

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Adrian, Michigan

Facility: **Hydro Aluminum Bohn Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>				5	5	250	<b>260</b>
Zinc (fume or dust)	River Raisin			5	5	250	<b>260</b>

City: Albion, Michigan

Facility: **Hayes-albion Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		260	10	10	10	10	<b>300</b>
Phenol	Kalamazoo River	250					<b>250</b>
Copper	Kalamazoo River	5	5	5	5	5	<b>25</b>
Manganese	Kalamazoo River		5	5	5	5	<b>20</b>
Manganese compounds	Kalamazoo River	5					<b>5</b>

City: Allegan, Michigan

Facility: **Allegan Metal Finishing Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		250	250	250	250	250	<b>1,250</b>
Zinc compounds	Kalamazoo River	250	250	250	250	250	<b>1,250</b>

City: Alma, Michigan

Facility: **Total Petroleum Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		65,524	67,155	54,055	64,789	63,700	<b>315,223</b>
Diethanolamine	Pine River	57,000	60,000	48,000	60,000	56,000	<b>281,000</b>
Ammonia	Pine River	8,500	6,900	5,800	4,500	7,700	<b>33,400</b>
Phenol	Pine River		250	250	250		<b>750</b>
Xylene (mixed isomers)	Pine River	13	5	5	18		<b>41</b>
Toluene	Pine River	6			11		<b>17</b>
Benzene	Pine River	3			5		<b>8</b>
Ethylbenzene	Pine River	2			5		<b>7</b>

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Companies reporting toxic discharges to water (1990-1994)

City: Alpena, Michigan

Facility: **ABTCO Inc.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		37,143	40,082	43,005	26,621	43,716	<b>190,567</b>
Ammonia	Lake Huron	37,000	40,000	43,000	21,000	37,000	<b>178,000</b>
Formaldehyde	Lake Huron	140	81		3,500	3,000	<b>6,721</b>
Phenol	Lake Huron				2,100	2,500	<b>4,600</b>
Sulfuric acid	Lake Huron				5	1,200	<b>1,205</b>
Chlorine	Thunder Bay River	3	1	5	5	5	<b>19</b>
Sulfuric acid	Thunder Bay River				5	5	<b>10</b>
Chlorine	Lake Huron				5	5	<b>10</b>
Ammonia	Thunder Bay River				1	1	<b>2</b>

City: Bangor, Michigan

Facility: **Inverness Casting Group**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		520	30	15	265		<b>830</b>
Nickel	Black River			5	250		<b>255</b>
Copper compounds	Black River	250	5				<b>255</b>
Nickel compounds	Black River	250	5				<b>255</b>
Cyanide compounds	Black River	5	5		5		<b>15</b>
Chromium	Black River			5	5		<b>10</b>
Copper	Black River			5	5		<b>10</b>
Zinc (fume or dust)	Black River	5	5				<b>10</b>
Chlorine	Black River	5	5				<b>10</b>
Chromium compounds	Black River	5	5				<b>10</b>

City: Bay City, Michigan

Facility: **Monitor Sugar Co.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>			14,000	14,000	13,000	16,000	<b>57,000</b>
Ammonia	Saginaw River		14,000	14,000	13,000	16,000	<b>57,000</b>

City: Bay City, Michigan

Facility: **General Motors Powertrain Grp.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		96	849	702	9		<b>1,656</b>
Manganese	Saginaw River		849	468			<b>1,317</b>
Copper	Saginaw River			234	9		<b>243</b>
Manganese compounds	Saginaw River	96					<b>96</b>

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Benton Harbor, Michigan

Facility: **Alreco Metals Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>			250	250	250	250	<b>1,000</b>
Copper	Paw Paw River		250	250	250	250	<b>1,000</b>

City: Benton Harbor, Michigan

Facility: **Whirlpool Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>			69	66	33	28	<b>196</b>
Nickel	Benton Harbor Ship Canal		69	66	33	28	<b>196</b>

City: Bronson, Michigan

Facility: **Bronson Plating Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		250	250	250	250	250	<b>1,250</b>
Nickel	County Drain #30		250	250	250	250	<b>1,000</b>
Nickel	Swan Creek	250					<b>250</b>

City: Coldwater, Michigan

Facility: **Climax Specialty Metals**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>						750	<b>750</b>
Molybdenum trioxide	Unnamed Stream To South Lake					750	<b>750</b>

City: Dearborn, Michigan

Facility: **Rouge Steel Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		44,000	27,000	19,800	10,100	12,320	<b>113,220</b>
Ammonia	Rouge River	39,000	22,000	17,000	8,900	1,600	<b>88,500</b>
Lead	Rouge River	3,200	2,800	2,800	1,200	1,720	<b>11,720</b>
Copper	Rouge River					9,000	<b>9,000</b>
Zinc compounds	Rouge River	1,800	2,200				<b>4,000</b>

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### Companies reporting toxic discharges to water (1990-1994)

City: Dearborn, Michigan

Facility: **Double Eagle Steel Coating Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		550	860	860	750	750	<b>3,770</b>
Zinc compounds	Rouge River	550	860	860	750	750	<b>3,770</b>

