

## **Appendix B**

### **TRI Release and Waste Management Data for Metals and Metal Compounds, 1999**



## Appendix B — TRI Release and Waste Management Data for Metals and Metal Compounds, 1999

**Table B-1. TRI On-site and Off-site Releases of Metals and Metal Compounds, Original and New Industries, 1999**

Chemical		On-site Releases										Off-site Releases	Total On- and Off-site Releases		
		Total Air Emissions Pounds		Surface Water Discharges Pounds		Underground Injection Class I Wells Pounds		Class II-V Wells Pounds		On-site Land Releases				Total On-site Releases Pounds	
										RCRA Subtitle C Landfills Pounds	Other Landfills Pounds	Land Treatment Pounds			Surface Impoundments Pounds
Aluminum* (CAS Number 7429-09-5)	O	5,634,715	4,753	0	0	47,925	597,309	19,883	180,000	500,941	6,985,526	13,809,568	20,795,094		
	N	1,144,097	0	0	0	4,072,525	1,053	0	99,052	111,277	5,428,004	18,368	5,446,372		
Antimony and antimony compounds	O	125,905	44,785	62,911	0	58,202	297,499	308	280,855	400,964	1,271,429	3,365,688	4,637,117		
	N	14,157	31,354	0	610,086	973,119	436,457	2	10,445,341	15,971,462	28,481,978	392,921	28,874,899		
Arsenic and arsenic compounds	O	92,874	16,131	198,310	0	150,111	2,993,418	5	5,674,927	536,035	9,661,811	2,073,922	11,735,733		
	N	205,423	168,578	250	880,034	2,788,158	2,367,618	13,711	187,517,056	398,708,824	592,649,652	1,987,448	594,637,100		
Barium and barium compounds	O	930,150	1,122,361	268	0	181,833	3,984,180	130,273	956,082	1,319,760	8,624,907	7,687,710	16,312,617		
	N	2,405,305	1,117,404	24,403	1,982,400	7,065,244	77,002,235	940,204	72,195,924	94,081,078	256,814,197	37,662,423	294,476,620		
Beryllium and beryllium compounds	O	1,242	84	4,100	0	2,650	50,529	5	32	74	58,716	25,109	83,825		
	N	7,343	3,483	0	0	288,832	253,640	1	274,750	5,705	833,754	49,840	883,594		
Cadmium and cadmium compounds	O	32,215	2,192	23	0	3,680	65,868	5	358,306	260,037	722,326	746,769	1,469,095		
	N	20,688	765	61,000	100,000	2,989,490	12,343	12	2,269,906	6,290,816	11,745,020	472,327	12,217,347		
Chromium and chromium compounds	O	767,885	108,615	816,768	5	431,728	1,714,091	36,291	24,472,106	3,652,262	31,999,751	26,931,218	58,930,969		
	N	285,275	117,535	720,250	38,000	4,877,156	4,951,964	61,231	11,394,334	112,027,121	134,472,866	6,723,106	141,195,972		
Cobalt and cobalt compounds	O	58,186	64,426	30,421	0	34,768	21,785	8,320	48,861	386,670	653,437	831,930	1,485,367		
	N	45,046	24,948	0	17,001	204,595	1,351,441	8,725	3,349,556	9,938,544	14,939,856	401,287	15,341,143		
Copper and copper compounds	O	3,700,149	118,477	310,117	5	401,462	3,361,484	87,227	6,534,444	35,244,654	49,758,019	18,767,102	68,525,121		
	N	741,296	279,810	68,005	1,205,581	9,092,867	8,200,446	51,550	398,746,700	1,328,496,172	1,746,882,427	5,882,850	1,752,765,277		
Lead and lead compounds	O	1,221,654	40,130	182,869	0	678,818	3,828,990	3,866	3,624,266	9,406,578	18,987,171	25,492,311	44,479,482		
	N	356,460	33,838	13,250	7,959,140	21,090,031	7,795,339	13,822	117,181,330	158,285,519	312,728,729	8,409,618	321,138,347		
manganese compounds	O	2,683,444	4,990,006	7,011,377	255	2,047,723	32,060,876	375,419	14,852,268	5,238,694	69,260,062	55,823,265	125,083,327		
	N	590,455	685,433	36,000	1,150,500	8,399,165	20,657,640	259,278	33,091,283	357,217,903	422,087,657	9,052,033	431,139,690		
Mercury and mercury compounds	O	13,385	169	0	0	1,453	3,358	5	3,300	3	21,673	59,621	81,294		
	N	13,092	9	0	0	455,855	1,698	0	1,014,029	1,686,005	3,170,688	104,085	3,274,773		
Nickel and nickel compounds	O	736,607	108,703	226,687	0	59,827	863,807	5,178	1,252,131	775,137	4,028,077	9,071,803	13,099,880		
	N	765,962	161,939	140,250	41,012	3,725,386	4,534,018	62,526	10,912,205	38,284,691	58,627,989	9,280,808	67,908,797		

