98	1,036	80,019,430	23,200	2,900,000	154,168	83,096,798	105,899	83,202,697
		99	1,035	72,987,874	16,995	4,100,000	134,273	77,239,142	91,743	77,330,885
		00	1,034	71,776,645	26,453	4,700,000	132,976	76,636,074	163,539	76,799,613
		01	991	67,248,474	21,549	4,400,000	279,575	71,949,598	136,470	72,086,068
123-31-9	Hydroquinone	98	63	13,867	1,558	347,309	0	362,734	27,893	390,627
		99	64	58,650	2,260	367,000	5	427,915	16,759	444,674
		00	66	12,990	4,170	333,200	16,281	366,641	893	367,534
		01	59	13,279	6,948	534,900	0	555,127	6,985	562,112
35554-44-0 *	Imazalil	98	1	0	0	0	0	0	10	10
		99	No reports							
		00	No reports							
		01	No reports							
55406-53-6 *	3-Iodo-2-propynyl butylcarbamate	98	21	3,393	10	0	291	3,694	7,352	11,046
		99	24	3,181	10	0	42,286	45,477	249,941	295,418
		00	27	3,362	10	0	41,564	44,936	50,644	95,580
		01	29	2,496	10	0	0	2,506	17,166	19,672
13463-40-6	Iron pentacarbonyl	98	1	1,475	0	0	0	1,475	0	1,475
		99	1	1,517	0	0	0	1,517	0	1,517
		00	3	1,283	0	0	4	1,287	4	1,291
		01	1	1,289	0	0	0	1,289	0	1,289

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
n-Hexane	98	769,360,268	13,874,749	42,541,590	30,711,503	71,906,362	6,290,973	68,411,669	1,003,097,114	99,592
	99	352,667,049	11,634,577	54,912,112	28,597,291	67,880,860	7,372,479	55,803,180	578,867,548	357,922
	00	269,287,607	7,788,231	42,175,899	19,601,139	63,510,882	5,949,323	55,007,121	463,320,203	134,989
	01	775,131,057	8,343,536	38,584,286	24,231,336	67,546,836	7,037,691	49,319,091	970,193,833	203,916
* Hexazinone	98	0	0	0	0	110,000	201,891	8,580	320,471	0
	99	0	0	0	0	71,000	164,269	13,155	248,424	0
	00	0	0	0	0	1,031	157,038	1,876	159,945	0
	01	0	0	0	0	166,675	193,662	1,415	361,752	0
* Hydramethylnon	98	0	0	0	0	0	0	24	24	0
	99	0	0	0	0	0	0	5	5	5
	00	0	0	0	0	0	3,382	0	3,382	0
	01	0	0	0	0	0	6,566	1	6,567	0
** Hydrazine	98	25	0	0	2,059	279,414	302,545	64,652	648,695	1
	99	25	0	5	45	517,251	142,351	142,113	801,790	3
	00	25	0	0	0	506,164	5,247	5,435	516,871	0
	01	25	0	330	1,491	217,189	18,668	2,804	240,507	0
** Hydrazine sulfate	98	0	0	0	0	0	0	200,000	200,000	0
	99	0	0	0	0	0	0	190,000	190,000	0
	00	0	0	0	0	0	0	150,000	150,000	0
	01	0	0	0	0	0	0	24,000	24,000	0
* Hydrochloric acid	98	61,757,568	2,681,128	190,000	243,927	891,527,596	6,353,452	613,359,742	1,576,113,413	173,578
	99	30,917,630	1,284,131	190,000	16,119	1,673,906,883	8,064,880	669,148,378	2,383,528,021	382,561
	00	41,366,411	3,711,351	5,841,928	4,773	1,813,606,470	9,596,531	655,485,445	2,529,612,909	238,442
	01	66,597,953	666,508	3,474,181	9,721	841,654,109	4,093,004	587,609,582	1,504,105,058	231,580
* Hydrogen cyanide	98	110,701	0	24,442,117	0	21,306,166	473	2,772,620	48,632,077	288
	99	146,979	0	27,900,378	0	19,590,811	2,675	3,029,677	50,670,520	184
	00	119,477	0	49,890,083	0	19,821,228	12,857	2,264,307	72,107,952	13,955
	01	145,702	0	8,654,669	0	28,385,179	1,327	2,851,558	40,038,435	37,391
* Hydrogen fluoride	98	53,583,453	156,245	0	4,910	230,504,806	2,303,950	83,202,618	369,755,982	11,196
	99	60,224,429	145,973	0	1,614	210,061,002	2,413,731	76,908,967	349,755,716	63,468
	00	80,991,919	1,877,343	0	14,120	247,656,239	1,915,039	77,271,201	409,725,861	70,290
	01	23,795,926	251,203	0	321	234,268,236	2,025,929	73,040,511	333,382,126	251,997
Hydroquinone	98	3,200	0	848,845	10,066	490,754	126,922	375,059	1,854,846	0
	99	31,960	0	929,456	49,575	762,432	159,207	445,424	2,378,054	10
	00	1,500	0	1,131,108	8,615	1,437,003	114,313	374,566	3,067,105	0
	01	7,000	0	1,094,660	15,385	706,412	90,949	571,260	2,485,666	0
* Imazalil	98	0	0	0	0	0	15	0	15	15
	99	No reports								
	00	No reports								
	01	No reports								
* 3-Iodo-2-propynyl butylcarbamate	98	30,906	0	400	5,561	334	123,399	6,271	166,871	0
	99	21,705	0	0	974	329	340,696	53,381	417,085	0
	00	118,785	0	0	2,007	322	182,186	63,399	366,699	0
	01	29,565	1,800	0	2,093	37,914	62,240	15,400	149,012	0
Iron pentacarbonyl	98	0	0	0	0	0	0	1,475	1,475	0
	99	0	0	0	0	0	0	1,517	1,517	0
	00	0	0	0	0	10,248	0	1,283	11,531	0
	01	0	0	0	0	0	0	1,289	1,289	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
78-84-2	Isobutyraldehyde	98	22	254,625	1,182	0	0	255,807	172,238	428,045
		99	20	259,971	966	0	0	260,937	124,062	384,999
		00	19	230,956	129	0	0	231,085	150,261	381,346
		01	19	245,973	877	0	0	246,850	17,693	264,543
465-73-6	* Isodrin	98	No reports	No reports	No reports	No reports	No reports	No reports	No reports	No reports
		99	No reports	No reports	No reports	No reports	No reports	No reports	No reports	No reports
		00	6	0.05	0.00	2.95	0.00	3.00	0.00	3.00
		01	5	0.35	0.00	0.00	19.00	19.35	441.40	460.75
25311-71-1	* Isufenphos	98	2	10	0	0	0	10	0	10
		99	2	205	0	0	0	205	0	205
		00	No reports							
		01	No reports							
67-63-0	* Isopropyl alcohol (strong acid manufacturing only)	98	80	603,142	250	192,117	0	795,509	59,649	855,158
		99	77	550,580	165	0	9	550,754	94,475	645,229
		00	28	99,133	0	0	4,120	103,253	3,785	107,038
		01	16	21,981	0	0	0	21,981	3,574	25,555
80-05-7	4,4'-Isopropylidenediphenol	98	138	190,550	7,681	0	123,520	321,751	1,054,716	1,376,467
		99	133	171,497	4,798	72	40,022	216,389	965,715	1,182,104
		00	136	162,425	6,727	217	40,701	210,070	953,248	1,163,318
		01	131	127,046	5,472	177	28,385	161,080	917,513	1,078,593
120-58-1	Isosafrole	98	1	0	0	0	0	0	0	0
		99	1	2	1	0	0	3	38	41
		00	2	0	0	0	0	0	260	260
		01	2	0	0	0	0	0	505	505
77501-63-4	* Lactofen	98	1	3	0	0	0	3	0	3
		99	2	406	0	0	0	406	9	415
		00	2	290	0	0	0	290	0	290
		01	2	3	0	0	0	3	0	3
7439-92-1	** Lead	98	896	313,185	13,253	31,681	15,100,503	15,458,622	4,784,878	20,243,500
		99	867	295,174	8,169	13,250	9,612,950	9,929,543	4,777,919	14,707,462
		00	944	266,200.96	14,629.16	60,110.00	10,831,119.00	11,172,059.12	4,508,616.27	15,680,675.39
		01	4,201	378,740.71	51,297.37	6.65	15,304,665.99	15,734,710.71	5,079,312.56	20,814,023.27
--	** Lead compounds	98	1,121	1,205,707	115,966	7,451,799	255,938,366	264,711,837	21,894,093	286,605,930
		99	1,069	1,221,563	65,682	8,142,009	280,339,312	289,768,565	23,966,427	313,734,992
		00	1,081	1,229,604.48	80,479.65	8,512,731.00	328,885,588.00	338,708,403.13	19,794,610.67	358,503,013.80
		01	4,360	1,254,380.94	362,122.44	6,232,814.69	364,115,208.54	371,964,526.62	50,213,158.38	422,177,685.00
58-89-9	*, ** Lindane	98	16	79	5	0	25,654	25,738	129	25,867
		99	14	30	6	0	0	36	369	405
		00	10	12	5	0	0	17	17	34
		01	10	13	0	0	274	287	256	543
330-55-2	* Linuron	98	3	1,015	5	0	0	1,020	750	1,770
		99	4	1,015	5	0	0	1,020	750	1,770
		00	3	1,010	5	0	0	1,015	750	1,765
		01	3	10	5	0	0	15	0	15
554-13-2	Lithium carbonate	98	43	8,144	250	114	32,284	40,792	292,407	333,199
		99	48	12,263	501	0	11,632	24,396	192,891	217,287
		00	49	18,922	268	0	108,368	127,558	189,929	317,487
		01	47	10,343	5	0	71,193	81,541	243,561	325,102

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For lead compounds, applies only to inorganic lead compounds.

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

**** Data for lead (a PBT chemical) and lead compounds (a PBT chemical category), due to threshold change for 2001 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
Isobutyraldehyde	98	0	48,000	1,509,037	582,178	1,134,091	118,833	429,216	3,821,355	221
	99	10,188	3,800	2,902,392	539,410	1,180,083	36,804	403,453	5,076,130	0
	00	11,321	1,200	1,624,049	518,098	1,096,242	78,610	382,891	3,712,411	0
	01	9,583	1,900	839,785	575,751	850,872	97,179	263,271	2,638,341	0
* Isodrin	98	No reports	No reports	No reports	No reports	No reports	No reports	No reports	No reports	No reports
	99	No reports	No reports	No reports	No reports	No reports	No reports	No reports	No reports	No reports
	00	0.00	0.00	0.00	0.00	6,603.84	0.00	3.00	6,606.84	0.00
	01	0.00	0.00	0.00	0.00	3,800.00	142.00	465.19	4,407.19	0.00
* Isofenphos	98	2,000	0	0	0	0	114	10	2,124	0
	99	20,000	0	0	0	0	0	210	20,210	0
	00	No reports								
	01	No reports								
* Isopropyl alcohol (strong acid manufacturing only)	98	135,846	146,022	3,681,484	1,050,303	323,436	133,468	835,508	6,306,067	0
	99	1,961,232	32,237	8,862,061	992,806	397,400	112,674	551,924	12,910,334	10
	00	111,416	0	8,128	909,081	0	12,310	588,557	1,629,492	10
	01	92,968	0	0	377,275	26,538	113,158	36,213	646,152	0
4,4'-Isopropylidenediphenol	98	104,158	71,832	9,043,549	98,999	1,777,772	267,511	1,405,174	12,768,995	3,476
	99	229,868	54,608	24,844,350	421,160	862,180	835,304	1,160,265	28,407,735	3,879
	00	144,861	53,743	18,345,193	3,328,793	695,393	424,815	1,139,386	24,132,184	0
	01	66,649	117,522	17,084,603	2,358,320	713,277	189,672	1,070,824	21,600,867	80
Isosafrole	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	77,000	0	37	77,037	0
	00	0	0	0	0	68,096	794	20	68,910	0
	01	0	0	330	80	104,417	560	527	105,914	0
* Lactofen	98	0	0	0	0	0	89	3	92	0
	99	0	0	0	0	0	156	406	562	0
	00	0	0	0	0	0	346	290	636	0
	01	0	0	0	0	0	284	3	287	0
** Lead	98	249,087,930	38,157,639	242,740	20,841	1,620,424	882,299	20,505,022	310,516,895	424,995
	2001 not comparable to prior years***	213,589,811	37,287,780	0	2,724	2,044,831	722,515	14,626,166	268,273,827	7,701
	00	192,686,784.00	39,117,106.99	13,780.00	4,580.00	3,051,196.60	394,342.36	16,656,244.58	251,924,034.53	270,853.02
	01	182,687,811.78	62,367,170.76	8,326.00	11,306.00	1,196,232.44	240,541.13	21,275,297.20	267,786,685.31	289,096.40
** Lead compounds	98	429,235,390	298,406,363	0	41,351	308,513	3,245,299	297,373,251	1,028,610,167	1,557,001
	2001 not comparable to prior years****	443,620,283	280,769,029	700	15,768	583,275	2,683,821	280,963,662	1,008,636,538	68,137,418
	00	452,938,123.00	245,379,326.00	35.00	1,795.00	549,833.00	4,174,260.05	350,478,308.07	1,053,521,680.12	19,105,691.00
	01	360,989,109.10	196,407,911.20	87,739.61	107,719.67	63,447.09	761,998.55	407,376,182.37	965,794,107.59	18,044,639.60
*,** Lindane	98	168	0	0	100,903	118,134	8,386	25,959	253,550	0
	99	1,131	0	0	0	350,078	2,719	237	354,165	0
	00	225	0	0	0	331,156	965	34	332,380	0
	01	188	0	0	0	524,429	1,739	319	526,675	205
* Linuron	98	25	0	0	2,214	14,516	500	554	17,809	0
	99	25	0	0	0	33,900	1,199	553	35,677	0
	00	25	0	0	0	17,951	500	530	19,006	0
	01	25	0	0	0	24,083	1	30	24,139	0
Lithium carbonate	98	48,373	0	0	0	1,400	3,266	301,392	354,431	0
	99	94,352	0	0	0	5,258	3,909	215,931	319,450	16
	00	28,887	0	0	0	10,098	7,311	314,120	360,416	0
	01	30,000	0	0	0	5,998	8,769	323,996	368,763	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For lead compounds, applies only to inorganic lead compounds.

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

**** Data for lead (a PBT chemical) and lead compounds (a PBT chemical category), due to threshold change for 2001 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
121-75-5 *	Malathion	98	23	2,027	255	0	20,222	22,504	1,163	23,667
		99	20	5,098	5	0	0	5,103	38	5,141
		00	21	3,904	10	0	0	3,914	268	4,182
		01	22	3,849	255	5	0	4,109	505	4,614
108-31-6	Maleic anhydride	98	218	357,400	11	0	154,430	511,841	35,141	546,982
		99	217	378,798	6	0	66,449	445,253	5,986	451,239
		00	214	232,311	5	6	299	232,621	42,930	275,551
		01	212	301,869	11	0	5	301,885	45,265	347,150
109-77-3	Malononitrile	98	5	510	0	111,100	0	111,610	0	111,610
		99	5	17	6	150,985	5	151,013	163	151,176
		00	4	0	0	255,157	0	255,157	5	255,162
		01	5	5	0	26,953	0	26,958	260	27,218
12427-38-2 *	Maneb	98	7	5	0	0	0	5	2,288	2,293
		99	6	0	0	0	0	0	0	0
		00	5	10	0	0	0	10	250	260
		01	7	271	0	0	0	271	2,489	2,760
7439-96-5	Manganese	98	1,968	1,202,332	418,523	3	24,930,378	26,551,236	16,181,939	42,733,175
		99	2,008	1,182,099	287,357	5	22,566,902	24,036,363	14,237,202	38,273,565
		00	1,976	932,992	353,419	2,600	18,834,978	20,123,989	11,756,721	31,880,710
		01	1,862	904,434	165,392	0	16,332,501	17,402,327	31,582,035	48,984,362
--	Manganese compounds	98	1,661	2,153,013	6,723,093	8,621,610	518,701,498	536,199,214	50,546,158	586,745,372
		99	1,710	2,474,200	6,562,299	8,198,127	424,389,790	441,624,416	45,732,843	487,357,259
		00	1,795	2,215,706	6,863,947	10,829,146	415,959,145	435,867,944	52,112,268	487,980,212
		01	1,779	1,877,226	6,236,782	12,481,513	331,701,802	352,297,323	47,995,623	400,292,945
93-65-2 **	Mecoprop	98	10	1,150	0	0	250	1,400	3,968	5,368
		99	13	1,125	0	0	250	1,375	2,432	3,807
		00	14	659	0	0	250	909	1,113	2,022
		01	14	671	0	0	250	921	7,228	8,149
149-30-4 *	2-Mercaptobenzo-thiazole	98	39	5,792	100,823	45,000	250,250	401,865	146,951	548,816
		99	36	5,696	66,893	37,000	176,304	285,893	140,100	425,993
		00	32	4,340	35,288	10,000	166,126	215,754	223,095	438,849
		01	33	3,908	50,561	12,000	29,312	95,781	338,772	434,553
7439-97-6 *	Mercury	98	34	22,007	134	0	239,072	261,213	29,241	290,454
		99	46	20,652	133	0	100,735	121,520	21,432	142,952
		00	572	29,104.88	409.41	1,376.70	37,384.83	68,275.82	25,230.57	93,506.38
		01	537	24,698.08	341.73	460.40	31,760.89	57,261.10	76,715.67	133,976.77
--	Mercury compounds	98	23	7,557	56	0	8,971,660	8,979,273	92,650	9,071,923
		99	33	5,903	45	0	2,974,015	2,979,963	142,219	3,122,182
		00	1,055	132,538.16	2,017.96	10,336.82	3,247,666.58	3,392,559.52	829,237.21	4,221,796.73
		01	1,128	125,764.77	1,463.42	9,315.75	4,484,228.72	4,620,772.66	151,567.27	4,772,339.93
150-50-5 *	Merphos	98	1	0	0	0	0	0	0	0
		99	1	0	13	0	0	13	0	13
		00	2	0	4	0	0	4	270	274
		01	1	0	6	0	0	6	0	6
126-98-7	Methacrylonitrile	98	8	1,700	0	107,076	0	108,776	0	108,776
		99	9	1,062	1	102,418	22,932	126,413	12,387	138,800
		00	10	1,241	0	59,399	0	60,640	260	60,900
		01	9	1,245	0	51,371	0	52,616	505	53,121