City: Dearborn, Michigan

Facility: **Ford**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>					250		<b>250</b>
Chlorine	Rouge River				250		<b>250</b>

City: Detroit, Michigan

Facility: **Pepsi-cola**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>					250		<b>250</b>
Phosphoric acid	St. Clair River				250		<b>250</b>

City: Dowagiac, Michigan

Facility: **Modine Heat Transfer Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		126	141	125	114	113	<b>619</b>
Copper	Pine Lake Creek	119	116	103	114	113	<b>565</b>
1,1,1-Trichloroethane	Pine Lake Creek	7		22			<b>29</b>
1,1,1-Trichloroethane	Pike Lake Creek		25				<b>25</b>

City: Ecorse, Michigan

Facility: **National Steel Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		140,500	318,670	274,840	71,611	257,764	<b>1,063,385</b>
Ammonia	Detroit River	114,500	210,000	172,000	31,000	98,000	<b>625,500</b>
Zinc compounds	Detroit River	5,000	49,000	32,900	12,000	12,000	<b>110,900</b>
Antimony	Detroit River					92,000	<b>92,000</b>
Manganese	Detroit River	2,500	25,000			25,000	<b>52,500</b>
Ethylene glycol	Detroit River	6,000	8,500	5,200	5,400	7,700	<b>32,800</b>
Manganese compounds	Detroit River			29,000			<b>29,000</b>
Ammonia	Rouge River		7,500	9,860	4,400	4,400	<b>26,160</b>
Chromium compounds	Detroit River	2,700	1,800	8,800	6,000	6,400	<b>25,700</b>
Phenol	Detroit River	2,100	5,000	3,200	6,000	5,900	<b>22,200</b>
Copper	Detroit River	1,700	1,200	4,000	1,100	1,000	<b>9,000</b>
Lead	Detroit River	1,300	7,300				<b>8,600</b>
Cobalt	Detroit River				3,300	3,600	<b>6,900</b>
Lead compounds	Detroit River			6,600			<b>6,600</b>
Zinc compounds	Rouge River			2,600	1,900	1,400	<b>5,900</b>

Source: Environmental Working Group. Compiled from U.S. Environmental Protection Agency, Toxics Release Inventory 1990-1994.

Page 4 of 23

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# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Ecorse, Michigan

Facility: **National Steel Corp.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		140,500	318,670	274,840	71,611	257,764	<b>1,063,385</b>
Barium compounds	Detroit River	4,700					<b>4,700</b>
Zinc compounds	Rogue River		2,000				<b>2,000</b>
Copper	Rouge River		460	600	450	320	<b>1,830</b>
Chlorine	Detroit River		640				<b>640</b>
1,1,1-Trichloroethane	Detroit River		210				<b>210</b>
Lead	Rouge River		60		61	44	<b>165</b>
Lead compounds	Rouge River			80			<b>80</b>

City: Edmore, Michigan

Facility: **Hitachi Magnetics Corp.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		260	15	270	515	760	<b>1,820</b>
Barium compounds	Ditch To Wolfe Creek			250	250	250	<b>750</b>
Nickel	Ditch To Wolfe Creek	5	5	5	250	250	<b>515</b>
Cobalt	Ditch To Wolfe Creek	250	5	5	5	5	<b>270</b>
Copper	Ditch To Wolfe Creek	5		5	5	250	<b>265</b>
Aluminum (fume or dust)	Ditch To Wolfe Creek			5	5	5	<b>15</b>
Copper	Dutch To Wolfe Creek		5				<b>5</b>

City: Escanaba, Michigan

Facility: **Mead Publishing**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		15,990	8,319	17,160	6,350	6,043	<b>53,862</b>
Methanol	Escanaba River	10,300	4,000	4,000	3,900	3,500	<b>25,700</b>
Ammonia	Escanaba River	2,940	1,700	1,500	1,700	1,000	<b>8,840</b>
Ethylene glycol	Escanaba River			8,800			<b>8,800</b>
Catechol	Escanaba River	1,320		1,400	62	63	<b>2,845</b>
Chloroform	Escanaba River	680	540	580	570		<b>2,370</b>
Acetone	Escanaba River	750	770	750	75		<b>2,345</b>
Catechol	Escanada River		1,300				<b>1,300</b>
Acetaldehyde	Escanaba River					1,000	<b>1,000</b>
Phenol	Escanaba River					480	<b>480</b>
Methyl ethyl ketone	Escanaba River		9	130	43		<b>182</b>

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Companies reporting toxic discharges to water (1990-1994)

City: Filer City, Michigan

Facility: **Packaging Corp. Of America**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		740	3,368	4,058	5,735	8,944	<b>22,845</b>
Ammonia	Lake Michigan	63	2,808	3,912	5,493	279	<b>12,555</b>
Methanol	Lake Michigan					4,120	<b>4,120</b>
Phenol	Lake Michigan					3,695	<b>3,695</b>
Chlorine	Manistee Lake	257	510		192	148	<b>1,107</b>
Ammonia	Manistee Lake	420	50	50	50	95	<b>665</b>
Acetaldehyde	Lake Michigan					607	<b>607</b>
Chlorine	Mainstee Lake			96			<b>96</b>