**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 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.

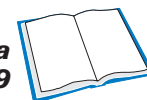
Due to an EPA data entry error, three chemical reporting revisions for 1999 by one facility, the US Army Letterkenny Depot in Chambersburg, PA, reporting in the original industry sector were not included in tables in this report (except in federal facility tables). The effect of the revisions is to change off-site transfers to disposal amounts for zinc compounds from 17,147,839 pounds to zero and lead compounds from 60,123 pounds to zero. The facility anticipated revising off-site transfers to disposal for manganese compounds from 5,584,900 pounds to below 500 pounds.

O: Original Industries.

N: New Industries.

\*Only fume or dust forms are reportable.

## Appendix B —TRI Release and Waste Management Data for Metals and Metal Compounds, 1999



**Table B-1. TRI On-site and Off-site Releases of Metals and Metal Compounds, Original and New Industries, 1999 (continued)**

Chemical		On-site Releases									Off-site Releases	Total On- and Off-site Releases	
				Underground Injection		On-site Land Releases				Total On-site Releases			
				Total Air Emissions	Surface Water Discharges	Class I Wells	Class II-V Wells	RCRA Subtitle C Landfills	Other Landfills		Land Treatment		Surface Impoundments
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	
Selenium and selenium compounds	O	151,420	4,391	33,509	0	3,103	115,507	5	71,010	118,830	497,775	105,535	603,310
	N	509,004	40,960	0	0	1,595,481	572,455	267	400,499	3,344,029	6,462,695	559,303	7,021,998
Silver and silver compounds	O	19,768	7,314	222	0	2,650	9,665	380	5,107	49,257	94,363	113,274	207,637
	N	2,203	322	17,000	160,000	644,846	2,010	0	335,133	2,757,959	3,919,473	297,121	4,216,594
Thallium and thallium compounds	O	2,791	750	0	0	4,350	82,805	0	170,000	0	260,696	6,161	266,857
	N	5,637	2,729	0	0	306,458	687,889	0	713,772	1,393,738	3,110,223	159,062	3,269,285
Vanadium* (CAS Number 7440-62-2)	O	15,105	283	0	0	6,200	94,000	9	0	26	115,623	17,242	132,865
	N	3,000	400	0	0	202,925	0	0	212,000	0	418,325	169,011	587,336
Zinc* and zinc compounds	O	6,748,857	1,018,013	222,563	5,500	7,834,748	32,783,281	125,988	9,444,787	81,791,904	139,975,641	143,921,722	283,897,363
	N	4,900,249	378,355	850,750	21,089,760	84,578,153	18,860,487	239,070	297,804,020	368,207,037	796,907,881	15,284,055	812,191,936
Total	O	22,936,352	7,651,583	9,100,145	5,765	11,951,231	82,928,452	793,167	67,928,482	139,681,826	342,977,003	308,849,950	651,826,953
	N	12,014,692	3,047,862	1,931,158	35,233,514	153,350,286	147,688,733	1,650,399	1,147,956,890	2,896,807,880	4,399,681,414	96,905,666	4,496,587,080

**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 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.

Due to an EPA data entry error, three chemical reporting revisions for 1999 by one facility, the US Army Letterkenny Depot in Chambersburg, PA, reporting in the original industry sector were not included in tables in this report (except in federal facility tables). The effect of the revisions is to change off-site transfers to disposal amounts for zinc compounds from 17,147,839 pounds to zero and lead compounds from 60,123 pounds to zero. The facility anticipated revising off-site transfers to disposal for manganese compounds from 5,584,900 pounds to below 500 pounds.

O: Original Industries. N: New Industries.

\*Only fume or dust forms are reportable.