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Malathion	98	1,187	0	0	0	180,176	1,841	22,039	205,243	0
	99	418	97	0	0	240,221	4,118	4,629	249,483	0
	00	215	0	0	68,367	160,786	71,538	3,892	304,798	0
	01	15	0	0	47,000	151,332	17,032	4,097	219,476	1
Maleic anhydride	98	7,607	250	3,857,500	219,433	50,715,151	1,404,589	538,016	56,742,546	12,599
	99	4,507	272	2,724,748	323,688	43,803,989	1,463,535	438,907	48,759,646	1,527
	00	5,907	0	5,226,962	404,459	37,916,665	862,882	269,203	44,686,078	796
	01	67,546	0	7,339,361	136,826	43,955,930	1,021,214	304,222	52,825,099	1,697
Malononitrile	98	0	0	0	0	336,000	0	111,214	447,214	0
	99	0	0	0	0	213,547	0	151,175	364,722	0
	00	0	0	0	0	150,447	785	255,159	406,391	0
	01	0	0	0	0	143,067	1,564	26,975	171,606	0
* Maneb	98	35	0	0	0	0	8,521	2,058	10,614	0
	99	0	0	0	0	0	10,113	2,853	12,966	0
	00	0	0	0	0	93,463	2,096	1	95,560	0
	01	11,650	0	0	0	12,886	9,902	899	35,337	595
Manganese	98	39,087,103	56,441,238	0	543	645,755	889,214	40,132,267	137,196,120	623,751
	99	42,777,882	78,596,484	0	1	202,172	526,595	36,459,507	158,562,641	18,809,964
	00	41,786,949	66,393,848	0	25	102,062	406,851	30,099,124	138,788,859	211,910
	01	13,806,776	80,575,895	0	0	119,178	274,508	25,432,758	120,209,115	68,026
Manganese compounds	98	17,416,504	48,128,615	22,153	35,980	1,919,079	5,428,320	590,587,734	663,538,385	403,227
	99	19,582,196	46,328,928	2,876	58,511	1,549,833	1,452,797	445,178,108	514,153,249	47,158,128
	00	44,283,624	49,568,223	776	51,636	3,301,004	1,357,509	473,025,650	571,588,422	20,585,670
	01	23,174,873	46,947,185	3,748	0	846,053	521,713	406,131,471	477,625,043	2,528,743
** Mecoprop	98	872	0	0	1,000	500	451	4,887	7,710	0
	99	2,611	0	0	0	12,319	632	3,654	19,216	0
	00	5,179	0	0	0	160	5,348	1,869	12,556	0
	01	4,220	0	0	0	163	4,686	7,515	16,584	0
* 2-Mercaptobenzo-thiazole	98	1,780	8,475	0	800,961	513,059	76,774	548,521	1,949,570	0
	99	207,850	50,116	0	601,890	527,221	11,170	431,762	1,830,009	0
	00	465,590	41,684	0	300,358	596,634	9,247	442,877	1,856,390	0
	01	203,818	16,712	0	93,106	560,520	210,397	273,526	1,358,079	0
* Mercury	98	455,629	37,773	0	0	4,315	1,161	281,046	779,924	0
	99	471,573	42,572	0	0	4,021	5,389	140,970	664,525	10
	00	301,682.95	70,151.61	67.73	14.01	365.23	3,054.07	90,612.65	465,948.24	4,903.71
	01	304,798.30	75,943.07	77.00	1.80	30.21	33,619.33	104,363.91	518,833.63	3,447.20
Mercury compounds	98	638,426	114,143	0	0	0	5,647	9,065,092	9,823,308	860
	99	502,455	90,252	0	0	5,900	780	3,100,706	3,700,093	17,400
	00	408,124.16	97,530.22	10.00	57.00	23,595.65	561.46	3,949,318.74	4,479,197.23	13,240.17
	01	430,298.53	85,599.27	0.00	0.00	10,832.75	4,177.47	4,768,795.72	5,299,703.74	12,566.96
* Merphos	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	155	12	13	180	0
	00	0	0	0	0	185	274	4	463	0
	01	0	0	0	0	345	0	6	351	0
Methacrylonitrile	98	0	0	0	1,891,340	500	0	108,776	2,000,616	0
	99	0	0	0	0	73,419	0	138,799	212,218	0
	00	0	0	0	0	88,594	809	60,411	149,814	45
	01	0	1,672	330	5,327	81,060	5,364	52,936	146,689	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
137-42-8	* Metham sodium	98	11	6,538	40	0	22,358	28,936	800	29,736
		99	10	9,984	40	0	110	10,134	220	10,354
		00	10	9,362	40	0	0	9,402	15	9,417
		01	12	10,531	40	0	0	10,571	0	10,571
67-56-1	* Methanol	98	2,637	190,667,969	5,791,609	17,806,788	2,406,308	216,672,674	969,073	217,641,747
		99	2,559	186,725,936	3,871,163	16,182,918	1,955,983	208,736,000	1,468,724	210,204,724
		00	2,537	181,836,899	3,746,358	18,353,232	1,817,006	205,753,495	1,282,338	207,035,833
		01	2,418	175,844,606	3,380,299	13,457,822	1,452,016	194,134,743	2,829,290	196,964,033
20354-26-1	* Methazole	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
2032-65-7	* Methiocarb	98	2	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	No reports							
		01	1	0	0	0	0	0	0	0
94-74-6	*,** Methoxone	98	6	1,255	0	0	250	1,505	3,749	5,254
		99	7	782	0	0	250	1,032	3,201	4,233
		00	6	758	0	0	250	1,008	895	1,903
		01	4	751	0	0	750	1,501	8,754	10,255
3653-48-3	*,** Methoxone, sodium salt	98	No reports							
		99	No reports							
		00	No reports							
		01	1	0	0	0	0	0	0	0
72-43-5	* Methoxychlor	98	8	12	0	0	25,474	25,486	0	25,486
		99	8	29	0	0	0	29	14	43
		00	21	59.83	0.00	0.00	2,569.00	2,628.83	31.75	2,660.58
		01	15	25.19	0.00	0.00	334.69	359.88	95.93	455.81
109-86-4	* 2-Methoxyethanol	98	66	1,020,149	16,882	51,963	400	1,089,394	968	1,090,362
		99	55	972,470	20,649	0	73,098	1,066,217	17,434	1,083,651
		00	49	886,237	22,286	0	18,241	926,764	61,915	988,679
		01	46	856,142	31,924	0	11,282	899,348	66,021	965,369
96-33-3	Methyl acrylate	98	72	270,583	761	53,244	14,000	338,588	54,255	392,843
		99	67	305,391	624	51,742	267	358,024	527,718	885,742
		00	67	320,278	294	13,670	0	334,242	26,857	361,099
		01	64	241,299	453	31,164	120,000	392,916	120,754	513,670
1634-04-4	Methyl tert-butyl ether	98	543	4,227,190	66,347	47,607	3,209	4,344,353	262,894	4,607,247
		99	499	3,772,019	121,185	20,477	6,606	3,920,287	260,753	4,181,040
		00	479	3,446,857	123,533	31,236	10,556	3,612,182	33,795	3,645,977
		01	477	3,289,087	63,575	35,962	4,255	3,392,879	23,855	3,416,734
79-22-1	Methyl chloro-carbonate	98	5	2,352	5	0	5	2,362	0	2,362
		99	7	3,234	6	0	5	3,245	162	3,407
		00	8	2,993	5	0	5	3,003	10	3,013
		01	9	3,620	5	0	5	3,630	260	3,890
101-14-4	** 4,4'-Methylenebis (2-chloroaniline)	98	24	20	0	0	0	20	0	20
		99	20	40	1	0	8,189	8,230	4,419	12,649
		00	23	15	0	0	26,154	26,169	10	26,179
		01	21	13	0	0	14,195	14,208	505	14,713

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Metham sodium	98	100	0	0	0	355	3,324	30,746	34,525	1,000
	99	9,100	0	0	0	748	16,442	10,466	36,756	100
	00	0	0	0	843	1,190	8,911	9,651	20,595	40
	01	0	0	0	259	360	6,613	10,603	17,835	0
* Methanol	98	624,345,837	13,003,938	307,586,241	130,161,321	1,079,745,342	128,628,815	218,971,546	2,502,443,040	112,046
	99	626,044,860	23,862,136	424,211,589	125,192,324	1,101,948,397	119,361,184	211,718,944	2,632,339,434	195,449
	00	597,755,128	18,685,908	373,940,816	149,172,431	1,216,448,329	131,388,712	214,469,494	2,701,860,817	259,055
	01	512,628,730	33,930,506	396,146,801	152,279,030	938,972,857	116,154,534	180,899,209	2,331,011,667	224,346
* Methazole	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Methiocarb	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	No reports								
	01	0	0	0	0	0	0	0	0	0
*,**Methoxone	98	6,670	0	0	0	0	1,301	5,417	13,388	0
	99	1,092	0	0	0	110,530	723	4,323	116,668	0
	00	3,007	0	0	0	90,180	4,208	2,280	99,675	0
	01	6,347	0	0	0	0	4,612	9,369	20,328	0
*,**Methoxone, sodium salt	98	No reports								
	99	No reports								
	00	No reports								
	01	0	0	0	0	0	0	0	0	0
* Methoxychlor	98	0	0	0	0	30,194	0	25,486	55,680	0
	99	0	0	0	0	206,422	0	43	206,465	0
	00	0.00	0.00	225.00	755.00	290,474.16	431.60	2,662.64	294,548.40	0.00
	01	0.00	0.00	569.00	1,376.00	319,545.30	231.40	12,093.69	333,815.39	0.00
* 2-Methoxyethanol	98	279,837	151,007	742,247	3,040,111	3,493,759	499,209	1,146,749	9,352,919	402
	99	711,053	200,000	1,236,963	545,620	3,845,705	496,600	1,076,305	8,112,246	0
	00	940,000	100,000	1,341,175	573,592	3,665,410	438,169	917,647	7,975,993	428
	01	470,000	0	84,334	587,705	3,884,482	210,638	903,133	6,140,292	0
Methyl acrylate	98	1,067,301	0	702,681	749,967	3,412,915	75,631	440,888	6,449,383	25,186
	99	942,001	140	545,151	655,257	2,440,430	232,465	383,057	5,198,501	498,921
	00	938,941	70	558,435	774,057	1,937,752	98,709	361,255	4,669,219	0
	01	992,232	43	2,793,395	953,548	3,020,126	31,560	395,149	8,186,053	0
Methyl tert-butyl ether	98	5,009,986	1,970,675	1,798,255	3,518,135	9,069,403	1,432,160	6,417,133	29,215,747	34,476
	99	8,459,734	136,286	2,068,570	4,482,937	21,357,151	1,290,265	3,883,367	41,678,310	303,259
	00	6,246,105	323,466	3,801,059	5,879,252	16,730,599	1,337,075	3,915,783	38,233,339	11,647
	01	9,350,579	221,280	4,066,574	5,249,715	10,815,904	2,764,744	3,348,578	35,817,374	16,030
Methyl chloro-carbonate	98	0	0	0	0	51,910	0	3,030	54,940	0
	99	0	0	0	0	213,662	0	3,213	216,875	0
	00	0	0	0	0	175,299	790	3,235	179,324	0
	01	0	0	0	0	254,399	91,383	3,137	348,919	0
** 4,4'-Methylenebis (2-chloroaniline)	98	0	0	0	4,169	0	9,787	10	13,966	0
	99	0	0	0	2,997	133,212	9,305	12,641	158,155	0
	00	0	0	0	8,910	123,238	6,402	26,168	164,718	0
	01	0	0	0	1,241	134,740	15,480	14,738	166,199	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

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Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
101-61-1	** 4,4'-Methylenebis (N,N-dimethyl) benzenamine	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	No reports							
74-95-3	Methylene bromide	98	8	46,313	0	0	0	46,313	0	46,313
		99	4	12,367	1	0	0	12,368	36	12,404
		00	5	4,585	0	0	0	4,585	32,861	37,446
		01	6	5,258	0	0	0	5,258	505	5,763
101-77-9	** 4,4'-Methylene-dianiline	98	26	9,073	5,041	51,200	0	65,314	6,867	72,181
		99	24	9,199	4,248	33,000	8	46,455	31,768	78,223
		00	23	12,908	296	30,000	8	43,212	6,550	49,762
		01	23	17,085	110	57,000	0	74,195	2,483	76,678
78-93-3	* Methyl ethyl ketone	98	2,205	46,975,314	55,944	395,669	118,437	47,545,364	1,060,022	48,605,386
		99	2,046	38,606,613	35,417	492,110	262,900	39,397,040	1,366,652	40,763,692
		00	1,977	34,449,072	40,688	250,249	127,838	34,867,847	1,019,810	35,887,657
		01	1,783	29,094,942	47,718	374,987	124,263	29,641,910	939,001	30,580,911
60-34-4	Methyl hydrazine	98	3	265	0	0	0	265	0	265
		99	6	407	0	0	0	407	195	602
		00	3	283	0	0	0	283	0	283
		01	6	399	0	0	0	399	0	399
74-88-4	Methyl iodide	98	12	65,167	45	131	1,357	66,700	329	67,029
		99	13	67,897	8	24	18,487	86,416	9,575	95,991
		00	14	71,912	22	8	1,002	72,944	74	73,018
		01	13	62,996	22	0	23,636	86,654	11,591	98,245
108-10-1	* Methyl isobutyl ketone	98	1,045	15,086,349	17,655	76,200	13,891	15,194,095	203,083	15,397,178
		99	1,006	14,403,204	19,592	79,800	48,539	14,551,135	229,493	14,780,628
		00	972	13,046,066	33,004	78,905	63,259	13,221,234	122,368	13,343,602
		01	869	10,033,115	19,790	52,205	56,684	10,161,794	11,870,197	22,031,991
624-83-9	Methyl isocyanate	98	6	507	0	0	5	512	0	512
		99	6	442	0	0	1	443	153	596
		00	5	472	0	0	0	472	0	472
		01	5	472	0	0	0	472	0	472
556-61-6	* Methyl isothio-cyanate	98	3	1,359	0	0	0	1,359	0	1,359
		99	3	1,091	0	0	0	1,091	0	1,091
		00	3	1,136	0	0	0	1,136	0	1,136
		01	3	1,079	0	0	0	1,079	0	1,079
75-86-5	2-Methyl-lacto-nitrile	98	10	12,283	0	80,698	0	92,981	147	93,128
		99	10	12,875	0	70,487	0	83,362	169	83,531
		00	8	12,011	0	160,007	0	172,018	76	172,094
		01	6	11,872	0	67,222	0	79,094	0	79,094
80-62-6	Methyl meth-acrylate	98	302	2,266,809	437,470	167,206	11,572	2,883,057	334,357	3,217,414
		99	319	2,640,069	3,344	62,000	51,564	2,756,977	532,849	3,289,826
		00	331	2,728,395	3,467	230,000	31,322	2,993,184	151,385	3,144,569
		01	324	2,566,372	2,440	189,000	64,747	2,822,559	99,258	2,921,817
924-42-5	N-Methylol-acrylamide	98	36	5,473	1,245	0	45	6,763	24,987	31,750
		99	35	6,178	1,259	0	53	7,490	3,648	11,138
		00	33	4,052	1,050	0	41	5,143	5,510	10,653
		01	32	5,571	1,141	0	33	6,745	13,206	19,951