City: Flat Rock, Michigan

Facility: **Autoalliance Intl. Inc.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		2,642	2,434	3,084	1,122	8,294	<b>17,576</b>
Methyl tert-butyl ether	Smith Creek	136	13			4,132	<b>4,281</b>
Methyl tert-butyl ether	Flowers County Drain	136	13			4,132	<b>4,281</b>
Benzene	Smith Creek	697	697	697			<b>2,091</b>
Benzene	Flowers County Drain	697	697	697			<b>2,091</b>
Methanol	Smith Creek	383	383				<b>766</b>
Methanol	Flowers County Drain	383	383				<b>766</b>
Ethylene glycol	Smith Creek			683			<b>683</b>
Ethylene glycol	Flowers County Drain			683			<b>683</b>
Zinc compounds	Smith Creek	68	68	94	164		<b>394</b>
Zinc compounds	Flowers County Drain	68	68	94	164		<b>394</b>
Manganese compounds	Smith Creek				382		<b>382</b>
Manganese compounds	Flowers County Drain				382		<b>382</b>
Barium compounds	Smith Creek	14	14	53			<b>81</b>
Barium compounds	Flowers County Drain	14	14	53			<b>81</b>
Ethylbenzene	Smith Creek	11	11				<b>22</b>
Ethylbenzene	Flowers County Drain	11	11				<b>22</b>
Xylene (mixed isomers)	Smith Creek	11	11				<b>22</b>
Xylene (mixed isomers)	Flowers County Drain	11	11				<b>22</b>
Glycol ethers	Smith Creek		5	5	5	5	<b>20</b>
Glycol ethers	Flowers County Drain		5	5	5	5	<b>20</b>
Methyl isobutyl ketone	Smith Creek			5	5	5	<b>15</b>
Methyl isobutyl ketone	Flowers County Drain			5	5	5	<b>15</b>
Lead compounds	Smith Creek			5	5	5	<b>15</b>
Lead compounds	Flowers County Drain			5	5	5	<b>15</b>
Toluene	Smith Creek	1	5				<b>6</b>
Toluene	Flowers County Drain	1	5				<b>6</b>
Cyclohexane	Smith Creek		5				<b>5</b>
Cyclohexane	Flowers County Drain		5				<b>5</b>
Di-(2-ethylhexyl) phthalate	Smith Creek		5				<b>5</b>
Di-(2-ethylhexyl) phthalate	Flowers County Drain		5				<b>5</b>

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Companies reporting toxic discharges to water (1990-1994)

City: Flint, Michigan

Facility: **Gmc Truck & Bus Group**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		1,000	424	148	2,505	266	<b>4,343</b>
Zinc compounds	Swartz Creek	250	270	110	2,000	250	<b>2,880</b>
Manganese compounds	Swartz Creek	250	98	22	250	5	<b>625</b>
Barium compounds	Swartz Creek		56	16	250	11	<b>333</b>
Nickel compounds	Swartz Creek	250			5		<b>255</b>
Lead compounds	Swartz Creek	250					<b>250</b>

City: Flint, Michigan

Facility: **Gmpt Flint V-8 Engine Plant**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>						785	<b>785</b>
Manganese compounds	Swartz Creek					250	<b>250</b>
Zinc compounds	Swartz Creek					250	<b>250</b>
Zinc compounds	Carmen Creek					250	<b>250</b>
Toluene	Swartz Creek					5	<b>5</b>
Toluene	Carmen Creek					5	<b>5</b>
Chromium	Swartz Creek					5	<b>5</b>
Chromium	Carmen Creek					5	<b>5</b>
Manganese compounds	Carmen Creek					5	<b>5</b>
Nickel compounds	Swartz Creek					5	<b>5</b>
Nickel compounds	Carmen Creek					5	<b>5</b>

City: Flint, Michigan

Facility: **Gmc**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>			500				<b>500</b>
4,4'-Isopropylidenediphenol	Flint River		250				<b>250</b>
Glycol ethers	Flint River		250				<b>250</b>

City: Flint, Michigan

Facility: **Delphi Interior & Lighting**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		500					<b>500</b>
Glycol ethers	Brent Run Via Hughes Drain	250					<b>250</b>
Barium compounds	Brent Run Via Hughes Drain	250					<b>250</b>

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### Companies reporting toxic discharges to water (1990-1994)

City: Grand Rapids, Michigan

Facility: **Steelcase Inc.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		1,350					<b>1,350</b>
Glycol ethers	Heyboer Drain	1,100					<b>1,100</b>
1,1,1-Trichloroethane	Heyboer Drain	250					<b>250</b>

City: Greenville, Michigan

Facility: **Federal-mogul Corp.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		35	30	47	46	177	<b>335</b>
Nickel	Flat River	19	16	23	22	91	<b>171</b>
Lead	Flat River	13	11	14	14	61	<b>113</b>
Copper	Flat River	3	3	10	10	25	<b>51</b>