## Appendix B — TRI On- and Off-site Releases and Waste Management of Metals and Metal Compounds, O and N Industries

**Table B-2. TRI Off-site Releases of Metals and Metal Compounds, Original and New Industries, 1999**

Chemical													Off-site Releases
		Storage Only <sup>a</sup>	Solidification/Stabilization Metals Only <sup>b</sup>	Wastewater Treatment (Excluding POTWs) Metals Only <sup>c</sup>	Transfers to POTWs Metals Only <sup>d</sup>	Underground Injection	Landfills/Surface Impoundments	Land Treatment	Other Land Disposal	Other Off-site Management	Transfers to Waste Broker for Disposal	Unknown <sup>e</sup>	Transfers Off-site to Disposal
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Aluminum* (CAS Number 7429-09-5)	O	3,105,861	6,370,192	5	6,290	0	3,665,170	0	23,794	850,205	13,813	6,568	14,041,898
	N	0	17,852	0	0	0	0	0	0	828	0	0	18,680
Antimony and antimony compounds	O	7,221	562,686	16,685	104,977	5,800	2,596,182	6,664	50,744	130,451	79,759	67,615	3,628,784
	N	250	195,856	1,558	860	505	86,642	37,303	30,127	35,066	4,005	930	393,102
Arsenic and arsenic compounds	O	22,629	801,204	291	1,070	425,893	1,052,314	262	40,375	45,312	78,686	8,657	2,476,693
	N	0	545,584	23,478	33	750	1,252,911	32,530	104,924	120,965	3,327	645	2,085,147
Barium and barium compounds	O	76,642	1,399,960	99,402	326,691	268	5,475,106	135,855	478,870	681,977	246,152	152,938	9,073,861
	N	1	862,926	117,570	1,622	750	24,288,889	91,217	7,091,175	6,975,816	204,278	67,967	39,702,211
Beryllium and beryllium compounds	O	0	10,762	150	11	0	14,086	0	0	0	100	0	25,109
	N	0	0	0	0	0	40,367	0	25,968	755	0	0	67,090
Cadmium and cadmium compounds	O	70	373,550	270	3,386	920	758,137	3,500	38,172	30,722	58,454	7,198	1,274,379
	N	0	370,937	10	305	25	98,970	0	0	40,035	1,787	16,373	528,442
Chromium and chromium compounds	O	312,628	3,547,397	838,181	329,950	400,665	16,196,426	14,264	6,937,101	420,569	828,738	150,230	29,976,149
	N	3,242	1,293,092	23,102	1,734	62,970	4,639,148	73,206	409,728	306,361	118,402	96,085	7,027,070
Cobalt and cobalt compounds	O	18,333	58,218	9,573	13,217	250	590,618	140	6,787	22,899	43,698	110,028	873,761
	N	0	3,587	0	1	1	299,703	12,629	84,087	22,917	0	0	422,925
Copper and copper compounds	O	229,879	4,014,202	1,051,343	751,414	21,621	10,673,303	19,364	497,678	1,428,936	1,655,368	464,659	20,807,767
	N	0	441,455	5,849	2,715	970	4,364,132	40,444	437,345	1,193,896	62,020	77,952	6,626,778
Lead and lead compounds	O	67,092	16,550,183	45,776	202,338	12,869	17,201,718	1,245,454	126,736	304,603	879,465	105,986	36,742,220
	N	68,723	1,065,604	10,844	41,435	105	3,497,323	23,356	187,464	3,584,490	447,641	46,532	8,973,517

**Note:** Off-site Releases are from Section 6 (off-site transfers to disposal) of Form R.

Due to an EPA data entry error, three chemical reporting revisions for 1999 by one facility, the US Army Letterkenny Depot in Chambersburg, PA, reporting in the original industry sector were not included in tables in this report (except in federal facility tables). The effect of the revisions is to change the facility's off-site transfers to disposal (other off-site management) amounts for zinc compounds from 17,147,839 pounds to zero and lead compounds from 60,123 pounds to zero. The facility anticipated revising off-site transfers to disposal for manganese compounds from 5,584,900 pounds to below 500 pounds.

O: Original Industries. N: New Industries.

\* Only fume or dust forms are reportable.

<sup>a</sup>Storage only (disposal code M10) indicates that the toxic chemical is sent off-site for storage because there is no known disposal method. Amounts reported as transferred to storage only are included as a form of disposal (off-site release). See Box 1-5.