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).
No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** 4,4'-Methylenebis (N,N-dimethyl) benzenamine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
Methylene bromide	98	1,500,000	0	0	64,300	354,774	0	46,295	1,965,369	0
	99	40	0	0	0	37,000	0	12,367	49,407	0
	00	44	0	0	0	51,376	780	37,570	89,770	0
	01	7,100	0	0	290	86,272	1,645	5,557	100,864	0
** 4,4'-Methylene-dianiline	98	2,830	0	311,271	11,793	418,954	56,581	66,591	868,020	1
	99	6,205	0	45,995	4,157	276,152	99,971	48,589	481,069	8
	00	9,920	0	30,467	1,199	14,899	69,471	48,429	174,385	0
	01	6,760	0	7,909	2	88,133	58,562	76,312	237,678	1
* Methyl ethyl ketone	98	73,514,991	21,519,094	81,005,382	74,787,749	86,399,514	13,000,816	48,944,350	399,171,896	181,577
	99	69,641,857	16,818,878	96,122,648	65,307,558	90,499,447	16,171,193	40,232,348	394,793,929	476,221
	00	62,580,803	15,829,562	99,171,052	67,188,111	85,345,303	12,076,923	36,961,450	379,153,204	398,282
	01	65,921,253	12,988,612	79,429,384	58,020,875	79,664,617	13,066,620	31,720,673	340,812,034	529,999
Methyl hydrazine	98	0	0	0	0	6,508	192	370	7,070	0
	99	0	0	0	0	131,147	5,967	707	137,821	0
	00	0	0	0	0	74,624	4,345	388	79,357	0
	01	0	0	0	136	72,923	1,361	504	74,924	0
Methyl iodide	98	0	0	0	0	184,842	31,143	66,328	282,313	420
	99	0	0	4,300	0	142,250	358	96,441	243,349	0
	00	50	0	4,900	0	131,316	65,735	71,833	273,834	99
	01	2,506	0	2,706	0	135,828	19,715	99,610	260,365	17
* Methyl isobutyl ketone	98	64,091,017	10,919,686	28,664,973	26,399,376	16,230,666	4,323,900	15,373,844	166,003,462	168,341
	99	51,922,043	11,656,778	28,147,633	25,583,720	17,786,717	4,412,499	14,819,207	154,328,597	338,868
	00	57,425,477	11,685,428	20,181,943	20,977,740	20,810,099	4,122,567	13,931,968	149,135,222	374,168
	01	58,960,266	9,571,531	21,545,735	20,539,374	18,333,606	4,210,806	22,751,089	155,912,407	527,428
Methyl isocyanate	98	0	0	0	3,450	90,771	0	497	94,718	5
	99	0	0	0	0	118,324	32	2,467	120,823	0
	00	0	0	0	0	155,129	0	471	155,600	0
	01	0	0	2	0	115,113	0	470	115,585	0
* Methyl isothio-cyanate	98	0	0	0	0	0	120	1,359	1,479	0
	99	0	0	0	48	0	72	1,091	1,211	0
	00	0	0	0	338	0	113	1,136	1,587	0
	01	0	0	0	0	0	1,422	1,079	2,501	0
2-Methyl lacto-nitrile	98	0	0	0	0	9,268	9	93,541	102,818	1
	99	0	0	0	0	108,224	41,008	83,457	232,689	0
	00	0	0	0	0	79,077	11	172,061	251,149	0
	01	0	0	0	0	50,215	6	78,626	128,847	0
Methyl meth-acrylate	98	1,546,426	58,753	2,254,439	2,736,835	4,966,709	588,108	3,227,985	15,379,255	8,246
	99	1,842,688	47,419	1,979,196	2,337,592	6,190,989	789,866	3,440,990	16,628,740	17,398
	00	1,741,478	96,940	4,385,587	2,599,061	5,650,546	803,394	3,117,511	18,394,517	1,361
	01	862,273	58,046	1,772,945	2,659,485	5,265,542	926,694	2,963,299	14,508,284	25,547
N-Methylol-acrylamide	98	0	113	0	0	12,400	7,425	31,759	51,697	99
	99	0	120	0	0	12,607	8,373	11,151	32,251	0
	00	0	0	0	24,460	36,683	14,468	10,661	86,272	0
	01	0	0	0	66,000	10,413	2,386	14,822	93,621	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
298-00-0 *	Methyl parathion	98	5	189	0	0	0	189	0	189
		99	6	15	0	0	0	15	0	15
		00	7	1	0	0	0	1	0	1
		01	7	10	0	0	0	10	201	211
109-06-8	2-Methylpyridine	98	8	3,008	0	38,900	0	41,908	813	42,721
		99	10	16,939	1	50,100	0	67,040	264	67,304
		00	11	19,846	22	24,000	0	43,868	10	43,878
		01	14	31,654	20	19,400	0	51,074	2,197	53,271
872-50-4	N-Methyl-2-pyrrolidone	98	486	3,070,838	43,231	2,865,692	99,411	6,079,172	498,719	6,577,891
		99	495	3,436,422	35,958	2,945,457	140,199	6,558,036	638,030	7,196,066
		00	495	3,208,888	19,392	2,022,037	150,160	5,400,477	926,179	6,326,656
		01	469	4,072,324	10,810	1,997,493	62,152	6,142,779	515,512	6,658,291
9006-42-2 *	Metiram	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
21087-64-9 *	Metribuzin	98	8	339	26	0	0	365	255	620
		99	10	397	68	0	1	466	250	716
		00	7	103	7	0	0	110	0	110
		01	7	269	31	0	0	300	2,636	2,936
7786-34-7 *	Mevinphos	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	No reports							
		01	No reports							
90-94-8 **	Michler's ketone	98	1	511	0	0	0	511	0	511
		99	2	869	0	0	0	869	0	869
		00	No reports							
		01	No reports							
2212-67-1 *	Molinate	98	3	1,063	113	0	0	1,176	8,305	9,481
		99	5	1,700	116	0	0	1,816	8,057	9,873
		00	4	1,585	105	0	0	1,690	3,243	4,933
		01	4	1,529	80	0	0	1,609	3,895	5,504
1313-27-5	Molybdenum trioxide	98	191	220,657	36,330	302,005	948,394	1,507,386	723,652	2,231,038
		99	194	115,098	38,305	117,120	672,703	943,226	1,295,752	2,238,978
		00	198	92,132	26,976	148,950	864,716	1,132,774	1,534,188	2,666,962
		01	191	74,943	24,759	120,500	685,897	906,099	1,206,755	2,112,854
76-15-3	Monochloropentafluoroethane (CFC-115)	98	8	83,108	5	0	0	83,113	0	83,113
		99	6	76,614	5	0	0	76,619	0	76,619
		00	5	61,449	5	0	0	61,454	0	61,454
		01	6	129,298	5	0	0	129,303	0	129,303
150-68-5 *	Monuron	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
505-60-2 **	Mustard gas	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Methyl parathion	98	0	0	0	0	0	47,000	8,531	55,531	0
	99	0	0	0	0	21,609	23,992	6,501	52,102	0
	00	0	0	0	0	62,814	11,727	1	74,542	0
	01	0	0	0	138	70,710	20,534	7	91,389	0
2-Methylpyridine	98	0	140,000	42,139	12	3	330	42,748	225,232	0
	99	0	170,000	34,963	5,110	307,656	1,475	67,342	586,546	1,000
	00	4,400	130,000	36,959	4,200	244,218	3,436	43,889	467,102	0
	01	0	57,000	20,064	4,830	238,996	13,017	65,627	399,534	20
N-Methyl-2-pyrrolidone	98	9,242,463	7,409,130	2,830,016	6,120,328	6,156,958	4,229,123	6,692,035	42,680,053	4,486
	99	7,871,219	7,424,798	5,922,795	8,429,534	5,597,757	5,104,285	7,088,394	47,438,782	462
	00	7,630,886	16,772,438	5,023,190	17,416,116	6,758,468	3,635,667	6,098,755	63,335,520	1,062
	01	6,092,953	8,020,222	9,133,347	10,428,210	5,273,935	2,998,648	6,727,154	48,674,469	2,571
* Metiram	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Metribuzin	98	0	0	0	0	4,596	48,209	140	52,945	0
	99	0	0	0	0	39,513	63,938	7,849	111,300	0
	00	0	0	0	0	24,393	21,199	7,307	52,899	0
	01	0	0	0	0	4,542	43,282	2,737	50,561	0
* Mevinphos	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	No reports								
	01	No reports								
** Michler's ketone	98	0	0	0	305	14,098	0	511	14,914	0
	99	0	0	290,000	309	11,720	86	632	302,747	0
	00	No reports								
	01	No reports								
* Molinate	98	0	0	0	0	9,646	67,166	10,483	87,295	0
	99	0	0	0	0	15,857	16,348	7,273	39,478	2,504
	00	0	0	0	0	4,226	77,036	5,508	86,770	2,504
	01	0	0	0	0	3,460	24,091	5,602	33,153	11
Molybdenum trioxide	98	3,589,437	2,925,092	0	0	175,000	526,540	3,284,148	10,500,217	110
	99	3,286,213	1,785,484	511	46,400	99,854	323,317	2,597,038	8,138,817	1,890
	00	1,720,245	2,326,702	0	21,023	59,784	178,193	2,726,202	7,032,149	90,313
	01	1,852,394	2,252,419	0	10	65,292	344,786	2,275,306	6,790,207	24,489
Monochloropenta-fluoroethane (CFC-115)	98	2,000	36,230	0	0	3,137	258	81,597	123,222	1,512
	99	0	34,344	0	0	4,683	0	39,319	78,346	37,300
	00	8,013	2,348	0	0	4,129	0	61,454	75,944	0
	01	0	5,752	0	0	180,668	0	129,303	315,723	95
* Monuron	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** Mustard gas	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
88671-89-0 *	Myclobutanil	98	3	1,000	0	0	0	1,000	0	1,000
		99	5	1,000	0	0	0	1,000	0	1,000
		00	6	1,000	0	0	0	1,000	0	1,000
		01	3	0	0	0	0	0	0	0
142-59-6 *	Nabam	98	6	0	4,864	0	0	4,864	0	4,864
		99	4	0	0	0	0	0	0	0
		00	5	0	0	0	0	0	0	0
		01	7	0	0	0	0	0	0	0
300-76-5 *	Naled	98	1	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	2	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	10	10
91-20-3 *	Naphthalene	98	774	3,516,555	34,520	191,682	1,273,506	5,016,263	963,317	5,979,580
		99	761	2,719,839	39,020	166,059	145,114	3,070,032	744,883	3,814,915
		00	750	2,361,365	48,939	205,934	131,729	2,747,967	329,508	3,077,475
		01	765	2,002,896	43,362	161,210	42,768	2,250,236	353,136	2,603,372
134-32-7 **	alpha-Naphthyl-amine	98	3	0	0	0	0	0	0	0
		99	5	7	1	0	0	8	164	172
		00	4	0	0	0	0	0	10	10
		01	4	0	0	0	0	0	260	260
91-59-8 **	beta-Naphthyl-amine	98	1	0	0	0	0	0	0	0
		99	1	2	1	0	0	3	5	8
		00	2	5	0	0	0	5	10	15
		01	2	5	0	0	0	5	260	265
7440-02-0 **	Nickel	98	2,349	752,671	30,987	129,812	5,281,714	6,195,183	7,718,987	13,914,170
		99	2,364	785,393	26,388	16,939	4,441,910	5,270,630	7,379,592	12,650,221
		00	2,362	653,640	25,266	16,562	1,998,680	2,694,148	6,455,462	9,149,609
		01	2,267	381,098	20,962	22,669	2,480,253	2,904,982	7,372,304	10,277,286
--	Nickel compounds	98	1,397	1,114,973	426,105	483,694	56,715,832	58,740,604	11,375,876	70,116,479
		99	1,412	1,180,455	246,927	391,010	56,000,381	57,818,773	10,851,863	68,670,636
		00	1,365	1,046,149	232,291	735,452	55,779,849	57,793,740	11,941,776	69,735,516
		01	1,330	1,004,693	244,846	980,689	50,984,105	53,214,334	13,753,100	66,967,433
--	Nicotine and salts	98	33	325,885	706	0	0	326,591	287,721	614,312
		99	37	286,702	586	0	0	287,288	759,322	1,046,610
		00	40	306,152	840	0	0	306,992	215,116	522,108
		01	35	437,274	950	0	215,914	654,138	284,733	938,871
1929-82-4 *	Nitrapyrin	98	3	1	0	0	0	1	0	1
		99	5	1	0	0	0	1	0	1
		00	6	1	0	0	0	1	0	1
		01	5	1	0	0	0	1	0	1
--	Nitrate compounds	98	1,717	376,963	221,465,000	53,125,133	12,251,510	287,218,606	11,016,996	298,235,602
		99	1,888	255,102	239,581,607	46,743,415	13,490,681	300,070,805	11,213,979	311,284,784
		00	1,966	337,285	238,407,195	57,203,694	13,116,005	309,064,179	10,161,428	319,225,607
		01	1,959	515,899	192,795,905	36,867,512	13,506,554	243,685,870	14,174,527	257,860,397
7697-37-2 *	Nitric acid	98	2,005	2,747,086	60,651	24,170,260	233,416	27,211,413	1,149,513	28,360,926
		99	1,955	2,791,187	60,181	22,810,609	273,558	25,935,535	8,070,369	34,005,904
		00	1,945	2,305,357	51,558	19,491,764	406,830	22,255,509	8,385,274	30,640,783
		01	1,847	1,804,386	86,022	13,177,641	452,403	15,520,452	3,682,415	19,202,867

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Myclobutanol	98	0	0	0	0	0	794	243	1,037	0
	99	0	0	0	0	0	2,116	455	2,571	0
	00	0	0	0	0	0	2,602	86	2,688	0
	01	0	0	0	0	0	0	0	0	0
* Nabam	98	0	0	192	0	7,352	0	4,864	12,408	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	7,592	7,592	0
* Naled	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	1,124	0	6	1,130	0
* Naphthalene	98	8,738,037	1,023,246	7,042,652	24,418,318	8,873,921	1,118,012	4,973,574	56,187,760	138,735
	99	14,208,353	1,106,053	74,518,363	3,231,854	9,068,977	816,077	3,750,745	106,700,422	43,123
	00	13,124,448	6,623,950	8,374,093	2,633,914	15,450,426	447,854	3,103,251	49,757,936	15,323
	01	6,907,847	8,243,628	16,521,044	15,458,947	7,385,166	466,623	2,594,940	57,578,195	33,328
** alpha-Naphthyl-amine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	243,339	0	165	243,504	0
	00	0	0	0	0	191,684	800	5	192,489	0
	01	0	0	330	1,491	173,649	75	37	175,582	0
** beta-Naphthyl-amine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	118,000	0	3	118,003	0
	00	0	0	0	0	112,279	740	6	113,025	0
	01	0	0	330	1,491	150,247	83	44	152,195	0
** Nickel	98	38,440,954	84,485,333	38,720	1,899	327,510	550,080	13,712,972	137,557,469	10,591
	99	29,054,871	87,627,293	0	575	914,321	541,136	12,208,358	130,346,554	172,606
	00	41,211,781	86,480,252	106,100	24,816	1,696,016	398,013	9,850,692	139,767,669	14,307
	01	30,643,467	83,547,785	0	5	318,104	214,333	11,090,398	125,814,093	457,278
** Nickel compounds	98	6,153,217	29,075,141	5,035	357	838,244	871,910	70,169,028	107,112,932	715,029
	99	7,169,903	31,190,172	2,900	27,128	691,587	901,091	63,702,159	103,684,940	5,648,507
	00	6,791,878	29,216,031	7,493	3,406	745,548	1,017,895	66,510,589	104,292,841	3,438,336
	01	5,337,174	24,673,257	5,482	3,040	615,586	349,802	67,199,326	98,183,667	1,182,707
Nicotine and salts	98	0	7,611	0	0	976,855	645,409	621,919	2,251,794	8,449
	99	2,877	4,692	0	0	1,410,888	541,900	548,180	2,508,537	0
	00	2,662	39,198	0	3,000	1,370,252	549,964	520,278	2,485,354	0
	01	2,817	12,896	0	0	1,007,188	503,254	636,853	2,163,008	0
* Nitrapyrin	98	0	0	0	0	0	140	1	141	0
	99	0	0	0	0	0	140	1	141	0
	00	0	0	0	0	0	534	1	535	0
	01	0	0	0	0	0	0	1	1	316
Nitrate compounds	98	117,904,731	2,204,886	0	59,241	113,021,088	141,052,646	313,807,358	688,049,950	128,327
	99	98,650,089	1,875,622	0	55,902	123,363,927	141,649,130	337,793,619	703,388,289	563,997
	00	97,381,231	1,657,179	0	39,820	156,075,603	150,138,721	355,638,663	760,931,217	542,319
	01	83,215,827	786,458	0	71,975	166,171,227	178,880,408	272,004,175	701,130,070	846,635
* Nitric acid	98	49,798,305	3,137,082	0	13,678	320,643,285	17,999,030	28,530,811	420,122,191	27,515
	99	49,505,705	2,822,384	14,434	0	344,600,379	15,672,639	34,343,072	446,958,613	4,566
	00	58,106,020	1,782,548	0	324	360,356,424	15,515,079	32,951,286	468,711,681	165,204
	01	64,955,578	1,947,737	0	3,383	309,588,845	13,266,297	21,919,421	411,681,261	500,036

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
139-13-9	** Nitrotriacetic acid	98	15	1,407	10,202	2,400	11,617	25,626	0	25,626
		99	12	600	6,320	1,600	0	8,520	0	8,520
		00	11	651	8	2,200	0	2,859	0	2,859
		01	12	625	35	2,100	17,975	20,735	0	20,735
100-01-6	p-Nitroaniline	98	5	12,058	0	0	0	12,058	500	12,558
		99	5	11,977	0	0	7,644	19,621	4,119	23,740
		00	6	3,933	0	0	0	3,933	0	3,933
		01	7	2,557	0	0	9,959	12,516	4,850	17,366
99-59-2	5-Nitro-o-anisidine	98	1	10	5	0	0	15	0	15
		99	1	10	5	0	0	15	0	15
		00	1	10	5	0	0	15	0	15
		01	1	10	5	0	0	15	0	15
98-95-3	*,** Nitrobenzene	98	27	81,297	1,152	422,619	62	505,130	12,383	517,513
		99	34	77,544	372	211,347	65	289,328	63,908	353,236
		00	30	41,934	120	297,084	18	339,156	6,721	345,877
		01	33	40,716	238	302,988	6,644	350,586	19,235	369,821
92-93-3	*,** 4-Nitrobiphenyl	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
1836-75-5	*,** Nitrofen	98	No reports							
		99	No reports							
		00	1	505	0	0	0	505	5,500	6,005
		01	1	505	0	0	0	505	5,500	6,005
51-75-2	** Nitrogen mustard	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
55-63-0	Nitroglycerin	98	22	12,814	4,713	0	0	17,527	266	17,793
		99	32	15,510	1	0	0	15,511	1,125	16,636
		00	29	154,372	1	0	0	154,373	2	154,375
		01	45	123,363	0	0	0	123,363	9	123,372
88-75-5	2-Nitrophenol	98	6	174	35	0	0	209	0	209
		99	6	52	48	0	0	100	0	100
		00	6	84	56	0	0	140	0	140
		01	6	37	123	0	0	160	505	665
100-02-7	* 4-Nitrophenol	98	8	890	0	0	0	890	500	1,390
		99	10	1,068	1	0	21,924	22,993	4,272	27,265
		00	8	1,219	16	0	0	1,235	5	1,240
		01	7	1,202	303	0	11,945	13,450	5,990	19,440
79-46-9	*,** 2-Nitropropane	98	9	23,838	558	0	0	24,396	192	24,588
		99	6	20,942	286	0	0	21,228	1,146	22,374
		00	7	18,970	229	0	0	19,199	1,157	20,356
		01	7	17,283	231	0	0	17,514	1,562	19,076
924-16-3	** N-Nitrosodi-n-butylamine	98	1	0	0	0	0	0	0	0
		99	1	2	1	0	0	3	4	7
		00	2	5	0	0	0	5	10	15
		01	2	5	0	0	0	5	4,505	4,510

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** Nitrotriacetic acid	98	0	0	0	0	1,070,287	27,440	25,626	1,123,353	0
	99	0	0	0	0	727,119	142	8,520	735,781	0
	00	0	0	0	0	577,244	3,138	2,859	583,241	0
	01	0	0	0	0	370,000	3,726	20,735	394,461	0
p-Nitroaniline	98	0	0	0	0	28,500	169,427	12,403	210,330	0
	99	0	0	0	0	1,249	86,550	23,990	111,789	0
	00	9,570	0	32,495	85	0	9,411	3,933	55,494	0
	01	0	0	30,392	73	2,063	2,344	18,337	53,209	0
5-Nitro-o-anisidine	98	0	0	0	0	0	0	1	1	0
	99	0	0	0	0	0	0	1	1	0
	00	0	0	0	0	0	0	1	1	0
	01	0	0	0	0	0	0	1	1	0
*,** Nitrobenzene	98	419,863	0	1,847,505	1,254,122	2,521,686	1,056,242	514,694	7,614,112	7,023
	99	13,396,471	1	1,773,033	1,682,042	4,245,916	2,335,225	378,928	23,811,616	9,098
	00	796,670	0	2,727,811	866,548	1,962,685	1,552,466	338,377	8,244,557	763
	01	2,284,240	0	1,818,676	482,301	3,672,327	2,031,262	433,117	10,721,923	684
*,** 4-Nitrobiphenyl	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
*,** Nitrofen	98	No reports								
	99	No reports								
	00	0	200	0	0	0	0	0	200	0
	01	0	200	0	0	0	0	0	200	0
** Nitrogen mustard	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
Nitroglycerin	98	18,000	15,198	0	21,685	270,572	134,991	20,617	481,063	0
	99	33,366	790	0	32,958	6,729,204	59,510	15,761	6,871,589	98
	00	6,967	0	0	27,266	1,886,871	72,328	156,002	2,149,434	540
	01	6,107	89,692	0	18,237	1,073,598	103,764	123,385	1,414,783	255
2-Nitrophenol	98	0	0	82,000	0	413,946	24,000	214	520,160	0
	99	0	0	65,000	0	324,516	18,545	101	408,162	0
	00	0	0	120,000	0	670,000	18,034	142	808,176	0
	01	0	0	98,000	0	186,095	12,406	316	296,817	0
* 4-Nitrophenol	98	0	0	0	591,228	170,944	633,084	1,040	1,396,296	0
	99	0	0	10,300	0	285,138	526,831	27,239	849,508	0
	00	0	0	0	0	282,248	68,535	1,212	351,995	0
	01	0	0	26,682	1,490	326,936	240	20,152	375,500	0
*,** 2-Nitropropane	98	0	0	9,835	519,251	214,424	42,968	24,588	811,066	0
	99	0	0	90	0	893,670	65	22,345	916,170	0
	00	0	0	69	0	896,218	957	19,761	917,005	0
	01	0	0	458	1,124	781,943	134	18,424	802,083	0
** N-Nitrosodi-n-butylamine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	32,000	0	2	32,002	0
	00	0	0	0	0	45,069	959	8	46,036	0
	01	0	0	330	1,267	64,286	4,676	4,482	75,041	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
55-18-5	** N-Nitrosodiethylamine	98	2	2	0	0	0	2	0	2
		99	3	30	1	0	7,640	7,671	4,123	11,794
		00	3	5	0	0	0	5	10	15
		01	3	234	0	0	9,959	10,193	7,347	17,540
62-75-9	** N-Nitrosodimethylamine	98	1	129	0	0	0	129	0	129
		99	1	5	0	0	0	5	0	5
		00	1	0	0	0	0	0	0	0
		01	No reports							
86-30-6	N-Nitrosodiphenylamine	98	5	75	0	0	0	75	0	75
		99	6	33	0	0	0	33	0	33
		00	6	49	0	0	0	49	0	49
		01	6	17	0	0	0	17	0	17
156-10-5	p-Nitrosodiphenylamine	98	2	24	0	0	0	24	0	24
		99	2	24	0	0	0	24	0	24
		00	2	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
621-64-7	** N-Nitrosodipropylamine	98	2	879	0	0	0	879	1,500	2,379
		99	1	5	0	0	0	5	0	5
		00	3	2	0	0	0	2	0	2
		01	3	6	0	0	0	6	505	511
759-73-9	** N-Nitroso-N-ethylurea	98	1	0	0	0	0	0	0	0
		99	3	7	1	0	0	8	161	169
		00	3	0	0	0	0	0	5	5
		01	2	0	0	0	0	0	255	255
684-93-5	*,** N-Nitroso-N-methylurea	98	1	0	0	0	0	0	0	0
		99	3	7	1	0	0	8	162	170
		00	3	0	0	0	0	0	5	5
		01	2	0	0	0	0	0	260	260
4549-40-0	** N-Nitrosomethylvinylamine	98	No reports							
		99	2	4	0	0	0	4	153	157
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
59-89-2	** N-Nitrosomorpholine	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
16543-55-8	** N-Nitrososonicotinine	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
100-75-4	** N-Nitrosopiperidine	98	1	0	0	0	0	0	0	0
		99	3	38	1	0	9,557	9,596	5,159	14,755
		00	3	5	0	5	0	10	10	20
		01	2	286	0	0	12,453	12,739	6,565	19,304
99-55-8	5-Nitro-o-toluidine	98	3	0	0	0	0	0	0	0
		99	5	27	0	0	7,644	7,671	4,139	11,810
		00	5	0	0	0	0	0	5	5
		01	5	229	0	0	9,959	10,188	5,350	15,538