City: Holland, Michigan

Facility: **Warner-Lambert Co.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		80	80	35,080			<b>35,240</b>
Methanol	Black River	5	5	35,000			<b>35,010</b>
Acetone	Black River	5	5	5			<b>15</b>
Benzene	Black River	5	5	5			<b>15</b>
Acetonitrile	Black River	5	5	5			<b>15</b>
Dichloromethane	Black River	5	5	5			<b>15</b>
Phosgene	Black River	5	5	5			<b>15</b>
Methyl ethyl ketone	Black River	5	5	5			<b>15</b>
Maleic anhydride	Black River	5	5	5			<b>15</b>
Toluene	Black River	5	5	5			<b>15</b>
Pyridine	Black River	5	5	5			<b>15</b>
Hydrochloric acid	Black River	5	5	5			<b>15</b>
Ammonia	Black River	5	5	5			<b>15</b>
Copper compounds	Black River	5	5	5			<b>15</b>
Cyanide compounds	Black River	5	5	5			<b>15</b>
o-Xylene	Black River		5	5			<b>10</b>
Sulfuric acid	Black River	5		5			<b>10</b>
Methyl tert-butyl ether	Black River			5			<b>5</b>
Sulfuric acid	Black River		5				<b>5</b>
Xylene (mixed isomers)	Black River	5					<b>5</b>



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Companies reporting toxic discharges to water (1990-1994)

City: Holland, Michigan

Facility: **Basf Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		1,407	1,004	757	760	760	<b>4,688</b>
Barium compounds	Lake Macatawa	1,100	1,000	750	750	750	<b>4,350</b>
Glycol ethers	Lake Macatawa	300					<b>300</b>
Toluene	Lake Macatawa	3	2	5	5	5	<b>20</b>
Xylene (mixed isomers)	Lake Macatawa	3	2	2	5	5	<b>17</b>
3,3'-Dichlorobenzidine	Lake Macatawa	1					<b>1</b>

City: Hubbell, Michigan

Facility: **Peninsula Copper Ind. Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		250	250	250	750	250	<b>1,750</b>
Copper compounds	Torch Lake	250	250	250	750	250	<b>1,750</b>

City: Hudson, Michigan

Facility: **Metalloy Hudson Foundry**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		5,842	5,200	5,800	250	250	<b>17,342</b>
Aluminum (fume or dust)	Bean Creek	5,342	5,200	5,800	250	250	<b>16,842</b>
Bis(2-ethylhexyl) adipate	Bean Creek	250					<b>250</b>
Phenol	Bean Creek	250					<b>250</b>

City: Hudson, Michigan

Facility: **Metalloy Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		750	250	250			<b>1,250</b>
Glycol ethers	Cooling Pond		250	250			<b>500</b>
Ethylene glycol	Cooling Pond	250					<b>250</b>
Aluminum (fume or dust)	Cooling Pond	250					<b>250</b>
Diethanolamine	Cooling Pond	250					<b>250</b>

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# Toxic water pollution in Michigan

### Companies reporting toxic discharges to water (1990-1994)

City: Jackson, Michigan  
Facility: **Quanex Corp.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		45	29	16	65	114	<b>269</b>
Zinc compounds	Grand River	4			50	48	<b>102</b>
Manganese compounds	Grand River	35			3	57	<b>95</b>
Manganese compounds	Marsh Contiguous W/ Ackerson		21				<b>21</b>
Nickel compounds	Grand River	4			10	7	<b>21</b>
Manganese compounds	Marsh Contiguous With			10			<b>10</b>
Lead compounds	Grand River	2			2		<b>4</b>
Nickel compounds	Marsh Contiguous W/ Ackerson		4				<b>4</b>
Nickel compounds	Marsh Contiguous With			3			<b>3</b>
Zinc compounds	Marsh Contiguous W/ Ackerson		3				<b>3</b>
Zinc compounds	Marsh Contiguous With			3			<b>3</b>
Lead compounds	Marsh Contiguous To Ackerson					2	<b>2</b>
Chlorine	Marsh Contiguous W/ Ackerson		1				<b>1</b>

City: Kalamazoo, Michigan  
Facility: **Gmc**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		10		220			<b>230</b>
Zinc compounds	Davis Creek	5		220			<b>225</b>
Sulfuric acid	Davis Creek	5					<b>5</b>

City: Kentwood, Michigan  
Facility: **Steelcase Inc.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		250					<b>250</b>
Glycol ethers	Fisk Drain	250					<b>250</b>

City: Kentwood, Michigan  
Facility: **Allied Finishing Inc.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>			58	23	25	25	<b>131</b>
Nickel compounds	Plaster Creek		50	4	5	5	<b>64</b>
Zinc compounds	Plaster Creek			11	12	12	<b>35</b>
Copper compounds	Plaster Creek		5	5	5	5	<b>20</b>
Cyanide compounds	Plaster Creek		2	2	2	2	<b>8</b>
Chromium compounds	Plaster Creek		1	1	1	1	<b>4</b>