<sup>b</sup>Beginning in reporting year 1997, transfers to solidification/stabilization of metals and metal compounds (waste treatment code M41) are reported separately from transfers to solidification/stabilization of non-metal TRI chemicals (waste treatment code M40). Because this treatment method prepares a metal for disposal, but does not destroy it such transfers are included as a form of disposal (off-site release). See Box 1-6. Reports under code M40 of metals and metal compounds have been included in solidification/stabilization of metals and metal compounds in this report.

<sup>c</sup>Beginning in reporting year 1997, transfers to wastewater treatment (excluding POTWs) of metals and metal compounds (waste treatment code M61) are reported separately from transfers to wastewater treatment of non-metal TRI chemicals (waste treatment code M60). Because wastewater treatment does not destroy metals, such transfers are included as a form of disposal (off-site release). See Box 1-6. Transfers of metals and metal compounds reported under code M60 have been included in transfers of metals and metal compounds to wastewater treatment.

<sup>d</sup>Reported as discharges to POTWs in Section 6.1 of Form R. EPA considers transfers of metals and metal compounds to POTWs an off-site release because sewage treatment does not destroy the metal content of the waste material.

<sup>e</sup>Unknown (disposal code M99) indicates that a facility is not aware of the type of waste management used for the toxic chemical that is sent off-site. Amounts reported as unknown transfers are treated as a form of disposal (off-site release).

## Appendix B —TRI Release and Waste Management Data for Metals and Metal Compounds, 1999



**Table B-2. TRI Off-site Releases of Metals and Metal Compounds, Original and New Industries, 1999 (continued)**

Chemical													Off-site Releases
		Storage Only <sup>a</sup>	Solidification/ Stabilization Metals Only <sup>b</sup>	Wastewater Treatment (Excluding POTWs) Metals Only <sup>c</sup>	Transfers to POTWs Metals Only <sup>d</sup>	Under ground Injection	Landfills/ Surface Disposal Impound- ments	Land Treatment	Other Land Disposal	Other Off-site Management	Transfers to Waste Broker for Disposal	Unknown <sup>e</sup>	Transfers Off-site to Disposal
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Manganese and manganese compounds	O	156,297	14,841,207	3,081,900	753,310	7,017	31,880,458	241,339	2,201,184	8,243,036	574,424	196,410	62,176,582
	N	82,778	537,086	338	1,771	1	6,948,636	120,399	1,041,277	555,748	27,163	6,356	9,321,553
Mercury and mercury compounds	O	20	20,603	191	69	9	37,450	0	16	178	1,585	0	60,121
	N	0	96,589	0	0	0	662	0	0	1,922	532	4,384	104,089
Nickel and nickel compounds	O	79,183	2,384,001	376,445	193,765	72,288	6,702,695	3,611	192,215	145,108	471,421	95,427	10,716,159
	N	50,005	408,343	2,238	4,780	1,253	7,339,809	75,551	423,158	190,402	1,403,493	27,027	9,926,059
Selenium and selenium compounds	O	0	19,807	6,617	259	0	35,656	2	4,932	42,757	0	6,790	116,820
	N	0	86,828	124	0	15	494,892	0	6,479	1,825	230	292	590,685
Silver and silver compounds	O	7,700	1,796	11	2,838	0	99,498	635	2,062	52	758	283	115,633
	N	0	298,175	3	5	0	10,790	0	0	1,133	6,681	84	316,871
Thallium and thallium compounds	O	0	571	0	0	0	6,090	0	0	5	0	0	6,666
	N	0	40,916	12	0	0	114,320	0	2,050	1,601	0	163	159,062
Vanadium* (CAS Number 7440-62-2)	O	0	10,620	0	1,521	0	17,486	0	0	0	0	0	29,627
	N	0	107,000	0	0	0	62,011	0	0	0	0	0	169,011
Zinc* and zinc compounds	O	115,687	88,466,751	955,957	654,218	2,441,072	106,458,928	82,822	1,188,670	18,549,348	1,031,693	319,527	220,264,673
	N	195,505	719,688	3,527	3,122	280	9,514,436	92,227	920,377	4,128,196	75,727	72,258	15,725,343
<b>Total</b>	O	<b>4,199,242</b>	<b>139,433,710</b>	<b>6,482,797</b>	<b>3,345,324</b>	<b>3,388,672</b>	<b>203,461,321</b>	<b>1,753,912</b>	<b>11,789,336</b>	<b>30,896,158</b>	<b>5,964,114</b>	<b>1,692,316</b>	<b>412,406,902</b>
	N	<b>400,504</b>	<b>7,091,518</b>	<b>188,653</b>	<b>58,383</b>	<b>67,625</b>	<b>63,053,641</b>	<b>598,862</b>	<b>10,764,159</b>	<b>17,161,956</b>	<b>2,355,286</b>	<b>417,048</b>	<b>102,157,635</b>