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

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** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** N-Nitrosodiethylamine	98	0	0	0	0	23,708	0	2	23,710	0
	99	0	0	0	0	54,242	0	11,791	66,033	0
	00	0	0	0	0	65,985	801	10	66,796	0
	01	0	0	0	0	60,297	7,383	23,392	91,072	0
** N-Nitrosodimethylamine	98	0	0	0	0	352,946	0	129	353,075	0
	99	0	0	0	0	3,978	40	1	4,019	0
	00	0	0	0	0	0	0	0	0	0
	01	No reports								
N-Nitrosodiphenylamine	98	0	0	0	340,000	158,471	34,298	75	532,844	0
	99	0	0	0	410,000	414,689	35,279	28	859,996	0
	00	0	0	45,500	490,000	379,039	20,662	47	935,248	0
	01	0	0	75,000	350,100	188,674	37,568	17	651,359	0
p-Nitrosodiphenylamine	98	0	0	9,300	16,500	0	0	24	25,824	0
	99	0	0	10,000	18,000	0	0	24	28,024	0
	00	0	0	9,100	16,200	0	0	0	25,300	0
	01	0	0	4,800	8,600	0	0	0	13,400	0
** N-Nitrosodipropylamine	98	0	0	25,000	1,500	377,946	0	729	405,175	0
	99	0	0	0	0	3,605	36	1	3,642	0
	00	0	0	30,275	79	12,299	771	2	43,426	0
	01	0	0	28,647	1,402	61,326	73	441	91,889	0
** N-Nitroso-N-ethylurea	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	161,322	0	164	161,486	0
	00	0	0	0	0	130,914	781	2	131,697	0
	01	0	0	0	0	98,088	1	13	98,102	0
*,** N-Nitroso-N-methylurea	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	162,480	0	165	162,645	0
	00	0	0	0	0	133,534	789	1	134,324	0
	01	0	0	0	0	97,482	1	13	97,496	0
** N-Nitrosomethylvinylamine	98	No reports								
	99	0	0	0	0	94,353	0	157	94,510	0
	00	0	0	0	0	67,878	0	0	67,878	0
	01	0	0	0	0	38,475	0	0	38,475	0
** N-Nitrosomorpholine	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** N-Nitrosomorpholine	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
** N-Nitrosopiperidine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	73,025	0	14,753	87,778	0
	00	0	0	0	0	68,660	752	12	69,424	0
	01	0	0	0	0	72,064	527	20,546	93,137	0
5-Nitro-o-toluidine	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	71,394	0	11,808	83,202	0
	00	0	0	0	733	58,203	79	2	59,017	0
	01	0	0	0	0	72,580	527	16,536	89,643	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
27314-13-2 *	Norflurazon	98	4	15	76	0	229	320	14,850	15,170
		99	2	5	2	0	4	11	1,850	1,861
		00	3	0	0	0	0	0	14,462	14,462
		01	3	0	0	0	0	0	24,363	24,363
2234-13-1	Octachloro-naphthalene	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
29082-74-4 ***	Octachlorostyrene	98	NR	NR	NR	NR	NR	NR	NR	NR
		99	NR	NR	NR	NR	NR	NR	NR	NR
		00	4	0.00	0.00	0.00	148.30	148.30	436.90	585.20
		01	4	0.00	0.12	0.00	193.00	193.12	508.60	701.72
19044-88-3 *	Oryzalin	98	4	103	0	0	0	103	0	103
		99	5	53	0	0	0	53	0	53
		00	4	24	0	0	0	24	0	24
		01	4	5	0	0	0	5	500	505
20816-12-0	Osmium tetroxide	98	No reports							
		99	1	0	0	0	0	0	0	0
		00	1	0	5	0	0	5	0	5
		01	1	0	5	0	0	5	0	5
301-12-2 *	Oxydemeton methyl	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
19666-30-9 *	Oxydiazon	98	5	1,160	0	0	0	1,160	750	1,910
		99	6	770	0	0	0	770	2,207	2,977
		00	6	900	0	0	0	900	1,502	2,402
		01	5	835	0	0	0	835	0	835
42874-03-3 *	Oxyfluorfen	98	2	10	0	0	0	10	0	10
		99	3	1,305	0	0	17,690	18,995	0	18,995
		00	4	10	0	0	16,113	16,123	1,297	17,420
		01	2	10	0	0	0	10	3,500	3,510
10028-15-6	Ozone	98	38	657,048	0	0	0	657,048	0	657,048
		99	39	631,964	0	0	5	631,969	0	631,969
		00	46	842,039	0	0	0	842,039	0	842,039
		01	41	765,489	0	0	0	765,489	0	765,489
123-63-7	Paraldehyde	98	4	26	0	0	0	26	0	26
		99	6	54	72	0	0	126	268	394
		00	6	288	5	0	0	293	10	303
		01	7	31	5	0	0	36	760	796
1910-42-5 *	Paraquat dichloride	98	3	500	0	0	0	500	0	500
		99	3	0	0	0	0	0	0	0
		00	3	0	0	0	0	0	0	0
		01	4	1	0	0	66,000	66,001	0	66,001
56-38-2 *	Parathion	98	2	0	0	0	0	0	85	85
		99	3	0	0	0	0	0	28	28
		00	3	0	0	0	0	0	0	0
		01	3	2	0	0	0	2	620	622

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year. NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** PBT Chemical added to list for 2000 reporting year. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Norflurazon	98	0	0	0	0	12,700	59,780	340	72,820	0
	99	0	0	0	0	0	46,850	15	46,865	0
	00	0	0	0	0	0	14,900	14,900	29,800	0
	01	0	0	0	0	0	505	24,868	25,373	0
Octachloronaphthalene	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
*** Octachlorostyrene	98	NR	NR	NR	NR	NR	NR	NR	NR	NR
	99	NR	NR	NR	NR	NR	NR	NR	NR	NR
	00	0.00	0.00	0.00	0.00	19.00	0.00	585.20	604.20	0.00
	01	0.00	0.00	0.00	0.00	8.00	0.00	701.72	709.72	0.00
* Oryzalin	98	0	0	0	0	22,972	42,000	98	65,070	0
	99	0	0	0	0	19,518	67,000	48	86,566	0
	00	0	0	0	11,000	0	33	24	11,057	0
	01	0	0	0	0	40,962	0	210	41,172	0
Osmium tetroxide	98	No reports								
	99	0	0	0	0	37,606	0	0	37,606	0
	00	0	0	0	0	47,912	0	9	47,921	0
	01	0	0	0	0	28,340	0	0	28,340	0
* Oxydemeton methyl	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
* Oxydiazon	98	28,500	0	0	0	960	287	900	30,647	0
	99	31,000	0	0	0	1,000	4,092	4,641	40,733	0
	00	36,300	0	0	0	780	440	5,393	42,913	0
	01	2,760	0	0	0	910	66	760	4,496	0
* Oxyfluorfen	98	0	0	0	0	2,800	2,900	1	5,701	0
	99	0	0	0	0	1,300	15,599	17,692	34,591	0
	00	0	0	0	0	1,800	14,411	16,115	32,326	0
	01	0	0	0	0	1,840	13,043	2	14,885	0
Ozone	98	0	0	0	0	2,918,204	0	655,954	3,574,158	0
	99	0	0	0	0	2,629,193	0	662,836	3,292,029	0
	00	0	0	0	0	3,155,398	0	873,392	4,028,790	0
	01	0	0	0	0	2,797,687	0	764,678	3,562,365	0
Paraldehyde	98	0	0	18,414	7	140,002	0	26	158,449	0
	99	0	0	43,482	0	409,965	8	391	453,846	0
	00	0	0	26,172	5	414,255	862	57	441,351	0
	01	0	0	29,640	1,494	375,674	77	162	407,047	0
* Paraquat dichloride	98	0	0	0	0	0	6	112	118	0
	99	0	0	0	0	0	10	0	10	0
	00	0	0	0	0	0	10	0	10	0
	01	0	0	0	0	0	10	66,000	66,010	0
* Parathion	98	0	0	0	0	32,638	0	85	32,723	0
	99	0	0	0	0	69,806	0	28	69,834	0
	00	0	0	0	0	64,761	36	0	64,797	0
	01	0	0	0	1,258	82,292	1,022	2	84,574	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** PBT Chemical added to list for 2000 reporting year. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
1114-71-2 *	Pebulate	98	2	520	98	0	0	618	1,501	2,119
		99	1	500	0	0	0	500	500	1,000
		00	1	500	0	0	0	500	500	1,000
		01	1	0	0	0	0	0	0	0
40487-42-1 *	Pendimethalin	98	9	3,003	15	0	5	3,023	683	3,706
		99	11	2,468	40	0	5	2,513	5,762	8,275
		00	18	733.54	329.00	0.00	20,675.00	21,737.54	9,555.00	31,292.54
		01	18	3,573.66	195.00	0.00	29,017.00	32,785.66	46,702.21	79,487.87
608-93-5 ****	Pentachloro-benzene	98	NR	NR	NR	NR	NR	NR	NR	NR
		99	NR	NR	NR	NR	NR	NR	NR	NR
		00	20	162.54	173.85	11.90	2,622.80	2,971.09	355.00	3,326.09
		01	17	69.10	132.70	1.48	2,349.90	2,553.18	206.32	2,759.50
76-01-7 *	Pentachloroethane	98	10	1,610	0	0	0	1,610	0	1,610
		99	10	808	2	0	0	810	244	1,054
		00	11	1,352	0	0	0	1,352	512	1,864
		01	11	669	4	0	519	1,192	2,459	3,651
87-86-5 *,**	Pentachlorophenol	98	44	4,630	1,307	250	240,250	246,437	25,058	271,495
		99	48	1,306	1,277	5	98,837	101,425	2,381	103,806
		00	45	471	1,206	250	25	1,952	1,961	3,913
		01	38	459	1,335	5	24	1,823	2,872	4,695
57-33-0	Pentobarbital sodium	98	1	0	0	0	0	0	0	0
		99	No reports							
		00	No reports							
		01	1	28	0	0	0	28	0	28
79-21-0 *	Peracetic acid	98	26	8,330	5	0	1,150	9,485	0	9,485
		99	27	13,557	755	0	1,095	15,407	0	15,407
		00	31	8,677	5	0	1,036	9,718	5	9,723
		01	27	7,254	5	0	877	8,136	8	8,144
594-42-3 *	Perchloromethyl mercaptan	98	3	894	0	0	0	894	0	894
		99	3	899	0	0	0	899	0	899
		00	3	820	0	0	0	820	0	820
		01	3	667	0	0	0	667	0	667
52645-53-1 *	Permethrin	98	19	4,435	7	0	0	4,442	17,549	21,991
		99	22	2,593	0	0	31,000	33,593	1,013	34,606
		00	21	1,581	7	0	0	1,588	1,000	2,588
		01	22	1,372	0	0	0	1,372	1,000	2,372
85-01-8	Phenanthrene	98	84	265,280	216	0	77,577	343,073	80,865	423,938
		99	97	262,631	174	0	74,813	337,618	118,360	455,978
		00	103	119,998	878	0	15,913	136,789	28,915	165,704
		01	109	69,125	934	0	4,460	74,519	74,625	149,144
108-95-2 *	Phenol	98	822	9,012,783	61,661	1,921,347	503,654	11,499,445	1,246,969	12,746,414
		99	803	7,485,780	45,961	1,843,177	1,438,729	10,813,647	1,312,520	12,126,167
		00	789	7,512,640	46,839	2,469,354	216,260	10,245,093	1,047,719	11,292,812
		01	732	6,750,142	47,188	1,349,277	179,837	8,326,444	1,286,712	9,613,156
26002-80-2 *	Phenothrin	98	2	0	0	0	0	0	0	0
		99	3	0	0	0	0	0	0	0
		00	3	10	0	0	0	10	0	10
		01	3	10	0	0	0	10	0	10

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year. NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

**** PBT Chemical added to list for 2000 reporting year. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Pebulate	98	0	0	0	0	89	2,809	1,523	4,421	0
	99	0	0	0	0	0	0	680	680	0
	00	0	0	0	0	0	0	600	600	0
	01	0	0	0	0	0	0	0	0	0
* Pendimethalin	98	2,000	0	0	0	246,483	104,946	2,658	356,087	0
	99	6,000	0	0	0	182,171	64,385	4,670	257,226	0
	00	4,000.00	0.00	0.00	0.00	656,145.00	19,602.00	31,358.55	711,105.55	0.00
	01	6,000.00	0.00	0.00	0.00	390,997.29	34,656.00	71,546.00	503,199.29	0.00
****Pentachloro-benzene	98	NR	NR	NR	NR	NR	NR	NR	NR	NR
	99	NR	NR	NR	NR	NR	NR	NR	NR	NR
	00	40.00	401.00	0.00	0.00	342,267.00	1,390.81	3,324.28	347,423.09	2.35
	01	8.00	770.00	330.00	1,491.00	445,846.25	1,307.52	2,759.93	452,512.70	3,073.84
* Pentachloroethane	98	620,000	0	0	134,821	5,054,747	107,405	1,611	5,918,584	0
	99	670,000	16,407	0	0	5,849,325	43,357	980	6,580,069	168
	00	340,000	5,796	617,910	0	15,373,974	62,072	1,922	16,401,674	8,700
	01	545,255	0	430,786	0	8,054,885	53,431	3,564	9,087,921	48,000
*,**Pentachlorophenol	98	76,838	227,808	2,682	4,416	109,941	127,933	268,037	817,655	5,813
	99	19,440	4,773	41,837	2,928	329,450	155,002	113,742	667,172	3,760
	00	10,766	13,933	66,872	4,078	280,750	69,743	3,017	449,159	6,285
	01	3,215	280,960	23,695	5,979	225,515	56,242	3,727	599,333	5,210
Pentobarbital sodium	98	0	0	0	0	0	0	0	0	0
	99	No reports								
	00	No reports								
	01	9,726	0	0	6,507	0	0	28	16,261	0
* Peracetic acid	98	0	0	0	0	47,536	17,732	9,971	75,239	0
	99	0	0	0	0	20,329	5,860	27,481	53,670	0
	00	0	0	0	0	107,738	20,424	25,186	153,348	100
	01	0	0	0	0	93,078	44,622	19,243	156,943	0
* Perchloromethyl mercaptan	98	0	0	0	0	120,000	15	891	120,906	0
	99	0	0	0	0	112,000	8	898	112,906	0
	00	0	0	0	0	156,000	6	820	156,826	0
	01	0	0	0	0	113,000	5	666	113,671	0
* Permethrin	98	0	0	0	0	10,815	22,529	5,379	38,723	0
	99	0	0	0	0	26,248	17,999	35,618	79,865	0
	00	0	0	0	0	14,147	22,937	1,672	38,756	0
	01	1,900	0	0	0	45,790	12,931	1,493	62,114	0
Phenanthrene	98	658,266	98,267	53,336	199,055	761,416	170,624	368,905	2,309,869	7,312
	99	986,986	83,569	10,620	250,220	391,091	112,071	470,389	2,304,946	10
	00	830,954	534,880	101,300	140,531	972,018	142,200	162,160	2,884,043	10
	01	818,894	742,926	74,575	89,675	205,256	36,390	153,392	2,121,108	1,513
* Phenol	98	42,421,575	164,242	32,544,546	9,287,496	31,115,699	5,263,833	12,409,386	133,206,777	49,058
	99	41,867,407	593,078	30,396,093	4,073,634	30,640,935	6,394,000	10,860,463	124,825,610	7,038
	00	58,250,338	1,025,878	23,271,768	7,653,198	31,248,592	5,937,139	11,467,821	138,854,734	1,860
	01	46,844,797	306,172	24,967,736	12,727,862	28,671,895	5,169,844	9,307,015	127,995,321	18,305
* Phenothrin	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	5,031	20	5,051	0
	01	0	0	0	0	0	19,497	20	19,517	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

**** PBT Chemical added to list for 2000 reporting year. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
95-54-5	1,2-Phenylene-diamine	98	9	565	51	0	0	616	1,641	2,257
		99	8	518	30	0	4,033	4,581	7	4,588
		00	9	548	118	0	3,497	4,163	0	4,163
		01	9	584	68	0	10	662	0	662
108-45-2	1,3-Phenylene-diamine	98	25	8,915	722	0	18,668	28,305	20,559	48,864
		99	21	2,358	237	0	31,534	34,129	37	34,166
		00	22	3,093	179	0	38,980	42,252	2,138	44,390
		01	19	4,332	535	0	77	4,944	6,500	11,444
106-50-3	p-Phenylene-diamine	98	12	1,517	114	0	0	1,631	1,816	3,447
		99	11	1,781	184	0	1,100	3,065	2,978	6,043
		00	11	9,051	93	10	954	10,108	2,566	12,674
		01	10	5,483	272	0	3	5,758	1,500	7,258
615-28-1	1,2-Phenylene-diamine dihydrochloride	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
624-18-0	1,4-Phenylene-diamine dihydrochloride	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
90-43-7	* 2-Phenylphenol	98	15	23	20	0	250	293	1,363	1,656
		99	20	14	10	0	253	277	1,755	2,032
		00	17	260	10	0	0	270	1,552	1,822
		01	12	4	0	0	0	4	1,511	1,515
57-41-0	** Phenytoin	98	2	4	0	0	0	4	7,653	7,657
		99	1	1	0	0	0	1	9,400	9,401
		00	1	255	0	0	0	255	12,600	12,855
		01	1	255	0	0	0	255	9,377	9,632
75-44-5	Phosgene	98	35	20,247	0	0	3	20,250	0	20,250
		99	35	16,676	0	0	0	16,676	93	16,769
		00	31	15,950	250	0	0	16,200	0	16,200
		01	30	16,133	250	0	0	16,383	0	16,383
7803-51-2	* Phosphine	98	5	38,368	0	0	0	38,368	0	38,368
		99	8	54,388	0	0	0	54,388	92	54,480
		00	6	85,227	0	0	0	85,227	0	85,227
		01	6	21,377	0	0	0	21,377	0	21,377
7723-14-0	* Phosphorus (yellow or white)	98	54	23,604	3,761	0	2,273,118	2,300,483	8,205	2,308,688
		99	55	85,123	4,995	0	2,715,468	2,805,586	6,847	2,812,433
		00	48	2,919	3,584	0	979,338	985,841	11,912	997,753
		01	60	55,718	3,137	0	583,654	642,509	13,344	655,853
85-44-9	Phthalic anhydride	98	169	303,624	193	31,039	0	334,856	3,828,154	4,163,010
		99	160	277,065	68	0	7,940	285,073	2,961,063	3,246,136
		00	166	244,069	250	5	81,509	325,833	3,247,093	3,572,926
		01	159	254,605	0	755	321,927	577,287	1,033,101	1,610,388
1918-02-1	* Picloram	98	2	460	380,006	0	0	380,466	0	380,466
		99	2	2,800	133,010	0	0	135,810	0	135,810
		00	2	2,388	150,500	0	9,000	161,888	0	161,888
		01	2	2,361	230,782	0	0	233,143	0	233,143