## Table 9

# Toxic water pollution in Michigan

## Companies reporting toxic discharges to water (1990-1994)

City: Lansing, Michigan

Facility: **Gmc Lansing Automotive Div.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		652	92	102	272		<b>1,118</b>
Zinc compounds	Grand River	320	29	49	96		<b>494</b>
Manganese compounds	Grand River	120	44	53	170		<b>387</b>
Barium compounds	Grand River	130					<b>130</b>
Copper	Grand River	82	19				<b>101</b>
Lead compounds	Grand River				6		<b>6</b>

City: Lansing, Michigan

Facility:

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		218	58	77	158	82	<b>593</b>
Zinc compounds	Grand River	58	58	77	150	74	<b>417</b>
Aluminum (fume or dust)	Grand River	160					<b>160</b>
Toluene	Grand River				7		<b>7</b>
Copper	Grand River					7	<b>7</b>
Ethylbenzene	Grand River				1		<b>1</b>
Chromium	Grand River					1	<b>1</b>

City: Livonia, Michigan

Facility: **Ford Motor Co.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>				312	135	101	<b>548</b>
Zinc compounds	Middle Rouge River			250	96		<b>346</b>
Copper	Middle Rouge River			62	39	45	<b>146</b>
Chromium	Middle Rouge River					30	<b>30</b>
Nickel	Middle Rouge River					26	<b>26</b>

City: Livonia, Michigan

Facility: **Delco Chassis Livonia**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>					500	5	<b>505</b>
Chromium compounds	Newburgh Lake				250	5	<b>255</b>
Nickel compounds	Newburgh Lake				250		<b>250</b>

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Lowell, Michigan

Facility: **Attwood Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		250	250	2			<b>502</b>
Zinc compounds	Flat River	250	250	1			<b>501</b>
Nickel compounds	Flat River			1			<b>1</b>

City: Mendon, Michigan

Facility: **Lear Plastics Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		99	147	142	53	39	<b>480</b>
Nickel compounds	St. Joseph River		89	60	17	16	<b>182</b>
Copper compounds	St. Joseph River		46	65	26	17	<b>154</b>
Chromium compounds	St. Joseph River		12	17	10	6	<b>45</b>
Copper	St. Joseph River	40					<b>40</b>
Nickel	St. Joseph River	40					<b>40</b>
Chromium	St. Joseph River	19					<b>19</b>

City: Menominee, Michigan

Facility: **Menominee Paper Co. Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		1,000	250	1,000			<b>2,250</b>
Ammonia	Menomonee River			750			<b>750</b>
Chlorine	Menomonee River	250	250	250			<b>750</b>
Ammonium nitrate (solution)	Menomonee River	750					<b>750</b>

City: Michigan Center, Michigan

Facility: **Adco Prods. Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>			250			500	<b>750</b>
Toluene	Grand River		250			250	<b>500</b>
Zinc compounds	Grand River					250	<b>250</b>



## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Midland, Michigan  
Facility: Dow Chemical USA

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		23,804	25,561	19,382	26,496	23,317	<b>118,560</b>
Chloroacetic acid	Tittabawassee River	1,441	1,441	2,944	8,682	8,523	<b>23,031</b>
Methanol	Tittabawassee River	5,358	3,813	4,254	3,870	3,686	<b>20,981</b>
1,2-Butylene oxide	Tittabawassee River	4,620	3,485	5,153			<b>13,258</b>
Ammonia	Tittabawassee River	3,968	4,397		2,780	1,105	<b>12,250</b>
Formaldehyde	Tittabawassee River	1,204	599	2,396	2,396	2,396	<b>8,991</b>
Ethylene glycol	Tittabawassee River	113	164	147	2,333	3,193	<b>5,950</b>
Acrylamide	Tittabawassee River	1,752	1,924		689	630	<b>4,995</b>
Chloromethane	Tittabawassee River	452	1,497	898	898	898	<b>4,643</b>
Acetone	Tittabawassee River	2,005	1,048	869	417		<b>4,339</b>
Styrene	Tittabawassee River	90	150	869	869	869	<b>2,847</b>
Copper compounds	Tittabawassee River	602	1,977	40	11	2	<b>2,632</b>
Chromium compounds	Tittabawassee River	602	958	211	207	219	<b>2,197</b>
Glycol ethers	Tittabawassee River	36	523	824	268	127	<b>1,778</b>
Zinc compounds	Tittabawassee River		1,575				<b>1,575</b>
Acrylic acid	Tittabawassee River	97	96	72	979	105	<b>1,349</b>
1,2-Dichloroethane	Tittabawassee River		150	150	730	150	<b>1,180</b>
Methyl acrylate	Tittabawassee River	45	480	73	69	44	<b>711</b>
Vinylidene chloride	Tittabawassee River	46	150	150	150	150	<b>646</b>
Acrylonitrile	Tittabawassee River	151	150	30	135	135	<b>601</b>
Chloroform	Tittabawassee River	46	15	15	188	188	<b>452</b>
Phenol	Tittabawassee River	211	1		112	112	<b>436</b>
1,1,1-Trichloroethane	Tittabawassee River	90	150	30	51	51	<b>372</b>
Xylene (mixed isomers)	Tittabawassee River	90	150	30	30	30	<b>330</b>
Ethylbenzene	Tittabawassee River	60	150	30	30	30	<b>300</b>
Benzene	Tittabawassee River	30	150	30	30	30	<b>270</b>
Toluene	Tittabawassee River	30	150	30	30	30	<b>270</b>
2-Phenylphenol	Tittabawassee River	112	104	10	15	15	<b>256</b>
2,4-D (acetic acid)	Tittabawassee River	4	7	7	112	112	<b>242</b>
Dichloromethane	Tittabawassee River	76	24	24	51	51	<b>226</b>
Naphthalene	Tittabawassee River	2			112	112	<b>226</b>
2,4-Dichlorophenol	Tittabawassee River	90	1		56	56	<b>203</b>
2,4,6-Trichlorophenol	Tittabawassee River	79	1	1	56	65	<b>202</b>
Diethanolamine	Tittabawassee River	104	15	16	32		<b>167</b>
n-Butyl alcohol	Tittabawassee River	97	1		3	39	<b>140</b>
Chlorobenzene	Tittabawassee River	20	1	1	40	40	<b>102</b>
Chlorophenols	Tittabawassee River	17	18	19	20	20	<b>94</b>
Tetrachloroethylene	Tittabawassee River	40	2		2	34	<b>78</b>
Methyl methacrylate	Tittabawassee River		7	7	8	44	<b>66</b>
Biphenyl	Tittabawassee River	7	10		16	24	<b>57</b>
2-Ethoxyethanol	Tittabawassee River	4	13	13	14	2	<b>46</b>
Allyl alcohol	Tittabawassee River			32			<b>32</b>
Chloroethane	Tittabawassee River		12	1			<b>13</b>
Vinyl chloride	Tittabawassee River	10					<b>10</b>
Cumene	Tittabawassee River			5	4		<b>9</b>
1,3-Butadiene	Tittabawassee River	2		1			<b>3</b>
m-Xylene	Tittabawassee River	1	2				<b>3</b>
Butyl acrylate	Tittabawassee River				1		<b>1</b>