**Note:** Off-site Releases are from Section 6 (off-site transfers to disposal) of Form R.

Due to an EPA data entry error, three chemical reporting revisions for 1999 by one facility, the US Army Letterkenny Depot in Chambersburg, PA, reporting in the original industry sector were not included in tables in this report (except in federal facility tables). The effect of the revisions is to change the facility's off-site transfers to disposal (other off-site management) amounts for zinc compounds from 17,147,839 pounds to zero and lead compounds from 60,123 pounds to zero. The facility anticipated revising off-site transfers to disposal for manganese compounds from 5,584,900 pounds to below 500 pounds.

O: Original Industries. N: New Industries.

\* Only fume or dust forms are reportable.

<sup>a</sup> Storage only (disposal code M10) indicates that the toxic chemical is sent off-site for storage because there is no known disposal method. Amounts reported as transferred to storage only are included as a form of disposal (off-site release). See Box 1-5.

<sup>b</sup> Beginning in reporting year 1997, transfers to solidification/stabilization of metals and metal compounds (waste treatment code M41) are reported separately from transfers to solidification/stabilization of non-metal TRI chemicals (waste treatment code M40). Because this treatment method prepares a metal for disposal, but does not destroy it such transfers are included as a form of disposal (off-site release). See Box 1-6. Reports under code M40 of metals and metal compounds have been included in solidification/stabilization of metals and metal compounds in this report.

<sup>c</sup> Beginning in reporting year 1997, transfers to wastewater treatment (excluding POTWs) of metals and metal compounds (waste treatment code M61) are reported separately from transfers to wastewater treatment of non-metal TRI chemicals (waste treatment code M60). Because wastewater treatment does not destroy metals, such transfers are included as a form of disposal (off-site release). See Box 1-6. Transfers of metals and metal compounds reported under code M60 have been included in transfers of metals and metal compounds to wastewater treatment.

<sup>d</sup> Reported as discharges to POTWs in Section 6.1 of Form R. EPA considers transfers of metals and metal compounds to POTWs an off-site release because sewage treatment does not destroy the metal content of the waste material.

<sup>e</sup> Unknown (disposal code M99) indicates that a facility is not aware of the type of waste management used for the toxic chemical that is sent off-site. Amounts reported as unknown transfers are treated as a form of disposal (off-site release).