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
1,2-Phenylene-diamine	98	0	0	0	0	176,437	50,690	2,245	229,372	0
	99	0	0	0	0	178,620	47,156	4,588	230,364	0
	00	0	0	182,587	0	181,524	48,077	4,163	416,351	0
	01	0	0	124,402	0	153,497	55,750	661	334,310	1
1,3-Phenylene-diamine	98	650	114,558	0	2,300	687,041	1,734,329	46,426	2,585,304	1,520
	99	760	0	0	2,901	276,300	1,730,750	35,231	2,045,942	0
	00	290	0	0	3,052	336,809	1,285,245	40,239	1,665,635	0
	01	55	6,500	102,300	1,341	223,983	1,202,098	4,439	1,540,716	0
p-Phenylene-diamine	98	0	0	0	111	337,520	66,661	3,045	407,337	0
	99	0	0	0	8	413,800	104,497	4,093	522,398	0
	00	0	0	508,635	93	188,231	30,873	11,299	739,131	0
	01	0	0	356,849	490	139,299	16,253	8,902	521,793	0
1,2-Phenylene-diamine dihydrochloride	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
1,4-Phenylene-diamine dihydrochloride	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* 2-Phenylphenol	98	197	0	300	0	120,000	332	456	121,285	0
	99	0	0	1	0	125,000	2,970	313	128,284	0
	00	0	0	1	0	6,300	2,574	922	9,797	0
	01	0	0	1	0	2,700	3,101	1,245	7,047	0
** Phenytoin	98	0	0	0	0	20,769	15,000	7,646	43,415	0
	99	0	0	0	0	152	17,500	9,400	27,052	0
	00	0	0	0	0	130	4,300	12,600	17,030	0
	01	0	0	0	0	130	0	9,377	9,507	0
Phosgene	98	3,173,304	0	0	330	7,417,425	735	20,288	10,612,082	43
	99	10,150,418	0	0	0	11,452,168	543	16,535	21,619,664	33
	00	6,180,000	0	0	0	12,525,890	4,580	17,356	18,727,826	31
	01	6,623,410	0	0	1	9,853,934	600	15,497	16,493,442	10
* Phosphine	98	0	0	0	0	328,000	0	38,368	366,368	135
	99	0	0	0	0	439,337	0	54,480	493,817	0
	00	0	0	0	0	347,207	0	85,217	432,424	0
	01	0	0	0	0	202,430	100	21,367	223,897	0
* Phosphorus (yellow or white)	98	1	236,289	0	0	981,152	1,235	2,307,523	3,526,200	4,400
	99	75,122	202,852	0	0	603,616	2,671	2,737,029	3,621,290	1
	00	0	92,946	0	0	1,221,607	1,090	992,028	2,307,671	0
	01	0	68,645	0	0	725,641	42,478	650,234	1,486,998	0
Phthalic anhydride	98	169,533	49,603	3,110,037	2,988,761	16,780,832	560,162	4,160,317	27,819,245	15,046
	99	79,831	29,939	2,993,912	1,904,147	15,894,165	154,329	3,214,709	24,271,032	72,444
	00	141,428	85,316	2,881,508	1,228,275	13,626,851	590,233	2,963,562	21,517,173	3,090
	01	2,769,496	42,309	3,665,164	1,046,242	14,089,007	278,305	1,911,493	23,802,016	31,620
* Picloram	98	0	0	0	0	59,000	0	380,006	439,006	0
	99	0	0	0	0	51,940	280,000	136,010	467,950	0
	00	0	0	0	0	48,470	340,000	160,508	548,978	0
	01	0	0	0	0	88,345	531,625	233,142	853,112	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
88-89-1	Picric acid	98	8	0	1	96,222	0	96,223	0	96,223
		99	8	0	1	129,398	0	129,399	0	129,399
		00	9	0	274	106,784	0	107,058	0	107,058
		01	7	459	24	76,521	0	77,004	0	77,004
51-03-6	* Piperonyl butoxide	98	12	501	0	0	0	501	0	501
		99	13	1,005	0	0	0	1,005	0	1,005
		00	13	1,001	144	0	0	1,145	0	1,145
		01	13	2	0	0	0	2	0	2
29232-93-7	* Pirimiphos methyl	98	No reports							
		99	1	1	0	0	0	1	0	1
		00	1	5	0	0	0	5	0	5
		01	No reports							
--	** Polybrominated biphenyls	98	2	0	0	0	0	0	0	0
		99	2	0	0	0	0	0	0	0
		00	No reports							
		01	No reports							
--	** Polychlorinated alkanes	98	72	4,085	4,131	0	0	8,216	111,132	119,348
		99	70	5,788	4,805	0	16,065	26,658	120,756	147,414
		00	66	6,839	5,706	0	0	12,545	112,199	124,744
		01	60	479,191	4	0	0	479,195	88,956	568,151
1336-36-3	*,** Polychlorinated biphenyls (PCBs) Not comparable to prior years***	98	21	446	251	5	3,742,136	3,742,838	4,327	3,747,165
		99	23	531	2	0	10,164,476	10,165,009	1,641	10,166,650
		00	162	1,158.00	28.82	0.60	1,431,738.80	1,432,926.22	10,205.60	1,443,131.82
		01	137	1,359.90	2.80	0.00	2,491,162.15	2,492,524.85	12,251.02	2,504,775.86
--	** Polycyclic aromatic compounds Not comparable to prior years***	98	278	1,438,600	2,008	0	286,591	1,727,199	1,755,172	3,482,371
		99	302	1,374,564	1,844	0	205,500	1,581,908	2,154,590	3,736,498
		00	2,257	1,474,310.19	17,576.02	0.00	292,180.36	1,784,066.57	3,011,595.37	4,795,661.94
		01	2,304	1,146,126.02	16,384.58	332.40	159,816.95	1,322,659.96	1,536,544.27	2,859,204.23
7758-01-2	** Potassium bromate	98	4	10	0	0	0	10	0	10
		99	2	5	0	0	0	5	0	5
		00	3	505	0	0	0	505	750	1,255
		01	3	250	0	0	0	250	250	500
128-03-0	* Potassium dimethyldithiocarbamate	98	19	533	43,088	0	5	43,626	5	43,631
		99	20	10,523	25,567	0	5	36,095	676	36,771
		00	14	16,792	10,394	0	0	27,186	0	27,186
		01	12	13,740	5,617	0	0	19,357	0	19,357
137-41-7	* Potassium N-methyldithiocarbamate	98	5	0	0	0	0	0	0	0
		99	5	10	5,680	0	0	5,690	0	5,690
		00	4	5	5	0	0	10	23,377	23,387
		01	6	5	5	0	0	10	20,915	20,925
41198-08-7	* Profenofos	98	1	10	0	0	0	10	0	10
		99	1	10	0	0	0	10	0	10
		00	No reports							
		01	1	0	0	0	0	0	0	0
7287-19-6	* Prometryn	98	5	725	8	0	0	733	1,047	1,780
		99	5	502	4	0	0	506	0	506
		00	4	533	0	0	0	533	0	533
		01	5	613	0	0	0	613	0	613

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year. NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For polycyclic aromatic compounds, applies to all polycyclic aromatic compounds reported except benzo(a)phenanthrene, dibenzo(a,e)fluoranthene, benzo(j,k)fluorene, and 3-methylcholanthrene.

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
Picric acid	98	0	0	129,412	12,941	1,627,444	0	96,223	1,866,020	0
	99	0	0	582	0	1,582,234	0	129,399	1,712,215	0
	00	0	0	13,597	3	2,132,561	0	107,058	2,253,219	0
	01	0	0	536	0	1,999,965	0	77,004	2,077,505	0
* Piperonyl butoxide	98	0	0	0	0	0	3,412	426	3,838	0
	99	0	0	0	0	21,382	3,432	595	25,409	0
	00	0	0	0	0	21,362	11,802	712	33,876	0
	01	0	0	0	0	13,307	2,490	1	15,798	0
* Pirimiphos methyl	98	No reports								
	99	0	0	0	0	0	0	1	1	0
	00	0	0	0	0	0	0	1	1	0
	01	No reports								
** Polybrominated biphenyls	98	0	1,000	0	0	0	0	0	1,000	0
	99	0	448	0	0	0	0	0	448	0
	00	No reports								
	01	No reports								
** Polychlorinated alkanes	98	110,100	510,315	32,400	89,093	47,526	233,344	146,565	1,169,343	628
	99	127,200	461,513	28,000	94,229	30,188	227,335	163,823	1,132,288	0
	00	120,000	319,454	0	79,109	48,428	242,967	123,016	932,974	0
	01	100,000	163,260	660	113,873	87,112	209,886	654,112	1,328,903	851
*,** Polychlorinated biphenyls (PCBs)	98	0	140,018	0	0	8,446,718	690,092	3,626,637	12,903,465	1
	99	0	92,003	0	0	11,690,585	1,032,750	6,629,574	19,444,912	111
	00	358.00	611.65	1,410.77	10,517.00	11,906,010.11	415,163.21	1,483,299.33	13,817,370.07	22,247.24
	01	355.10	121.88	400.00	54.40	1,310,735.30	270,767.30	2,545,407.33	4,127,841.31	23,202.59
** Polycyclic aromatic compounds	98	1,992,127	306,050	3,808,404	270,675	2,336,671	40,610	3,375,480	12,130,017	44,045
	99	3,465,916	221,154	4,100,254	101,838	2,418,779	66,470	3,871,152	14,245,563	131,987
	00	2,550,191.40	615,679.71	8,482,044.65	206,941.18	10,541,963.60	256,107.34	4,929,605.13	27,582,533.01	64,121.72
	01	2,040,493.51	822,954.35	9,593,812.06	175,067.67	7,982,246.65	178,955.12	2,895,075.65	23,688,605.01	17,309.23
** Potassium bromate	98	0	0	51,447	1	0	0	13	51,461	0
	99	0	0	0	0	0	0	10	10	0
	00	0	0	0	0	0	0	1,060	1,060	0
	01	0	0	0	0	0	0	250	250	300
* Potassium dimethyldithiocarbamate	98	0	0	0	0	23,596	120,325	54,888	198,809	0
	99	0	0	0	0	42,919	72,363	52,819	168,101	0
	00	0	0	0	0	8,504	57,251	27,186	92,941	0
	01	0	0	0	0	4,596	46,048	19,357	70,001	0
* Potassium N-methyldithiocarbamate	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	4,647	0	5,690	10,337	0
	00	0	0	0	0	0	0	30,000	30,000	0
	01	0	0	0	0	0	0	27,000	27,000	0
* Profenofos	98	0	0	0	0	0	0	7,270	7,270	0
	99	0	0	0	0	0	0	6,420	6,420	0
	00	No reports								
	01	0	0	0	0	0	0	0	0	0
* Prometryn	98	0	0	0	0	30,035	38,455	789	69,279	0
	99	0	0	0	0	51,018	6,238	4,342	61,598	0
	00	0	0	0	0	10,007	21,250	21,776	53,033	0
	01	0	0	0	0	17,007	4,587	602	22,196	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information). For polycyclic aromatic compounds, applies to all polycyclic aromatic compounds reported except benzo(a)phenanthrene, dibenzo(a,e)fluoranthene, benzo(j,k)fluorene, and 3-methylcholanthrene.

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
23950-58-5 *	Pronamide	98	4	365	0	0	0	365	0	365
		99	3	332	1	0	0	333	16	349
		00	4	170	0	0	0	170	255	425
		01	3	0	0	0	0	0	505	505
1918-16-7 *	Propachlor	98	4	62	0	0	0	62	600	662
		99	4	81	0	0	14,208	14,289	10	14,299
		00	3	3	0	0	0	3	120	123
		01	2	240	1	0	0	241	0	241
1120-71-4 **	Propane sultone	98	No reports							
		99	2	5	0	5	0	10	157	167
		00	2	1	0	0	0	1	0	1
		01	3	250	0	0	0	250	505	755
709-98-8 *	Propanil	98	6	2,507	750	0	0	3,257	11,520	14,777
		99	5	2,010	750	0	0	2,760	26,250	29,010
		00	5	521	250	0	0	771	28,500	29,271
		01	6	1,024	250	0	0	1,274	48,300	49,574
2312-35-8 *	Propargite	98	3	525	0	0	0	525	3,546	4,071
		99	3	739	0	0	0	739	9,446	10,185
		00	3	551	0	0	0	551	1,140	1,691
		01	3	626	0	0	0	626	86	712
107-19-7 *	Propargyl alcohol	98	16	15,680	0	418,223	7,620	441,523	253	441,776
		99	15	9,974	0	545,399	0	555,373	10,237	565,610
		00	11	3,803	0	1,031,538	0	1,035,341	26,096	1,061,437
		01	14	2,947	0	747,137	0	750,084	1,361	751,445
31218-83-4 *	Propetamphos	98	1	10	0	0	0	10	250	260
		99	1	10	0	0	0	10	250	260
		00	1	10	0	0	0	10	750	760
		01	No reports							
60207-90-1 *	Propiconazole	98	5	10	0	0	0	10	0	10
		99	3	10	0	0	0	10	0	10
		00	3	0	0	0	0	0	0	0
		01	4	0	0	0	0	0	0	0
57-57-8 *,**	beta-Propiolactone	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
123-38-6 *	Propionaldehyde	98	29	311,345	6,017	92,183	78	409,623	14	409,637
		99	27	426,122	2,604	112,720	0	541,446	331	541,777
		00	35	304,533	10,878	91,235	2,277	408,923	450	409,373
		01	31	390,637	2,733	40,662	0	434,032	135	434,167
114-26-1 *	Propoxur	98	3	0	0	0	0	0	10	10
		99	2	11	0	0	0	11	10	21
		00	2	5	0	0	0	5	0	5
		01	3	10	0	0	0	10	500	510
115-07-1	Propylene	98	416	16,640,924	3,104	2,870	389	16,647,287	897	16,648,184
		99	439	13,693,999	1,023	136,393	396	13,831,811	118	13,831,929
		00	436	13,102,280	3,246	27,664	5	13,133,195	18	13,133,213
		01	427	13,924,267	1,594	24,081	56,474	14,006,416	56,448	14,062,864

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Pronamide	98	5,500	0	0	234,265	0	2,095	400	242,260	0
	99	14,000	0	0	0	33,000	2,393	1,628	51,021	0
	00	11,000	0	0	0	47,591	2,089	1,064	61,744	0
	01	0	0	330	320	62,063	671	396	63,780	0
* Propachlor	98	0	0	0	0	0	91,800	662	92,462	0
	99	0	0	0	0	77,027	85,700	14,884	177,611	0
	00	0	0	0	0	13,747	900	123	14,770	0
	01	4,500	0	0	0	4,900	3,200	240	12,840	0
** Propane sultone	98	No reports								
	99	0	0	0	0	129,321	0	165	129,486	0
	00	0	0	0	0	103,051	772	1	103,824	0
	01	0	0	0	0	111,063	0	443	111,506	0
* Propanil	98	200,000	0	0	0	202,192	86,745	12,824	501,761	50
	99	0	0	0	0	0	270,452	3,357	273,809	50
	00	0	0	0	0	33,794	400,428	1,696	435,918	110
	01	143	0	0	200	0	50,166	448	50,957	25
* Propargite	98	0	0	0	2,216	0	76,189	3,896	82,301	0
	99	0	0	0	4,164	255	13,305	564	18,288	0
	00	0	0	0	3,240	255	10,397	376	14,268	0
	01	13	0	0	4,144	255	6,967	451	11,830	0
* Propargyl alcohol	98	0	0	60,400	521,236	122,320	42,800	444,547	1,191,303	1
	99	0	0	13,091	4	232,624	62,376	592,052	900,147	5
	00	32	0	0	0	67,989	44,757	1,101,028	1,213,806	0
	01	28	0	0	13	41,151	64,533	770,814	876,539	1,050
* Propetamphos	98	0	0	0	0	0	0	482	482	0
	99	0	0	0	0	0	0	490	490	0
	00	0	0	0	0	0	0	495	495	0
	01	No reports								
* Propiconazole	98	0	0	0	0	25,000	0	2,943	27,943	0
	99	0	0	0	0	22,000	0	2,001	24,001	0
	00	0	0	0	0	15,000	0	0	15,000	0
	01	0	0	0	0	20,000	0	0	20,000	0
*,**beta-Propiolactone	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Propionaldehyde	98	0	0	2,021,614	447,257	5,082,156	46,298	411,557	8,008,882	402
	99	440,000	0	2,311,283	6,506	3,030,989	34,933	534,575	6,358,286	0
	00	0	0	4,639,054	5,080	30,329,356	1,767	411,188	35,386,445	18
	01	223,807	521	2,810,395	83,441	6,120,483	171,083	386,314	9,796,044	18
* Propoxur	98	0	0	0	0	0	435	25	460	0
	99	0	0	0	0	56,411	0	11	56,422	0
	00	0	0	0	0	0	39	1	40	0
	01	0	0	0	0	28,231	1,281	67	29,579	0
Propylene	98	72,765,807	23,152	455,991,665	2,218	307,027,993	2,896,808	15,270,441	853,978,084	1,239,979
	99	104,322,899	28	338,452,763	10,337,809	393,639,467	1,579,785	13,575,570	861,908,321	267,570
	00	131,973,657	45	338,105,929	71	515,897,929	437,870	13,022,059	999,437,560	323,283
	01	25,694,779	25	282,717,411	85,357	461,181,800	14,093,926	13,793,661	797,566,959	203,649

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
75-55-8	** Propyleneimine	98	4	385	5	0	0	390	5	395
		99	6	108	0	0	0	108	153	261
		00	4	89	0	0	0	89	0	89
		01	4	574	5	0	0	579	5	584
75-56-9	*,** Propylene oxide	98	122	740,059	1,124	15,303	691	757,177	5,687	762,864
		99	127	705,052	10,847	15,071	29,364	760,334	5,266	765,600
		00	122	460,257	11,652	2,100	115,232	589,241	6,829	596,070
		01	115	304,054	452	6,399	66,745	377,650	10,271	387,921
110-86-1	* Pyridine	98	66	70,959	1,056	593,204	0	665,219	16,146	681,365
		99	66	69,660	1,075	953,995	0	1,024,730	53,300	1,078,030
		00	59	83,417	1,930	959,200	5	1,044,552	36,839	1,081,391
		01	59	71,294	428	770,268	8,284	850,274	8,136	858,410
91-22-5	Quinoline	98	22	15,416	32	29,350	265	45,063	2,626	47,689
		99	19	11,813	26	25,205	7	37,051	21,715	58,766
		00	18	22,026	21	31,413	11	53,471	3,233	56,704
		01	20	4,781	18	24,899	6	29,704	6,060	35,764
106-51-4	* Quinone	98	8	482	1,600	0	0	2,082	0	2,082
		99	10	439	1,401	0	0	1,840	161	2,001
		00	9	569	1,400	0	0	1,969	135	2,104
		01	8	470	1,051	0	0	1,521	747	2,268
82-68-8	* Quintozene	98	13	1,798	0	0	0	1,798	2	1,800
		99	17	422	1	0	0	423	5,022	5,445
		00	19	1,928	0	0	0	1,928	8,435	10,363
		01	17	1,213	1	0	589	1,803	7,914	9,717
76578-14-8	* Quizalofop-ethyl	98	1	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
10453-86-8	* Resmethrin	98	2	0	0	0	0	0	0	0
		99	3	22	0	0	0	22	0	22
		00	3	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
81-07-2	Saccharin (manufacturing)	98	2	160	0	0	0	160	940	1,100
		99	3	63	0	0	0	63	940	1,003
		00	2	80	0	0	0	80	100	180
		01	1	69	0	0	0	69	0	69
94-59-7	*,** Safrole	98	3	10	0	0	0	10	0	10
		99	4	281	0	0	6,005	6,286	3,239	9,525
		00	4	260	0	0	0	260	0	260
		01	4	435	0	0	7,821	8,256	4,309	12,565
7782-49-2	* Selenium	98	25	34,835	58	17,937	256,269	309,099	201,701	510,800
		99	24	69,802	285	0	267,917	338,004	12,040	350,044
		00	25	65,481	1,019	40,246	155,516	262,262	3,724	265,986
		01	24	88,194	3,261	0	3,024,113	3,115,568	1,249,298	4,364,866
--	Selenium compounds	98	132	602,482	36,100	38,038	5,169,845	5,846,465	446,298	6,292,763
		99	123	590,567	45,066	33,509	6,427,166	7,096,308	652,798	7,749,106
		00	121	576,929	56,378	27,699	7,209,823	7,870,829	1,757,925	9,628,754
		01	132	491,944	50,859	39,734	4,788,664	5,371,201	459,255	5,830,456

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** Propyleneimine	98	0	0	0	0	2,788	6	680	3,474	0
	99	0	0	0	0	111,173	0	261	111,434	0
	00	0	0	0	0	58,472	0	90	58,562	0
	01	0	0	0	0	34,004	0	154	34,158	0
*,** Propylene oxide	98	1,081,157	0	13,924,312	97,882	14,444,921	475,463	767,488	30,791,223	1,411
	99	508,380	619	12,895,870	18,761	12,306,352	200,238	769,520	26,699,740	1,254
	00	508,380	0	14,595,273	29,398	191,619,914	179,584	588,555	207,521,104	11,256
	01	672,485	35	23,079,849	57,000	9,183,157	388,810	403,939	33,785,275	3,803
* Pyridine	98	616,015	1,600	1,772,791	1,090,271	2,098,536	748,228	692,092	7,019,533	1,109
	99	915,235	8,115	989,780	639,663	2,596,555	1,049,738	1,023,706	7,222,792	1,011
	00	590,646	10,457	815,513	352,570	3,131,610	725,729	1,044,365	6,670,890	8
	01	361,170	123,299	965,327	1,046,655	2,938,897	290,354	858,405	6,584,107	110
Quinoline	98	27,147	1,713	38	11,582	120,111	961	47,815	209,367	300
	99	12,831	1,137	28,056	11,353	135,341	4,200	58,429	251,347	0
	00	8,046	0	28,000	3,649	149,410	18,962	56,296	264,363	0
	01	2,919	10,585	8	2,808	222,221	1,101	35,582	275,224	0
* Quinone	98	0	0	1,400	17,747	567,300	10,917	2,101	599,465	0
	99	0	0	340	162,544	292,006	135,984	1,987	592,861	0
	00	0	0	340	124,080	244,773	165,714	1,867	536,774	0
	01	0	0	589	371	653,199	408,120	2,029	1,064,308	0
* Quintozene	98	515	0	0	342,800	44,515	13,168	1,793	402,791	0
	99	2,371	0	0	214,728	126,058	8,126	472	351,755	30
	00	2,299	0	0	558,653	114,121	7,141	10,387	692,601	0
	01	2,365	0	0	205,982	168,467	281,197	8,927	666,938	10
* Quizalofop-ethyl	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
* Resmethrin	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	46	0	46	0
	00	0	0	0	0	0	50	0	50	0
	01	0	0	0	0	0	344	0	344	0
Saccharin (manufacturing)	98	0	0	0	0	7,300	7	1,100	8,407	0
	99	0	0	0	0	124,730	7	1,000	125,737	0
	00	0	0	0	0	2,800	3	174	2,977	3
	01	0	0	0	0	2,100	2	69	2,171	0
*,**Safrole	98	0	0	0	0	0	10	30	40	0
	99	0	0	0	0	61,981	10	9,373	71,364	0
	00	0	0	0	0	58,686	810	126	59,622	0
	01	0	0	330	1,440	91,254	613	13,213	106,850	0
* Selenium	98	0	0	86,174	3,902	156	186,424	318,360	595,016	0
	99	4	800	0	0	1,166	50	347,555	349,575	47
	00	4,254	19,210	0	0	498	1,109	263,490	288,561	106
	01	3,784	800	0	50	0	0	4,368,816	4,373,450	0
Selenium compounds	98	651,027	69,641	0	0	2,044	9,766	6,262,710	6,995,188	76,443
	99	631,195	34,866	0	0	2,410	10,363	7,059,414	7,738,248	779,656
	00	625,209	34,429	0	0	0	85,497	8,979,528	9,724,663	319,000
	01	756,656	22,357	0	0	327	1,167	5,794,349	6,574,856	66,049