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Midland, Michigan

Facility: **Dow Corning Corp.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		743	413	44		97	<b>1,297</b>
Zinc compounds	Lingle Drain	415					<b>415</b>
Methanol	Lingle Drain		290				<b>290</b>
Ammonia	Lingle Drain		73	25		70	<b>168</b>
Copper compounds	Lingle Drain	101	31				<b>132</b>
1,1,1-Trichloroethane	Lingle Drain	83	5	9			<b>97</b>
Chromium compounds	Lingle Drain	68					<b>68</b>
Carbon tetrachloride	Lingle Drain	31	10	7		4	<b>52</b>
Xylene (mixed isomers)	Lingle Drain	23	2	1		14	<b>40</b>
Toluene	Lingle Drain	16	2	2		5	<b>25</b>
Ethylbenzene	Lingle Drain	6				3	<b>9</b>
Chloromethane	Lingle Drain					1	<b>1</b>

City: Montague, Michigan

Facility: **Du Pont**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		1,655	1,639	389	192	150	<b>4,025</b>
Freon 113	Lake Michigan	1,381	1,199	146	30	24	<b>2,780</b>
Antimony compounds	Lake Michigan	98	86	60	119	51	<b>414</b>
Acetone	Lake Michigan	158	109	57			<b>324</b>
Trichlorofluoromethane	Lake Michigan		161	22	6	10	<b>199</b>
Dichlorodifluoromethane	Lake Michigan		68	98	10	18	<b>194</b>
Chloroform	Lake Michigan	16	15	5	25	15	<b>76</b>
Chlorodifluoromethane	Lake Michigan					28	<b>28</b>
Dichloromethane	Lake Michigan	2	1		2		<b>5</b>
2,2-dichloro-1,1,1-trifluoroetha	Lake Michigan					3	<b>3</b>
Carbon tetrachloride	Lake Michigan			1		1	<b>2</b>

City: Munising, Michigan

Facility: **Kimberly-clark Corp.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		250	255	255	255	255	<b>1,270</b>
Ammonia	Lake Superior	250	250	250	250	250	<b>1,250</b>
Hydrochloric acid	Lake Superior		5	5	5	5	<b>20</b>

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Niles, Michigan

Facility: **National Standard Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		260	760	760	760	760	<b>3,300</b>
Nickel	Lacey Creek	250	750	750	750	750	<b>3,250</b>
Manganese	Lacey Creek	5	5	5	5	5	<b>25</b>
Chromium	Lacey Creek	5	5	5	5	5	<b>25</b>

City: Ontonagon, Michigan

Facility: **Stone Container Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		184	174	164	164	160	<b>846</b>
Ammonia	Ontonagon River	179	174	164	164	160	<b>841</b>
Chlorine	Ontonagon River	5					<b>5</b>

City: Otsego, Michigan

Facility: **Menasha Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		7,416	1,947	10,603	5,707	6,913	<b>32,586</b>
Ammonium nitrate (solution)	Kalamazoo River	5,555	1,583	10,000	4,998	5,277	<b>27,413</b>
Catechol	Kalamazoo River	1,861	364	603	709		<b>3,537</b>
Methanol	Kalamazoo River					1,636	<b>1,636</b>