## Appendix B — TRI Release and Waste Management Data for Metals and Metal Compounds, 1999

**Table B-3. Quantities of TRI Metals and Metal Compounds in Waste, Original and New Industries, 1999**

Chemical		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			
Aluminum* (CAS Number 7429-09-5)	O	15,508,535	28,604,288	0	5,058	21,798,263	425,726	19,199,937	85,541,807	25
	N	1,013,539	0	0	0	289,500	127,156	4,320,550	5,750,745	1
Antimony and antimony compounds	O	10,326,707	5,026,225	0	53,103	822,211	630,099	3,969,220	20,827,565	213,269
	N	11,713	14,752	0	0	0	470	28,571,356	28,598,291	300,004
Arsenic and arsenic compounds	O	5,031,994	1,655,537	300	0	153,013	205,899	8,100,640	15,147,383	2,439,811
	N	65,746	143,165	0	0	0	112,405	595,363,207	595,684,523	5,200,019
Barium and barium compounds	O	52,217,129	2,716,885	6,000	139,668	5,055,878	798,445	18,332,032	79,266,037	14,173
	N	582,193	3,031,849	0	0	1,214,330	387,170	294,985,180	300,200,722	11,321
Beryllium and beryllium compounds	O	101,065	62,538	0	0	0	2,315	74,525	240,443	2
	N	9,700	0	0	0	0	0	898,112	907,812	9
Cadmium and cadmium compounds	O	3,092,021	839,086	0	212	34,017	31,073	1,944,225	5,940,634	39,154
	N	220,837	167,099	0	0	0	1,521	8,433,009	8,822,466	120,019
Chromium and chromium compounds	O	54,619,373	121,166,954	2,000	66,394	9,443,342	2,128,928	55,812,213	243,239,204	5,331,804
	N	15,941	2,148,824	0	0	93,959	394,888	97,069,410	99,723,022	43,000,536
Cobalt and cobalt compounds	O	4,735,797	8,885,356	117	14,204	1,163,005	79,814	1,343,947	16,222,240	3,811
	N	164,666	11,144	0	0	0	10	15,339,663	15,515,483	30
Copper and copper compounds	O	687,450,913	746,609,196	1,200	324,671	3,842,961	3,101,617	61,160,208	1,502,490,766	4,641,244
	N	5,368,443	3,883,289	0	0	7,265,333	533,299	1,490,742,033	1,507,792,397	330,001,092
Lead and lead compounds	O	655,768,754	329,657,165	700	18,492	1,821,109	3,108,433	43,599,113	1,033,973,766	29,097,238
	N	486,397	3,136,030	0	0	764,817	220,850	287,737,594	292,345,688	39,001,949
Manganese and manganese compounds	O	61,530,770	115,055,084	2,876	58,512	1,689,240	7,738,519	122,989,530	309,064,531	18,968,296
	N	769,421	971,871	0	0	65,792	83,200	382,507,399	384,397,683	47,000,056
Mercury and mercury compounds	O	861,988	40,477	0	0	4,021	5,682	76,702	988,870	2,412
	N	43,155	87,770	0	0	0	550	3,255,808	3,387,283	15,003
Nickel and nickel compounds	O	34,046,852	110,495,866	2,900	27,846	1,475,056	1,353,733	13,052,736	160,454,989	576,940
	N	999,461	1,443,880	0	0	107,177	104,304	62,932,713	65,587,535	5,230,057
Selenium and selenium compounds	O	574,219	23,662	0	0	3,576	10,393	489,808	1,101,658	109,704
	N	56,980	4	0	0	0	20	6,442,558	6,499,562	670,007
Silver and silver compounds	O	4,235,477	2,996,482	90,601	11	2,177	41,591	312,693	7,679,032	9,984
	N	612	124,761	0	0	0	144,015	3,424,801	3,694,189	540,012
Thallium and thallium compounds	O	9	0	0	0	0	366	201,183	201,558	60,000
	N	1,884	0	0	0	0	0	3,102,108	3,103,992	120,001
Vanadium* (CAS Number 7440-62-2)	O	113,633	35,862	0	0	0	2,809	132,442	284,746	27
	N	0	0	0	0	0	0	479,721	479,721	90,000
Zinc and zinc compounds*	O	86,965,221	335,353,178	142,280	231,402	24,153,593	27,111,074	333,599,223	807,555,971	233,011,799
	N	9,808,546	2,665,741	0	0	66,270	292,548	818,551,130	831,384,235	34,034,413
<b>Total</b>	O	<b>1,677,180,457</b>	<b>1,809,223,841</b>	<b>248,974</b>	<b>939,573</b>	<b>71,461,462</b>	<b>46,776,516</b>	<b>684,390,377</b>	<b>4,290,221,200</b>	<b>294,519,693</b>
	N	<b>19,619,234</b>	<b>17,830,179</b>	<b>0</b>	<b>0</b>	<b>9,867,178</b>	<b>2,402,406</b>	<b>4,104,156,352</b>	<b>4,153,875,349</b>	<b>505,334,529</b>

**Note:** Data are from Section 8 of Form R.

Due to an EPA data entry error, three chemical reporting revisions for 1999 by one facility, the US Army Letterkenny Depot in Chambersburg, PA, reporting in the original industry sector were not included in tables in this report (except in federal facility tables). The effect of the revisions is to change the facility's treated off-site amounts for zinc compounds from 17,147,839 pounds to zero and lead compounds from 60,123 pounds to zero. The facility anticipated revising treated off-site for manganese compounds from 5,584,900 pounds to below 500 pounds.

O: Original Industries. N: New Industries.

\* Only fume or dust forms are reportable.