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
74051-80-2 *	Sethoxydim	98	3	10	0	0	0	10	0	10
		99	2	10	0	0	0	10	0	10
		00	3	3	0	0	0	3	0	3
		01	3	0	0	0	0	0	0	0
7440-22-4 *	Silver	98	102	11,864	171	15,382	402,332	429,749	104,883	534,632
		99	98	12,194	96	17,000	222,756	252,046	337,605	589,651
		00	89	10,147	105	19,000	48,014	77,266	8,046	85,312
		01	87	8,307	184	18,000	226,700	253,191	44,373	297,564
--	Silver compounds	98	84	7,640	6,385	140,109	4,168,109	4,322,243	357,677	4,679,920
		99	83	10,054	7,543	160,222	3,581,251	3,759,070	72,549	3,831,619
		00	79	11,392	6,728	170,214	4,066,283	4,254,617	327,853	4,582,470
		01	73	9,899	4,460	97,076	1,458,634	1,570,069	127,090	1,697,159
122-34-9 *	Simazine	98	7	3,321	332	0	0	3,653	4,497	8,150
		99	6	3,928	385	0	0	4,313	2,385	6,698
		00	6	2,974	367	0	8	3,349	3,418	6,767
		01	4	2,771	322	0	0	3,093	1,214	4,307
26628-22-8 *	Sodium azide	98	14	15,406	20	0	190,896	206,322	11,071	217,393
		99	12	5,957	15	0	33,542	39,514	5,970	45,484
		00	14	3,902	17	0	34,720	38,639	6,157	44,796
		01	10	2,461	21	0	35,308	37,790	103,475	141,265
1982-69-0 *	Sodium dicamba	98	2	8,560	0	750	0	9,310	0	9,310
		99	2	5,150	0	250	0	5,400	0	5,400
		00	5	7,102	0	250	0	7,352	500	7,852
		01	5	10,051	0	250	0	10,301	0	10,301
128-04-1 *	Sodium dimethyl-dithiocarbamate	98	94	12,261	4,868	0	337,651	354,780	318,752	673,532
		99	83	6,138	4	0	420,623	426,765	309,655	736,420
		00	77	7,114	4	0	171,133	178,251	748,151	926,402
		01	71	2,228	4	0	41,060	43,292	106,073	149,365
62-74-8 *	Sodium fluoroacetate	98	No reports							
		99	2	4	0	0	0	4	153	157
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
7632-00-0 *	Sodium nitrite	98	442	173,865	1,031,134	1,969,201	548,905	3,723,105	478,300	4,201,405
		99	439	155,925	1,593,212	2,007,410	279,429	4,035,976	413,146	4,449,122
		00	439	132,935	1,158,926	2,276,276	365,649	3,933,786	407,386	4,341,172
		01	432	116,939	2,116,870	2,156,573	414,341	4,804,723	576,520	5,381,243
131-52-2 *	Sodium pentachlorophenate	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
132-27-4 *,**	Sodium o-phenylphenoxide	98	4	0	0	0	0	0	0	0
		99	6	10	0	11,000	250	11,260	250	11,510
		00	9	10	750	13,000	250	14,010	1,750	15,760
		01	6	0	0	0	0	0	0	0
--	Strychnine and salts	98	1	0	0	0	0	0	0	0
		99	3	5	0	0	0	5	171	176
		00	2	0	0	0	0	0	0	0
		01	3	0	0	0	0	0	260	260

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Sethoxydim	98	0	0	0	0	17,391	293	20	17,704	0
	99	0	0	0	0	0	0	20	20	0
	00	0	0	0	0	0	965	3	968	0
	01	0	0	0	0	0	2	0	2	0
* Silver	98	649,013	1,346,794	0	32	4,917	44,975	651,244	2,696,975	1,138
	99	420,072	3,046,647	0	11	87	183,485	262,977	3,913,279	867
	00	479,965	1,134,943	0	0	822	745	133,782	1,750,256	108
	01	262,985	1,945,206	0	0	1	710	304,674	2,513,576	33
Silver compounds	98	266,630	1,012,252	0	0	52,854	15,458	4,840,387	6,187,581	4,277
	99	3,876,852	1,141,972	0	0	2,090	13,643	3,471,585	8,506,142	549,121
	00	1,509,450	968,777	0	0	2,708	35,951	4,340,462	6,857,348	261,704
	01	630,072	1,121,853	0	0	540	959	2,546,141	4,299,565	94,864
* Simazine	98	50	0	0	0	68,000	1,500	6,294	75,844	0
	99	50	0	0	0	77,000	8,251	14,154	99,455	0
	00	50	0	0	0	63,000	288	6,375	69,713	0
	01	50	0	0	0	62,000	0	3,675	65,725	0
* Sodium azide	98	34,600	440,942	0	0	47,806	590,062	237,127	1,350,537	5
	99	15,800	148,200	0	0	172,830	297,907	45,503	680,240	3
	00	26,800	74,500	0	0	376,687	255,276	38,970	772,233	0
	01	13,921	36,131	0	0	219,927	144,435	155,146	569,560	0
* Sodium dicamba	98	0	0	0	0	414,800	46,680	9,546	471,026	0
	99	0	0	0	0	248,383	0	5,400	253,783	0
	00	0	0	0	0	133,000	7,000	7,760	147,760	0
	01	0	0	0	0	186,130	4,600	10,001	200,731	0
* Sodium dimethyl-dithiocarbamate	98	250	183,222	192	3	751,668	683,771	629,617	2,248,723	0
	99	250	196,401	0	0	830,308	590,553	613,649	2,231,161	0
	00	250	158,844	0	0	577,920	609,891	725,393	2,072,298	0
	01	200	90,182	0	0	747,885	614,439	113,224	1,565,930	0
* Sodium fluoroacetate	98	No reports								
	99	0	0	0	0	124,717	0	157	124,874	0
	00	0	0	0	0	89,038	0	0	89,038	0
	01	0	0	0	0	52,255	0	0	52,255	0
* Sodium nitrite	98	434,389	17,741	0	17	39,605,102	3,499,708	5,660,426	49,217,383	9,037
	99	511,277	45,498	0	20	48,354,287	2,902,548	6,213,601	58,027,231	89,000
	00	632,150	205,247	211	3,832	46,622,464	2,734,030	4,441,374	54,639,308	140,087
	01	115,138	64,829	0	35	49,611,465	2,295,396	5,559,140	57,646,003	257
* Sodium penta-chlorophenate	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
*,** Sodium o-phenyl-phenoxide	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	11,000	11,000	0
	00	0	0	0	0	8,800	8,800	25,600	43,200	0
	01	0	0	0	0	0	0	0	0	0
Strychnine and salts	98	0	0	0	0	31,974	0	0	31,974	0
	99	0	0	0	0	161,966	0	177	162,143	0
	00	0	0	0	0	120,960	20	0	120,980	0
	01	0	0	0	0	95,616	0	273	95,889	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
100-42-5	** Styrene	98	1,690	54,845,503	243,148	507,683	337,312	55,933,646	2,106,111	58,039,757
		99	1,694	59,089,925	3,690	191,124	461,479	59,746,218	2,239,513	61,985,731
		00	1,723	58,427,654	3,371	260,005	279,068	58,970,098	2,210,727	61,180,825
		01	1,626	46,466,141	2,993	394,001	165,220	47,028,355	1,953,117	48,981,473
96-09-3	** Styrene oxide	98	2	9	0	0	0	9	0	9
		99	1	7	0	0	0	7	0	7
		00	5	48	0	0	33,987	34,035	0	34,035
		01	3	6	0	0	0	6	0	6
7664-93-9	* Sulfuric acid	98	1,333	195,977,178	22,609	690,900	141,338	196,832,025	367,593	197,199,618
		99	1,287	181,685,838	13,432	1,075,050	220,781	182,995,101	119,589	183,114,690
		00	1,221	149,584,936	18,311	807,650	95,238	150,506,135	272,771	150,778,906
		01	1,164	146,397,844	694	679,045	548,775	147,626,358	129,606	147,755,964
2699-79-8	* Sulfuryl fluoride	98	3	466,000	0	0	0	466,000	0	466,000
		99	3	519,400	0	0	0	519,400	0	519,400
		00	3	629,500	0	0	0	629,500	0	629,500
		01	2	210,000	0	0	0	210,000	0	210,000
35400-43-2	* Sulprofos	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
34014-18-1	* Tebuthiuron	98	1	10	0	0	0	10	750	760
		99	1	755	0	0	0	755	750	1,505
		00	2	1,010	0	0	0	1,010	1,500	2,510
		01	2	10	0	0	0	10	500	510
3383-96-8	* Temephos	98	3	7	0	0	0	7	0	7
		99	2	0	0	0	0	0	0	0
		00	2	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
5902-51-2	* Terbacil	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
79-94-7	*** Tetrabromo-bisphenol A	98	NR	NR	NR	NR	NR	NR	NR	NR
		99	NR	NR	NR	NR	NR	NR	NR	NR
		00	49	59,910.21	10.00	0.00	197,214.00	257,134.21	537,549.30	794,683.51
		01	48	54,004.91	9.00	0.00	196,675.00	250,688.91	625,481.75	876,170.66
630-20-6	1,1,1,2-Tetra-chloroethane	98	12	9,564	5	0	0	9,569	69	9,638
		99	14	5,387	1	0	0	5,388	735	6,123
		00	17	5,110	0	0	0	5,110	510	5,620
		01	14	3,604	91	0	54	3,749	505	4,254
79-34-5	* 1,1,2,2-Tetra-chloroethane	98	21	7,299	269	5	0	7,573	6,503	14,076
		99	18	5,202	1	0	15	5,218	30	5,248
		00	19	4,461	13	5	0	4,479	631	5,110
		01	18	3,456	56	0	961	4,473	941	5,414
127-18-4	*,** Tetrachloro-ethylene	98	528	5,709,344	1,741	6,560	21,978	5,739,623	161,078	5,900,701
		99	467	4,025,978	1,794	9,185	104,885	4,141,842	204,511	4,346,353
		00	440	3,531,926	1,159	60,391	14,359	3,607,835	43,801	3,651,636
		01	382	2,674,561	556	111,606	23,082	2,809,805	55,641	2,865,446

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year. NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** PBT Chemical added to list for 2000 reporting year. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** Styrene	98	15,589,255	1,994,591	29,679,770	11,438,145	11,233,799	5,136,639	57,556,734	132,628,933	182,696
	99	14,357,718	931,048	43,228,207	12,095,378	14,583,686	4,097,267	65,519,340	154,812,644	161,727
	00	6,843,547	2,596,958	33,078,631	12,791,786	23,859,891	3,515,842	58,282,671	140,969,326	35,219
	01	3,941,728	2,408,379	29,330,338	9,962,105	17,770,782	3,451,702	47,877,132	114,742,166	168,003
** Styrene oxide	98	0	0	30,000	0	0	0	9	30,009	0
	99	0	0	70,000	0	0	0	7	70,007	0
	00	0	0	77,439	12,000	0	0	34,035	123,474	9
	01	0	0	82,629	4	0	0	6	82,639	0
* Sulfuric acid	98	32,489,671	1,193,481	43,000	17,225	544,983,911	4,590,153	195,948,310	779,265,751	43,865
	99	32,121,629	1,014,529	28,000	1,680	566,129,259	2,196,108	183,467,734	784,958,939	41,238
	00	58,243,766	2,441,697	4,725	3,469	607,863,890	2,577,157	151,368,314	822,503,018	64,275
	01	38,353,227	640,324	6,225	34,500	395,096,005	991,808	148,183,112	583,305,201	256,304
* Sulfuryl fluoride	98	0	0	0	0	0	0	461,000	461,000	5,700
	99	0	0	0	0	0	0	519,400	519,400	0
	00	0	0	0	0	0	0	629,500	629,500	0
	01	0	0	0	0	0	0	210,000	210,000	0
* Sulprofos	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Tebuthiuron	98	4	0	0	0	860	870	1	1,735	0
	99	3	0	0	0	680	700	1	1,384	0
	00	4	0	0	0	920	1,430	501	2,855	0
	01	4	0	0	0	880	890	1	1,775	0
* Temephos	98	0	0	0	0	31,269	0	7	31,276	0
	99	0	0	0	0	51,378	0	0	51,378	0
	00	0	0	0	0	51,378	0	0	51,378	0
	01	0	0	0	0	25,289	0	0	25,289	0
* Terbacil	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
*** Tetrabromo-bisphenol A	98	NR	NR	NR	NR	NR	NR	NR	NR	NR
	99	NR	NR	NR	NR	NR	NR	NR	NR	NR
	00	565.00	0.00	0.00	1,848.80	6,962.00	7,958.40	785,073.41	802,407.61	0.00
	01	556.00	323.00	0.00	2,927.50	94,850.00	52,090.00	854,019.81	1,004,766.31	0.00
1,1,1,2-Tetra-chloroethane	98	6,600,180	0	0	120,700	3,088,343	2,623,242	9,550	12,442,015	18
	99	6,500,000	0	0	147,754	4,730,670	63,047	5,424	11,446,895	385
	00	6,000,000	6,880	0	10,727	3,100,435	61,509	5,833	9,185,384	1,761
	01	7,930,998	0	0	170	4,962,090	74,476	3,805	12,971,539	4,650
* 1,1,2,2-Tetra-chloroethane	98	6,692,000	2,339,618	597,000	2,214	10,733,341	2,679,730	8,972	23,052,875	803
	99	6,492,000	3,095,391	0	0	12,363,611	53,056	4,799	22,008,857	294
	00	5,202,000	337,790	1,079,075	171	17,549,013	87,415	5,145	24,260,609	10,143
	01	7,141,061	30,170	1,168,289	0	12,162,041	233,996	5,176	20,740,733	22,003
*,** Tetrachloro-ethylene	98	133,625,941	16,582,245	3,641,921	3,490,168	26,714,562	5,708,583	5,756,105	195,519,525	36,377
	99	121,500,914	10,117,266	3,141,592	5,165,194	14,622,285	7,057,837	4,181,665	165,786,753	30,606
	00	110,995,826	8,628,400	3,083,463	3,454,935	216,713,360	2,775,764	3,961,228	349,612,976	31,486
	01	96,362,760	7,031,743	3,192,452	2,378,890	15,248,987	2,497,090	2,952,426	129,664,349	60,016

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** PBT Chemical added to list for 2000 reporting year. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
354-11-0	1,1,1,2-Tetrachloro-2-fluoroethane	98	1	23,275	1	0	0	23,276	0	23,276
		99	No reports							
		00	2	27,200	0	0	0	27,200	0	27,200
		01	No reports							
354-14-3	1,1,2,2-Tetrachloro-1-fluoroethane	98	1	10	0	0	0	10	0	10
		99	1	10	0	0	0	10	0	10
		00	1	25	0	0	0	25	0	25
		01	1	25	0	0	0	25	0	25
961-11-5 *	Tetrachlorvinphos	98	4	360	5	0	0	365	0	365
		99	6	201	5	0	0	206	1,846	2,052
		00	6	444	5	0	0	449	37	486
		01	4	318	5	0	0	323	1,850	2,173
64-75-5 *	Tetracycline hydrochloride	98	2	525	0	0	0	525	1,800	2,325
		99	4	0	0	0	0	0	4,300	4,300
		00	5	10	0	0	0	10	11,550	11,560
		01	4	10	0	0	0	10	2,400	2,410
7696-12-0 *	Tetramethrin	98	2	0	0	0	0	0	0	0
		99	4	10,080	0	0	0	10,080	0	10,080
		00	3	11,088	0	0	0	11,088	0	11,088
		01	3	12,600	0	0	0	12,600	0	12,600
7440-28-0	Thallium	98	9	268	5	0	91,739	92,012	3,670	95,682
		99	7	3,157	600	0	77,055	80,812	103,578	184,390
		00	7	1,104	540	0	256	1,900	102,714	104,614
		01	5	64	0	0	119,537	119,601	808	120,409
--	Thallium compounds	98	32	35,565	999	0	11,165,608	11,202,172	2,561	11,204,733
		99	35	5,456	2,879	0	3,362,057	3,370,392	61,645	3,432,037
		00	39	11,800	2,095	0	3,839,249	3,853,144	1,070,698	4,923,842
		01	42	6,140	11,605	0	3,697,138	3,714,883	61,452	3,776,335
148-79-8 *	Thiabendazole	98	3	0	0	0	0	0	0	0
		99	3	255	0	0	0	255	0	255
		00	3	500	0	0	0	500	1,500	2,000
		01	4	500	0	0	0	500	1,500	2,000
62-55-5 **	Thioacetamide	98	1	0	0	0	0	0	0	0
		99	3	7	1	0	0	8	164	172
		00	3	5	0	0	0	5	5	10
		01	3	4	0	0	0	4	260	264
28249-77-6 *	Thiobencarb	98	2	286	0	0	0	286	760	1,046
		99	2	343	0	0	0	343	832	1,175
		00	2	34	0	0	0	34	11	45
		01	2	15	0	0	0	15	5,036	5,051
139-65-1 **	4,4'-Thiodianiline	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
59669-26-0 *	Thiodicarb	98	3	359	0	0	0	359	5,966	6,325
		99	3	438	0	0	6,843	7,281	239	7,520
		00	4	355	0	0	0	355	0	355
		01	4	613	0	0	0	613	0	613