City: Parchment, Michigan

Facility: **James River Paper Corp. Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		7,400					<b>7,400</b>
Formaldehyde	Kalamazoo River	7,400					<b>7,400</b>

City: Paw Paw, Michigan

Facility: **Paw Paw Plating**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		2,750					<b>2,750</b>
Sulfuric acid	Unknown	750					<b>750</b>
Nickel	Unknown	750					<b>750</b>
Copper	Unknown	750					<b>750</b>
Hydrochloric acid	Unknown	250					<b>250</b>
Trichloroethylene	Unknown	250					<b>250</b>

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Plainwell, Michigan

Facility: **Simpson Plainwell Paper Co.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		9,262	1,909	1,758	1,950	5	<b>14,884</b>
Manganese compounds	Kalamazoo River	8,200	250		250		<b>8,700</b>
Ammonia	Kalamazoo River	912	1,500	1,600	1,700	5	<b>5,717</b>
Chlorine	Kalamazoo River	150	159	158			<b>467</b>

City: Pontiac, Michigan

Facility: **Gmc**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		1,760	1,382				<b>3,142</b>
Ammonia	Clinton River	1,000	1,000				<b>2,000</b>
Barium compounds	Clinton River		370				<b>370</b>
Lead	Osmund Lake	250					<b>250</b>
Manganese	Clinton River	250					<b>250</b>
Barium	Clinton River	250					<b>250</b>
Lead compounds	Osmun Lake		12				<b>12</b>
Nickel	Clinton River	5					<b>5</b>
Aluminum (fume or dust)	Clinton River	5					<b>5</b>

City: Pontiac, Michigan

Facility: **Gmc Truck & Bus Group**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		1,250					<b>1,250</b>
Benzene	Murphy Creek	250					<b>250</b>
1,2,4-Trimethylbenzene	Murphy Creek	250					<b>250</b>
Ethylbenzene	Murphy Creek	250					<b>250</b>
Toluene	Murphy Creek	250					<b>250</b>
Xylene (mixed isomers)	Murphy Creek	250					<b>250</b>

City: Port Huron, Michigan

Facility: **E. B. Eddy Paper Inc.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		2,860	3,000	2,200	400	33	<b>8,493</b>
Chlorine	St. Clair River	2,800	3,000	2,200	400	27	<b>8,427</b>
Sulfuric acid	St. Clair River	60					<b>60</b>
Chlorine	Black River					6	<b>6</b>



## Table 9

# Toxic water pollution in Michigan

### Companies reporting toxic discharges to water (1990-1994)

City: Port Huron, Michigan

Facility: **Mueller Brass Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		1,800	1,350	2,255	760	760	<b>6,925</b>
Zinc compounds	Black River	1,300	1,000	1,500	250	250	<b>4,300</b>
Copper	Black River	250	73	250	250	250	<b>1,073</b>
Copper compounds	Black River		250	250	250	250	<b>1,000</b>
Lead	Black River	250	22	250	5	5	<b>532</b>
Manganese	Black River		5	5	5	5	<b>20</b>

City: Port Huron, Michigan

Facility: **James River Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		1,200	1,100	100	250	250	<b>2,900</b>
Ammonia	St. Clair River	1,200	1,100	100	250	250	<b>2,900</b>

City: Portage, Michigan

Facility: **Upjohn Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		159,849	313,095	148,605	243,310	401,455	<b>1,266,314</b>
Methanol	Upjohn Pond	50,349	300,000	140,000	100,000	340,000	<b>930,349</b>
Methanol	Portage Creek	100,000	250	5,100	140,000	53,000	<b>298,350</b>
Dichloromethane	Upjohn Pond	750	9,400	250	750	1,800	<b>12,950</b>
Chlorine	Upjohn Pond			750	1,300	5,900	<b>7,950</b>
Acetone	Portage Creek	5,000		250			<b>5,250</b>
Acetone	Upjohn Pond	2,500	1,700	250	250		<b>4,700</b>
Toluene	Upjohn Pond	750	250	250	250	250	<b>1,750</b>
1,2-Dichloroethane	Upjohn Pond	250	750	5	5	250	<b>1,260</b>
Toluene	Portage Creek	250	250	250	250		<b>1,000</b>
Dichloromethane	Portage Creek			250	250	250	<b>750</b>
Ammonia	Portage Creek		270				<b>270</b>
1,2-Dichloroethane	Portage Creek		5	250	5	5	<b>265</b>
tert-Butyl alcohol	Portage Creek				250		<b>250</b>
Zinc (fume or dust)	Upjohn Pond			250			<b>250</b>
Zinc (fume or dust)	Portage Creek			250			<b>250</b>
Copper compounds	Upjohn Pond			250			<b>250</b>
Copper compounds	Portage Creek			250			<b>250</b>
n-Butyl alcohol	Portage Creek		220				<b>220</b>