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
1,1,1,2-Tetra-chloro-2-fluoro-ethane	98	6,600	270	0	0	0	0	21,000	27,870	0
	99	No reports								
	00	7,800	0	0	0	0	550	27,200	35,550	0
	01	No reports								
1,1,2,2-Tetra-chloro-1-fluoro-ethane	98	0	0	0	0	0	26,387	15	26,402	0
	99	0	0	0	0	0	67,130	15	67,145	0
	00	0	0	0	30,589	0	7,306	25	37,920	0
	01	0	0	0	6,221	0	25,952	25	32,198	0
* Tetrachlorvinphos	98	350	0	44,000	26,700	870	11,640	211	83,771	0
	99	375	0	14,000	98,900	37,641	13,640	496	165,052	0
	00	370	0	21,000	34,600	63,913	23,990	330	144,203	0
	01	380	0	0	0	40,532	10,635	434	51,981	0
* Tetracycline hydrochloride	98	0	0	0	0	0	700	2,160	2,860	0
	99	0	0	0	0	0	2,001	4,501	6,502	0
	00	0	0	0	0	0	4,888	11,588	16,476	1
	01	0	0	0	0	0	1,500	2,488	3,988	0
* Tetramethrin	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	260	10,080	10,340	0
	00	0	0	0	0	0	0	11,088	11,088	0
	01	0	0	0	0	0	0	12,600	12,600	0
Thallium	98	0	0	52,353	1	21,600	10	91,792	165,756	0
	99	9	0	0	0	0	51	179,437	179,497	0
	00	1,400	0	0	0	0	29	103,732	105,161	0
	01	0	1,400	0	0	0	0	120,387	121,787	0
Thallium compounds	98	2,133	0	0	0	0	251	11,104,136	11,106,520	100,650
	99	1,884	0	0	0	0	315	3,204,554	3,206,753	180,000
	00	221,810	8,705	0	0	0	29	4,493,787	4,724,331	58,300
	01	76,604	5,800	0	0	0	0	3,772,800	3,855,204	16,605
* Thiabendazole	98	0	0	0	0	0	747	0	747	0
	99	0	0	0	0	1,500	5,094	75	6,669	0
	00	0	0	0	0	1,600	5,045	240	6,885	0
	01	0	0	0	0	1,600	4,331	240	6,171	0
** Thioacetamide	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	181,229	0	167	181,396	0
	00	0	0	0	0	138,216	787	6	139,009	0
	01	0	0	330	1,511	121,257	46	18	123,162	0
* Thiobencarb	98	747	0	0	0	0	198	1,772	2,717	0
	99	0	0	0	0	0	105	120	225	0
	00	6	0	0	0	0	11	34	51	0
	01	0	0	0	0	0	5	5,051	5,056	5,049
** 4,4'-Thiodianiline	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Thiodicarb	98	108,880	0	0	0	34,243	19,476	362	162,961	0
	99	84,500	0	0	0	35,246	11,073	1,200	132,019	0
	00	156,750	0	0	0	49,529	12,706	1,653	220,638	0
	01	75,000	0	0	0	44,656	22,532	611	142,799	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
23564-06-9 *	Thiophanate ethyl	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
23564-05-8 *	Thiophanate methyl	98	7	431	0	0	0	431	442	873
		99	10	493	0	0	0	493	7,165	7,658
		00	10	740	0	0	0	740	3,709	4,449
		01	11	0	0	0	0	0	1,601	1,601
79-19-6	Thiosemi-carbazide	98	No reports							
		99	2	3	0	0	0	3	98	101
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
62-56-6 *,**	Thiourea	98	31	1,422	358	1,250	250	3,280	5,895	9,175
		99	29	1,002	258	0	250	1,510	1,297	2,807
		00	30	1,533	266	0	28,803	30,602	956	31,558
		01	24	1,565	296	11,000	31,285	44,146	309	44,455
137-26-8 *	Thiram	98	69	3,443	22	0	1,751	5,216	87,190	92,406
		99	66	3,416	31	0	589	4,036	71,461	75,497
		00	71	3,938	40	0	9,873	13,851	741,007	754,858
		01	68	2,816	35	0	7,206	10,057	84,446	94,503
1314-20-1	Thorium dioxide	98	2	0	0	0	0	0	0	0
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	1	0	0	0	0	0	0	0
7550-45-0	Titanium tetrachloride	98	37	37,991	0	0	0	37,991	380	38,371
		99	34	28,212	0	0	0	28,212	260,390	288,602
		00	38	31,351	0	0	41	31,392	239,867	271,259
		01	37	36,879	0	0	23	36,902	61,939	98,841
108-88-3 *	Toluene	98	3,888	99,308,613	43,786	724,015	94,368	100,170,782	1,688,492	101,859,274
		99	3,656	91,194,604	44,624	728,385	312,110	92,279,723	2,056,115	94,335,838
		00	3,548	81,538,847	40,511	513,810	148,703	82,241,871	1,477,494	83,719,365
		01	3,321	71,539,704	75,909	265,130	127,657	72,008,400	1,780,473	73,788,873
584-84-9 **	Toluene-2,4-diisocyanate	98	61	6,851	5	0	0	6,856	4,402	11,258
		99	63	4,842	6	0	14,201	19,049	14,973	34,022
		00	63	3,602	5	0	12,160	15,767	15,040	30,807
		01	54	10,611	894	0	0	11,505	15,688	27,193
91-08-7 **	Toluene-2,6-diisocyanate	98	26	1,560	0	0	0	1,560	1,079	2,639
		99	30	4,330	0	0	0	4,330	1,418	5,748
		00	27	447	0	0	0	447	3,670	4,117
		01	25	1,664	62	0	0	1,726	3,731	5,457
26471-62-5 **	Toluene diisocyanate (mixed isomers)	98	180	55,406	0	0	534	55,940	32,450	88,390
		99	183	34,832	2,501	0	256	37,589	36,070	73,659
		00	179	35,405	2,500	0	29,739	67,644	18,655	86,299
		01	172	29,808	0	0	18,273	48,081	72,396	120,477
95-53-4 **	o-Toluidine	98	19	7,750	5	17,020	5	24,780	11	24,791
		99	25	7,736	2	10,010	0	17,748	635	18,383
		00	25	11,069	25	7,040	0	18,134	400	18,534
		01	23	9,784	26	12,020	10	21,840	633	22,473

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Thiophanate ethyl	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Thiophanate methyl	98	10,000	0	0	0	0	3,431	436	13,867	0
	99	11,800	0	0	0	0	13,725	2,810	28,335	0
	00	470	0	0	0	0	5,781	5,126	11,377	0
	01	0	0	0	0	0	3,852	1,601	5,453	0
Thiosemi-carbazide	98	No reports								
	99	0	0	0	0	67,904	0	101	68,005	0
	00	0	0	0	0	49,589	0	0	49,589	0
	01	0	0	0	0	24,302	0	0	24,302	0
*,**Thiourea	98	0	245	0	0	54,525	16,111	8,822	79,703	0
	99	0	0	0	0	382,504	6,349	2,591	391,444	0
	00	0	55,452	0	0	216,817	20,797	31,140	324,206	13,000
	01	0	57	0	240	301,047	8,377	44,024	353,745	0
* Thiram	98	25,341	31,339	0	870	42,192	19,988	90,484	210,214	0
	99	34,797	32,328	0	925	261,724	25,452	75,059	430,285	0
	00	33,951	21,459	0	1,022	190,731	23,605	82,964	353,732	0
	01	23,583	26,934	330	2,021	232,895	17,069	85,235	388,067	1,500
Thorium dioxide	98	3,100	0	0	0	0	0	330	3,430	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	27,000	0	0	27,000	0
	01	0	0	0	0	0	0	0	0	0
Titanium tetrachloride	98	0	196,905	0	1	31,168,125	142,054	38,619	31,545,704	265
	99	0	176,544	0	1	31,288,986	268,223	29,724	31,763,478	31
	00	0	148,838	0	0	31,809,842	245,617	30,966	32,235,263	544
	01	13,063,436	70,077	0	0	31,599,053	137,004	36,410	44,905,980	42
* Toluene	98	1,094,203,086	27,903,590	239,098,487	153,895,277	266,201,113	34,858,953	104,496,350	1,920,656,856	973,205
	99	1,019,788,626	26,533,460	226,838,615	158,385,184	285,830,043	35,338,928	93,217,602	1,845,932,458	631,533
	00	1,082,002,596	27,689,852	214,745,364	163,493,289	339,848,300	26,914,690	85,307,277	1,940,001,368	313,500
	01	1,017,876,688	37,638,485	182,640,178	147,740,286	303,738,267	23,503,497	74,807,577	1,787,944,977	668,782
** Toluene-2,4-diisocyanate	98	393	440	1,410	9,586	21,916	23,162	9,700	66,607	689
	99	80	0	0	24,734	1,315,146	44,080	22,882	1,406,922	14
	00	15,650	3,000	0	7,762	875,494	26,500	43,271	971,677	20
	01	12,732	1,900	0	6,989	632,791	4,293	33,867	692,572	0
** Toluene-2,6-diisocyanate	98	98	0	0	1,276	501	2,613	1,546	6,034	0
	99	220	0	0	48	215,867	8,890	5,341	230,366	0
	00	0	750	0	1,538	87,801	4,363	3,096	97,548	0
	01	0	480	0	252	53,741	2,336	7,371	64,180	81
** Toluene diisocyanate (mixed isomers)	98	7,260	1,996	7,812,428	2,054,250	1,218,761	299,050	71,320	11,465,065	17,912
	99	13,350	438	5,076,288	67,400	4,586,866	182,771	44,322	9,971,435	18,373
	00	4,048	1,126	3,337,852	32,266	32,648,003	665,361	79,828	36,768,484	3,118
	01	751	0	17,222,925	81,418	3,266,299	140,693	118,789	20,830,875	10,722
** o-Toluidine	98	220	198	303,180	120,352	150,729	105,606	24,800	705,085	461
	99	0	0	1,953,207	515,283	757,634	57,511	18,328	3,301,963	5,132
	00	0	0	592,030	206,023	582,720	170,605	22,563	1,573,941	1
	01	0	0	674,677	41,451	416,509	79,985	21,917	1,234,539	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
636-21-5	** o-Toluidine hydrochloride	98	1	0	0	0	0	0	0	0
		99	3	10	1	0	0	11	164	175
		00	3	250	0	0	0	250	5	255
		01	3	5	0	0	0	5	260	265
8001-35-2	*,** Toxaphene	98	5	13	0	0	25,476	25,489	113	25,602
		99	4	16	1	0	0	17	14	31
		00	15	20.98	1.62	0.21	5,928.02	5,950.83	55.14	6,005.97
		01	18	42.34	6.29	0.14	3,073.89	3,122.66	854.53	3,977.18
43121-43-3	* Triadimefon	98	4	3	0	0	1	4	0	4
		99	4	0	0	0	0	0	0	0
		00	3	2	0	0	0	2	0	2
		01	3	0	0	0	0	0	0	0
2303-17-5	* Triallate	98	2	519	0	0	0	519	21,640	22,159
		99	4	513	0	0	0	513	496	1,009
		00	3	509	0	0	0	509	996	1,505
		01	5	573	1	0	0	574	1,046	1,620
68-76-8	Triaziquone	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
101200-48-0	* Tribenuron methyl	98	1	1	0	0	0	1	0	1
		99	1	1	0	0	0	1	0	1
		00	1	1	0	0	0	1	0	1
		01	1	1	0	0	0	1	0	1
1983-10-4	* Tributyltin fluoride	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
2155-70-6	* Tributyltin methacrylate	98	2	14	10	0	0	24	0	24
		99	3	510	0	0	0	510	0	510
		00	5	1,965	0	0	0	1,965	260	2,225
		01	3	16	7	0	0	23	250	273
78-48-8	* S,S,S-Tributyltri-thiophosphate	98	2	250	36	0	0	286	0	286
		99	2	250	161	0	0	411	0	411
		00	1	0	12	0	0	12	0	12
		01	2	5	14	0	0	19	0	19
52-68-6	* Trichlorfon	98	5	2	0	0	0	2	0	2
		99	3	39	0	0	11,242	11,281	6,058	17,339
		00	3	409	0	0	0	409	11,518	11,927
		01	3	236	3	0	8,313	8,552	5,251	13,803
76-02-8	Trichloroacetyl chloride	98	1	1	0	0	0	1	0	1
		99	1	1	0	0	0	1	0	1
		00	1	1	0	0	0	1	0	1
		01	1	1	0	0	0	1	0	1
120-82-1	* 1,2,4-Trichlorobenzene	98	34	166,133	441	8,965	20	175,559	2,158	177,717
		99	34	173,630	267	7,100	10	181,007	1,952	182,959
		00	34	158,945	119	3,150	0	162,214	4,636	166,850
		01	35	96,833	96	3,005	7,710	107,644	9,252	116,896

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year. NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
** o-Toluidine hydrochloride	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	191,883	0	168	192,051	0
	00	0	0	0	0	154,846	744	35	155,625	0
	01	0	0	330	1,491	145,321	74	19	147,235	0
*,** Toxaphene	98	0	0	0	0	103,929	1	25,602	129,532	0
	99	0	0	0	0	134,998	28	27	135,053	0
	00	0.00	0.00	1,072.00	0.00	210,240.69	468.24	6,007.47	217,788.40	0.00
	01	0.00	3.00	1,138.00	7.20	124,183.14	464.80	4,378.99	130,175.13	0.00
* Triadimefon	98	0	0	0	0	280	1,984	4	2,268	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	342	458	2	802	0
	01	0	0	0	0	20	548	0	568	0
* Triallate	98	0	0	0	0	6,480	97,751	22,410	126,641	0
	99	840	0	0	0	12,825	47,151	1,508	62,324	0
	00	884	0	0	0	22,110	32,887	1,996	57,877	0
	01	127	0	13,399	6	54,803	16,678	864	85,877	0
Triaziquone	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Tribenuron methyl	98	0	0	0	0	0	13,016	1	13,017	0
	99	0	0	0	0	0	14,832	1	14,833	0
	00	0	0	0	0	0	17,700	1	17,701	0
	01	0	0	0	0	0	22,568	1	22,569	0
* Tributyltin fluoride	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Tributyltin methacrylate	98	253	0	0	419	0	0	34	706	0
	99	3,458	0	0	3,218	0	3,100	3,330	13,106	0
	00	0	11,613	0	6,210	11	5,660	2,765	26,259	0
	01	0	6,779	0	0	100,348	65,998	194	173,319	0
* S,S,S-Tributyltri-thiophosphate	98	0	0	0	0	10,276	691	367	11,334	0
	99	0	0	0	0	13,441	694	292	14,427	0
	00	0	0	0	0	1,891	85	12	1,988	0
	01	0	0	0	0	29,574	194	15	29,783	0
* Trichlorfon	98	0	0	0	0	213	2,831	2	3,046	0
	99	0	0	0	0	1,331	890	18,229	20,450	0
	00	0	0	0	0	785	480	12,407	13,672	0
	01	0	0	0	0	1,783	1,300	13,803	16,886	0
Trichloroacetyl chloride	98	0	0	0	0	0	0	1	1	0
	99	0	0	0	0	0	0	1	1	0
	00	0	0	0	0	0	0	1	1	0
	01	0	0	0	0	0	0	1	1	0
* 1,2,4-Trichlorobenzene	98	1,115,301	22,393	66,119	25,218	714,244	199,936	176,401	2,319,612	35
	99	1,262,006	6,595	1,494,567	62,078	1,506,015	234,018	181,437	4,746,716	181
	00	1,203,313	15,884	539,513	21,833	999,758	201,165	164,106	3,145,572	9
	01	50,556	27,543	324,130	268,618	2,682,941	113,214	115,246	3,582,248	1,508

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
71-55-6	* 1,1,1-Trichloroethane	98	166	840,973	667	0	4,980	846,620	31,399	878,019
		99	92	410,845	45	0	15,981	426,871	53,067	479,938
		00	75	267,671	85	5	14,298	282,059	2,200	284,259
		01	51	206,609	22	5	169	206,805	2,582	209,387
79-00-5	* 1,1,2-Trichloroethane	98	35	280,213	790	5	1	281,009	2,326	283,335
		99	35	199,121	926	0	13,788	213,835	484	214,319
		00	33	91,189	572	5	11,813	103,579	7,967	111,546
		01	25	84,383	15	0	554	84,952	1,274	86,226
79-01-6	*,** Trichloroethylene	98	730	13,265,539	882	593	800	13,267,814	126,053	13,393,867
		99	646	10,616,607	1,044	0	148,867	10,766,518	168,374	10,934,892
		00	598	9,759,536	593	47,877	9,713	9,817,719	159,396	9,977,115
		01	525	8,249,317	406	98,220	12,609	8,360,552	121,748	8,482,300
75-69-4	* Trichlorofluoromethane (CFC-11)	98	43	443,267	1,734	250	0	445,251	109	445,360
		99	41	402,657	1,001	0	10,078	413,736	14,676	428,412
		00	43	305,062	961	0	0	306,023	141	306,164
		01	35	298,622	545	0	15,568	314,735	7,759	322,494
95-95-4	* 2,4,5-Trichlorophenol	98	3	201	36	0	69	306	0	306
		99	6	279	42	0	21,922	22,243	269	22,512
		00	5	339	51	0	36,021	36,411	82	36,493
		01	6	162	3,493	5	10,082	13,742	1,008	14,750
88-06-2	*,** 2,4,6-Trichlorophenol	98	4	118	26	0	0	144	10	154
		99	5	90	39	0	2,002	2,131	6	2,137
		00	5	114	29	0	1	144	7	151
		01	5	60	64	0	1	125	506	631
96-18-4	** 1,2,3-Trichloropropane	98	8	13,837	300	0	0	14,137	6,758	20,895
		99	12	13,959	2,300	0	8,189	24,448	4,412	28,860
		00	11	16,614	5,498	0	28	22,140	0	22,140
		01	9	9,528	802	0	12,084	22,414	5,887	28,301
57213-69-1	* Triclopyr triethylammonium salt	98	3	6	0	0	0	6	0	6
		99	1	37	0	0	0	37	0	37
		00	3	9	0	0	0	9	0	9
		01	5	9	0	0	0	9	0	9
121-44-8	Triethylamine	98	196	1,573,105	26,281	186,190	23,755	1,809,331	56,313	1,865,644
		99	186	1,975,258	17,937	28,659	35,032	2,056,886	289,800	2,346,686
		00	186	1,890,605	27,218	18,990	13,937	1,950,750	119,972	2,070,722
		01	178	1,624,316	22,787	45,714	19,292	1,712,109	128,346	1,840,455
1582-09-8	* Trifluralin	98	20	9,193	250	0	5	9,448	29,888	39,336
		99	20	5,185	0	0	0	5,185	14,631	19,816
		00	31	5,694.15	0.00	0.00	19,371.00	25,065.15	2,748.67	27,813.82
		01	31	2,896.17	1.00	115.00	17,113.70	20,125.87	2,390.11	22,515.98
26644-46-2	* Triforine	98	1	0	0	0	0	0	0	0
		99	No reports							
		00	1	187	0	0	0	187	0	187
		01	1	255	0	0	0	255	0	255
95-63-6	1,2,4-Trimethylbenzene	98	1,534	7,947,119	8,490	6,650	17,789	7,980,048	181,117	8,161,165
		99	1,517	7,844,333	6,869	2,295	10,380	7,863,877	111,646	7,975,523
		00	1,535	7,699,925	7,801	3,710	11,638	7,723,074	176,355	7,899,429
		01	1,524	7,166,019	6,525	1,790	29,120	7,203,454	104,880	7,308,334

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year. NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* 1,1,1-Trichloroethane	98	2,276,712	164,553	2,982,403	2,726,756	1,879,745	907,594	809,743	11,747,506	19,845
	99	1,685,059	206,605	2,043,213	1,481,056	4,325,155	441,694	448,797	10,631,579	983
	00	975,810	36,704	1,346,260	1,343,576	5,348,212	277,788	274,439	9,602,789	7,606
	01	651,193	16,663	1,135,118	1,048,434	2,725,899	270,443	242,042	6,089,792	6,300
* 1,1,2-Trichloroethane	98	55,855,000	12,399,585	4,961,599	33,052	44,449,926	2,055,682	285,681	120,040,525	48
	99	50,477,000	16,038,204	189,669	212,449	46,286,611	754,272	215,093	114,173,298	892
	00	50,811,610	7,445,333	4,067,013	75,560	44,669,906	1,293,327	108,500	108,471,249	7,199
	01	44,413,491	2,504,599	5,203,838	140	33,929,513	2,514,691	85,564	88,651,836	12,006
*,** Trichloroethylene	98	137,119,808	4,814,735	2,422,389	1,470,592	8,610,230	7,466,698	13,205,544	175,109,996	124,030
	99	137,490,808	4,068,707	3,515,395	1,274,790	6,858,805	1,942,366	10,536,839	165,687,710	50,358
	00	126,124,653	3,563,836	1,792,566	1,718,331	6,119,729	1,515,316	9,933,225	150,767,656	61,286
	01	140,436,215	3,029,470	1,988,713	856,625	5,614,707	1,335,905	9,359,639	162,621,274	54,062
* Trichlorofluoromethane (CFC-11)	98	0	138,866	210,039	128,122	633,096	297,684	444,151	1,851,958	25
	99	83,525	92,780	1,189,772	124,082	618,099	458,100	425,463	2,991,821	8,686
	00	171,898	102,023	232,249	12,292	577,088	402,517	306,220	1,804,287	40
	01	107,620	109,768	217,225	34,920	349,303	401,244	325,459	1,545,539	7
* 2,4,5-Trichlorophenol	98	0	0	0	0	51,152	5	306	51,463	0
	99	0	0	0	0	343,729	40	22,535	366,304	0
	00	0	0	0	0	166,393	14	36,486	202,893	0
	01	0	0	0	0	202,564	6	14,326	216,896	0
*,** 2,4,6-Trichlorophenol	98	0	0	0	0	1,128,000	0	150	1,128,150	0
	99	0	0	0	0	1,399,542	46	127	1,399,715	2,000
	00	0	13,933	0	0	1,291,102	9	144	1,305,188	0
	01	0	280,960	0	0	1,220,931	1	652	1,502,544	0
** 1,2,3-Trichloropropane	98	7,100,000	0	870,000	0	2,553,000	5,949,995	14,187	16,487,182	0
	99	9,300,000	0	678,000	0	47,284,964	660,000	28,872	57,951,836	0
	00	12,000,000	0	5,610,685	0	56,798,048	3,219,000	22,202	77,649,935	0
	01	850,762	0	28,625,849	77,600	7,648,305	5,909,680	29,590	43,141,786	0
* Triclopyr triethylammonium salt	98	0	0	0	0	0	70	6	76	0
	99	0	0	0	0	55	68	37	160	0
	00	0	0	0	0	15	130	9	154	0
	01	0	0	0	0	13	150	9	172	0
Triethylamine	98	332,653	677,152	380,472	412,334	4,403,232	867,852	2,137,380	9,211,075	114
	99	113,198	738,564	486,746	468,385	3,862,005	1,107,435	2,670,792	9,447,125	480
	00	151,958	902,247	220,570	688,659	5,003,076	853,078	2,105,042	9,924,630	209
	01	108,054	930,819	337,037	607,064	5,434,000	1,066,801	1,851,857	10,335,632	14,907
* Trifluralin	98	80,000	0	0	0	36,707	75,025	30,425	222,157	0
	99	89,000	0	0	0	40,210	71,489	23,222	223,921	0
	00	7,501.00	0.00	0.00	228.00	16,709.08	109,807.00	33,522.47	167,767.55	45.00
	01	7,702.00	0.00	0.00	626.00	297,841.95	79,243.00	22,661.75	408,074.70	679.00
* Triforine	98	0	0	0	0	0	0	0	0	0
	99	No reports								
	00	0	0	0	0	0	118	182	300	0
	01	0	0	0	0	0	69	107	176	0
1,2,4-Trimethylbenzene	98	15,943,528	2,528,986	8,208,452	3,855,356	11,018,711	849,686	8,872,956	51,277,675	153,746
	99	21,567,474	1,737,051	11,817,095	5,013,134	11,220,494	668,698	8,021,036	60,044,982	31,576
	00	12,310,536	2,314,924	8,689,649	5,070,297	12,331,156	751,917	7,669,141	49,137,620	10,097
	01	11,625,912	3,508,541	7,064,483	3,858,308	11,459,895	698,303	7,330,655	45,546,097	189,804

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

*** Data for PBT chemicals, due to threshold change for 2000 reporting year, are not comparable to prior year reporting. See Chapter 3 for more information.



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
2655-15-4 *	2,3,5-Trimethyl-phenyl methyl-carbamate	98	No reports							
		99	No reports							
		00	No reports							
		01	No reports							
639-58-7 *	Triphenyltin chloride	98	1	0	0	0	0	0	0	0
		99	1	3	0	0	0	3	0	3
		00	1	1	0	0	0	1	0	1
		01	1	0	0	0	0	0	0	0
76-87-9 *	Triphenyltin hydroxide	98	3	7	0	0	0	7	235	242
		99	5	1,001	0	0	0	1,001	1,085	2,086
		00	5	1,002	0	0	0	1,002	0	1,002
		01	5	257	0	0	0	257	0	257
126-72-7 **	Tris(2,3-dibromopropyl) phosphate	98	1	0	0	0	0	0	0	0
		99	1	2	1	0	0	3	5	8
		00	2	0	0	0	0	0	10	10
		01	2	0	0	0	0	0	260	260
72-57-1 **	Trypan blue	98	2	0	0	0	0	0	0	0
		99	3	5	0	0	0	5	163	168
		00	3	0	0	0	0	0	5	5
		01	3	0	0	0	0	0	260	260
51-79-6 **	Urethane	98	3	1,417	22	0	0	1,439	2,224	3,663
		99	7	90	1	0	14,249	14,340	929	15,269
		00	11	1,447	29,580	0	12,667	43,694	27,675	71,369
		01	10	1,110	0	0	17,684	18,794	24,218	43,012
7440-62-2	Vanadium (except when contained in an alloy)	98	31	53,209	616	0	1,253,179	1,307,004	97,999	1,405,003
		99	37	17,131	683	0	1,087,208	1,105,022	186,253	1,291,275
		00	69	80,217	3,599	8,121	1,879,816	1,971,753	1,205,908	3,177,661
		01	57	247,120	1,081	18,507	1,720,673	1,987,381	2,337,313	4,324,694
--	Vanadium compounds	98	NR	NR	NR	NR	NR	NR	NR	NR
		99	NR	NR	NR	NR	NR	NR	NR	NR
		00	462	2,126,896	644,654	1,192,983	76,367,856	80,332,389	6,272,002	86,604,391
		01	487	1,399,953	639,856	882,575	78,935,812	81,858,196	6,641,947	88,500,143
50471-44-8 *	Vinclozolin	98	2	10	0	0	0	10	750	760
		99	1	0	0	0	0	0	0	0
		00	1	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0
108-05-4 **	Vinyl acetate	98	207	3,384,013	3,665	285,141	56,125	3,728,944	127,552	3,856,496
		99	198	3,392,243	3,948	286,764	38,340	3,721,295	372,536	4,093,831
		00	199	3,152,104	2,377	223,927	104,809	3,483,217	18,918	3,502,135
		01	193	2,874,635	2,035	453,683	60,623	3,390,976	20,903	3,411,879
593-60-2 **	Vinyl bromide	98	1	0	0	0	0	0	0	0
		99	2	500	0	0	0	500	0	500
		00	No reports							
		01	No reports							
75-01-4 **	Vinyl chloride	98	55	885,387	78	154	0	885,619	69,214	954,833
		99	51	855,691	103	405	1	856,200	14,015	870,215
		00	52	773,239	177	43,650	0	817,066	623	817,689
		01	54	732,219	102	96,042	1	828,364	1,002	829,366

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

98o, 99o and 00o are data from original industries; 98n, 99n and 00n are data from new industries.

NR: not reportable (chemicals added to the TRI list after 1988).

DC: definition change (chemicals whose reporting definition has changed since 1988).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen (see Appendix C for more information). Ethylbenzene meets OSHA carcinogen standard effective for the 2001 reporting year.

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* 2,3,5-Trimethyl-phenyl methyl-carbamate	98	No reports								
	99	No reports								
	00	No reports								
	01	No reports								
* Triphenyltin chloride	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	26,226	0	3	26,229	0
	00	0	0	0	0	10,273	0	1	10,274	0
	01	0	0	0	0	4,825	0	0	4,825	0
* Triphenyltin hydroxide	98	0	0	0	0	16,465	1,273	237	17,975	0
	99	0	0	0	0	6,900	2,867	609	10,376	0
	00	0	0	0	0	24,570	1,158	87	25,815	0
	01	29,000	0	0	0	24,295	1,410	332	55,037	0
** Tris(2,3-dibromopropyl) phosphate	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	33,000	0	2	33,002	0
	00	0	0	0	0	45,140	982	7	46,129	0
	01	0	0	0	0	63,282	960	61	64,303	0
** Trypan blue	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	192,524	0	168	192,692	0
	00	0	0	0	0	152,211	785	2	152,998	0
	01	0	0	330	691	139,481	44	22	140,568	0
** Urethane	98	0	0	0	0	168,481	0	3,663	172,144	0
	99	0	0	518	1,473	680,048	0	14,765	696,804	0
	00	0	0	11,724	13,409	449,969	34,723	71,134	580,959	0
	01	0	0	15,113	3,394	778,227	165	43,012	839,911	0
Vanadium (except when contained in an alloy)	98	2,920	44,903	0	0	0	0	1,384,389	1,432,212	0
	99	86,633	35,862	0	0	0	2,809	1,183,245	1,308,549	90,026
	00	86,086	879,098	0	0	0	10,970	3,083,605	4,059,759	70,530
	01	79,603	784,232	0	0	0	1,387	4,220,139	5,085,361	921,608
Vanadium compounds	98	NR	NR	NR	NR	NR	NR	NR	NR	NR
	99	NR	NR	NR	NR	NR	NR	NR	NR	NR
	00	1,393,009	2,726,304	8	0	165,762	60,687	83,035,243	87,381,013	3,251,966
	01	887,130	2,703,852	0	0	95,502	35,153	88,856,599	92,578,236	100,734
* Vinclozolin	98	0	0	0	0	650	660	1	1,311	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0
** Vinyl acetate	98	993,710	86,991	18,008,261	16,805,998	28,073,111	1,498,924	3,687,077	69,154,072	62,310
	99	1,158,990	13,249	21,815,185	13,574,613	20,914,900	1,090,996	3,771,129	62,339,062	2,313,481
	00	1,038,436	3,896	18,585,538	10,932,118	15,063,237	1,924,348	3,567,759	51,115,332	13,767
	01	1,000,678	36,799	17,640,079	6,005,589	13,071,306	6,022,992	3,439,286	47,216,729	5,594
** Vinyl bromide	98	0	0	0	0	0	0	0	0	0
	99	0	0	0	0	0	0	50	50	0
	00	No reports								
	01	No reports								
** Vinyl chloride	98	377,999,298	857,715	25,083,408	20,780	37,025,589	591,050	874,517	442,452,357	19,820
	99	421,323,079	785,132	28,607,150	137,672	36,054,708	439,487	906,597	488,253,825	57,485
	00	427,180,214	754,310	25,758,170	13,311	34,433,686	273,723	979,922	489,393,336	20,698
	01	135,203,875	15,084	20,026,956	8,733	25,773,458	5,705,730	821,674	187,555,510	17,833

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).



Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001

Table A-1A: TRI On-site and Off-site Releases, by Chemical, 1998-2001
(continued)

CAS Number	Chemical	Year	Total Forms Number	On-site Releases					Off-site Releases	Total On and Off-site Releases Pounds
				Total Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	Releases to Land Pounds	Total On-site Releases Pounds	Transfers Off-site to Disposal Pounds	
75-35-4	* Vinylidene chloride	98	33	181,513	561	46,030	82,000	310,104	12,357	322,461
		99	33	158,684	133	99	14,945	173,861	937	174,798
		00	34	146,760	1,629	204	328,972	477,565	679	478,244
		01	33	141,876	428	632	19,837	162,773	656	163,429
--	Warfarin and salts	98	No reports							
		99	4	10	0	0	0	10	327	337
		00	3	2	0	0	0	2	72	74
		01	2	0	0	0	0	0	0	0
108-38-3	m-Xylene	98	85	1,199,852	1,070	4,199	860	1,205,981	29,939	1,235,920
		99	82	981,937	85	3,578	3,948	989,548	45,753	1,035,301
		00	73	626,000	193	3,555	5,554	635,302	18,278	653,580
		01	70	545,240	36	2,324	1,871	549,471	20,047	569,518
95-47-6	o-Xylene	98	105	1,347,696	965	3,088	41,350	1,393,099	102,777	1,495,876
		99	100	895,071	82	3,379	44,287	942,819	138,162	1,080,981
		00	99	742,213	2,565	3,376	626	748,780	34,570	783,350
		01	83	774,117	52	2,639	63	776,871	52,972	829,843
106-42-3	p-Xylene	98	58	1,841,331	730	3,227	55	1,845,343	18,212	1,863,555
		99	54	1,713,819	87	3,578	570	1,718,054	24,798	1,742,852
		00	54	1,321,313	198	3,555	166	1,325,232	8,242	1,333,474
		01	42	1,349,125	95	2,324	24,508	1,376,052	8,789	1,384,841
1330-20-7	* Xylene (mixed isomers)	98	3,729	70,512,765	57,507	124,315	109,671	70,804,258	1,488,887	72,293,145
		99	3,561	67,881,540	30,113	87,520	252,584	68,251,757	2,118,280	70,370,037
		00	3,444	58,481,728	82,243	151,178	142,785	58,857,934	1,318,611	60,176,545
		01	3,199	47,081,406	21,972	81,071	177,294	47,361,743	1,158,921	48,520,664
87-62-7	*,** 2,6-Xylidine	98	3	453	0	0	0	453	0	453
		99	2	1	0	0	0	1	0	1
		00	1	1	0	0	0	1	0	1
		01	2	14	0	0	0	14	0	14
7440-66-6	* Zinc (fume or dust)	98	462	1,391,077	40,539	294,943	74,519,262	76,245,821	9,935,739	86,181,560
		99	443	1,406,023	23,441	1	56,252,063	57,681,528	16,173,800	73,855,328
		00	419	794,465	22,010	2	37,555,894	38,372,371	14,785,655	53,158,026
		01	399	870,792	15,426	44,518	33,695,443	34,626,179	11,297,950	45,924,130
--	Zinc compounds	98	3,423	95,495,251	1,824,590	21,997,661	782,071,416	901,388,918	124,776,151	1,026,165,069
		99	3,469	8,485,157	1,386,796	22,177,372	831,523,302	863,572,627	130,416,020	993,988,647
		00	3,502	7,454,100	1,282,189	22,580,398	828,129,701	859,446,388	170,125,877	1,029,572,265
		01	3,390	6,159,692	2,172,966	9,656,931	738,610,608	756,600,197	205,468,291	962,068,488
12122-67-7	* Zineb	98	2	101	0	0	0	101	1	102
		99	1	10	0	0	0	10	0	10
		00	No reports							
		01	1	5	0	0	0	5	505	510
--	Mixtures and other trade name products	98	59	74,154	0	0	9	74,163	86,098	160,261
		99	51	218,595	0	0	500	219,095	25,649	244,744
		00	46	615	0	0	40,100	40,715	44,378	85,093
		01	112	101,848	750	0	3,537	106,135	22,474	128,609
--	Trade secrets	98	11	30	0	0	0	30	0	30
		99	3	0	0	0	0	0	0	0
		00	3	0	0	0	0	0	0	0
		01	2	0	0	0	0	0	0	0

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release. Breakdown of Underground Injection and On-site Land Releases (for RCRA Subtitle C landfills) began in 1996 reporting year.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).

Appendix A – Chemical-specific TRI Release and Other Waste Management Data, 1998-2001



Table A-1B: Quantities of TRI Chemicals in Waste, by Chemical, 1998-2001
(continued)

Chemical	Year	Recycled		Energy Recovery		Treated		Quantity Released On-and Off-site Pounds	Total Production-related Waste Managed Pounds	Non-Production-related Waste Managed Pounds
		On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds	On-site Pounds	Off-site Pounds			
* Vinylidene chloride	98	1,830,000	8,606	125,000	91,015	4,294,231	17,145	322,249	6,688,246	81
	99	3,977,000	21,860	100,000	66,964	2,544,483	41,010	208,407	6,959,724	145
	00	1,620,000	2,925	200,000	44,472	2,908,777	24,749	181,006	4,981,929	1,281
	01	1,551,367	822	390,806	149,050	3,161,210	81,153	162,874	5,497,282	1,709
Warfarin and salts	98	No reports								
	99	0	0	0	0	309,501	1	338	309,840	0
	00	0	0	0	0	202,284	0	74	202,358	0
	01	0	0	0	0	108,481	0	0	108,481	0
m-Xylene	98	1,915,527	162,342	9,462,285	436,809	1,084,879	126,038	1,233,872	14,421,752	19,071
	99	1,335,709	112,672	11,882,415	486,427	960,452	103,696	1,003,784	15,885,155	15,278
	00	4,344,222	350,344	10,109,064	445,221	889,781	40,664	656,054	16,835,350	431
	01	326,998	39,856	7,482,614	436,822	417,623	106,883	580,445	9,391,241	4,652
o-Xylene	98	103,367	15,218	6,965,568	1,948,285	2,099,235	815,726	1,403,971	13,351,370	14,899
	99	1,047,906	8,764	7,989,008	2,020,177	2,063,253	414,093	1,175,222	14,718,423	13,514
	00	9,055,394	384	5,654,825	957,459	2,614,290	963,866	1,085,399	20,331,617	4,751
	01	8,122,177	7,489	1,997,338	467,085	1,935,544	181,552	1,313,835	14,025,020	4,453
p-Xylene	98	126,840	395	4,670,124	189,448	2,866,722	156,678	1,858,164	9,868,371	14,187
	99	147,846	7	683,856	234,234	1,937,576	77,621	1,763,250	4,844,390	11,833
	00	178,703	7	2,663,410	128,534	2,251,786	53,976	1,326,753	6,603,169	10,349
	01	3,578,849	2,199	4,968,069	22,277,020	2,430,690	79,120	1,364,222	34,700,169	174,687
* Xylene (mixed isomers)	98	129,828,050	39,098,393	141,505,558	144,257,281	74,242,226	22,650,264	76,233,785	627,815,557	254,569
	99	132,164,663	34,774,046	119,792,335	110,701,307	71,063,900	20,660,931	69,853,184	559,010,366	364,234
	00	106,724,282	31,618,502	109,899,891	108,505,791	75,153,649	15,232,206	63,175,406	510,309,726	127,224
	01	106,413,584	31,701,371	92,846,853	116,238,710	65,780,111	15,708,374	50,788,556	479,477,559	567,440
*,** 2,6-Xyldine	98	0	4	22,235	0	0	0	453	22,692	0
	99	0	0	0	2,904	17	0	1	2,922	0
	00	0	0	0	3,900	29	0	1	3,930	0
	01	0	0	0	108,000	47	27	15	108,089	0
* Zinc (fume or dust)	98	28,252,595	49,368,687	0	125,059	652,837	741,490	98,267,388	177,408,056	2,282,657
	99	6,124,363	55,342,801	0	58,144	606,425	604,136	83,282,430	146,018,299	16
	00	6,601,018	42,697,358	0	141,555	968,888	257,019	53,447,517	104,113,355	119,207
	01	5,278,971	36,137,304	0	19,930	916,034	96,702	46,889,001	89,337,942	1,027,036
Zinc compounds	98	76,027,315	275,719,276	367,541	270,668	5,661,330	12,579,485	1,000,435,483	1,371,061,097	1,405,980
	99	91,292,781	293,412,489	142,280	173,258	22,342,193	9,572,650	1,013,273,429	1,430,209,080	267,037,408
	00	101,270,500	305,046,621	144,790	227,926	9,969,206	11,607,619	1,050,863,256	1,479,129,918	20,032,070
	01	84,963,627	274,345,019	140,775	40,538	10,462,553	2,697,732	982,854,573	1,355,504,817	5,393,968
* Zineb	98	0	0	0	100	11,715	0	102	11,917	0
	99	0	0	0	0	0	320	9	329	0
	00	No reports								
	01	0	0	0	0	17,404	429	433	18,266	0
Mixtures and other trade name products	98	10,427,837	14,255	1,367,661	14,955	23,598	72,626	108,558	12,029,490	0
	99	39,297	7,316	700	43,758	233,209	14,608	262,325	601,213	0
	00	0	18,844	0	32,445	0	3,858	28,097	83,244	10
	01	18,197	53,714	0	500	1,977,082	47,828	151,199	2,248,520	28,232
Trade secrets	98	0	0	0	0	2,700	0	30	2,730	0
	99	0	0	0	0	0	0	0	0	0
	00	0	0	0	0	0	0	0	0	0
	01	0	0	0	0	0	0	0	0	0

Note: Data from Section 8 (Current Year) of Form R.

NR: not reportable (chemicals added to the TRI list after 1998).

No reports: No reports received for the chemical in that reporting year.

* Chemicals that are currently active ingredients in EPA's Pesticide Product Information System (all pesticide products imported and/or manufactured in the U.S.) and/or Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Active Ingredients, including Special Review, Canceled/Denied or Suspended, and Restricted Use Pesticides.

** Chemicals meeting the OSHA carcinogen standard (see Appendix C for more information).