## Table 9

# Toxic water pollution in Michigan

### Companies reporting toxic discharges to water (1990-1994)

City: Quincy, Michigan

Facility: **Quincy Prods.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		87	11	7	10	10	<b>125</b>
Zinc compounds	Unknown	85		6	10	10	<b>111</b>
Zinc compounds	Berry Drain To Marble Lake		10				<b>10</b>
Manganese	Unknown	2		1			<b>3</b>
Manganese	Berry Drain To Marble Lake		1				<b>1</b>

City: Quinnesec, Michigan

Facility: **Champion Intl. Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		29,451	4,807	760	1,020	40,760	<b>76,798</b>
Methanol	Menomonee River					40,000	<b>40,000</b>
Ammonia	Menomonee River	22,000	190	150	420	310	<b>23,070</b>
Ethylene glycol	Menomonee River	6,000	3,600				<b>9,600</b>
Chloroform	Menomonee River	1,400	970	560	550	450	<b>3,930</b>
Acetone	Menomonee River	51	47	50	50		<b>198</b>

City: Reed City, Michigan

Facility: **Tubelite Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		5	750	750			<b>1,505</b>
Sulfuric acid	Storm Water Collection Ditch		750	750			<b>1,500</b>
Sulfuric acid	Hersey River	5					<b>5</b>

City: Riverview, Michigan

Facility: **Elf Atochem N.A. Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		20,951	28,474	32,459	31,697	23,987	<b>137,568</b>
Ammonia	Monguagon Creek	10,173	15,951	19,925			<b>46,049</b>
Ethylene	Detroit River				20,085	22,861	<b>42,946</b>
Ethylene	Monguagon Creek	10,659	12,090	12,467			<b>35,216</b>
Ammonia	Detroit River				11,542	1,063	<b>12,605</b>
Sulfuric acid	Monguagon Creek	10	183				<b>193</b>
Chlorine	Monguagon Creek	64	62	64			<b>190</b>
Ethylene oxide	Monguagon Creek	1	150				<b>151</b>
Chlorine	Detroit River				65	59	<b>124</b>
Phenol	Monguagon Creek	41	35				<b>76</b>
Maleic anhydride	Monguagon Creek	3	3	3			<b>9</b>
Maleic anhydride	Detroit River				5	4	<b>9</b>

## Table 9

# Toxic water pollution in Michigan

### Companies reporting toxic discharges to water (1990-1994)

City: Roseville, Michigan

Facility: **Apollo Plating Inc.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		760					<b>760</b>
Chromium compounds	Unknown	250					<b>250</b>
Zinc compounds	Unknown	250					<b>250</b>
Nickel compounds	Unknown	250					<b>250</b>
Hydrochloric acid	Unknown	5					<b>5</b>
Sulfuric acid	Unknown	5					<b>5</b>

City: Saginaw, Michigan

Facility: **General Motors Corporation**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>			750	3,550		10,950	<b>15,250</b>
Phenol	Unknown					5,300	<b>5,300</b>
Manganese	Unknown					5,300	<b>5,300</b>
Manganese compounds	Unknown			2,800			<b>2,800</b>
Copper compounds	Unknown		250	250			<b>500</b>
Copper	Unknown					350	<b>350</b>
Ammonium nitrate (solution)	Unknown		250				<b>250</b>
Phosphoric acid	Unknown		250				<b>250</b>
Chromium compounds	Unknown			250			<b>250</b>
Nickel compounds	Unknown			250			<b>250</b>

City: Sandusky, Michigan

Facility: **Yale-south Haven Inc.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		250	250	250	5	5	<b>760</b>
Zinc compounds	Unknown	250	250	250	5	5	<b>760</b>

City: South Lyon, Michigan

Facility: **Quanex Mst Div.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		517	726	582	477	553	<b>2,855</b>
Manganese	Yerkes Drain	398	406	348	295	324	<b>1,771</b>
Zinc compounds	Yerkes Drain	80	121	66	79	122	<b>468</b>
Chromium	Yerkes Drain	5	109	92	50	55	<b>311</b>
Nickel	Yerkes Drain	34	90	76	53	52	<b>305</b>

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Sturgis, Michigan  
Facility: **Sturgis Fndy. Corp.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>			176	176	25,716	231	<b>26,299</b>
Manganese	Unknown		176	176	25,716	231	<b>26,299</b>

City: Trenton, Michigan  
Facility: **Mclouth Steel**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		35,855	36,255	24,455	34,755	62,255	<b>193,575</b>
Zinc compounds	Detroit River	7,100	14,000	8,200	32,000	28,000	<b>89,300</b>
Ethylene glycol	Detroit River	28,000	22,000	16,000	2,500	2,000	<b>70,500</b>
Ammonia	Detroit River					32,000	<b>32,000</b>
Chromium compounds	Detroit River	750	250	250	250	250	<b>1,750</b>
Manganese compounds	Detroit River	5	5	5	5	5	<b>25</b>

City: Trenton, Michigan  
Facility: **Monsanto Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		31,000	28,000	32,000	190	190	<b>91,380</b>
Ammonia	Detroit River	31,000	28,000	32,000	190	190	<b>91,380</b>

City: Troy, Michigan  
Facility: **Freiborne Ind. Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		750	750	750	15	15	<b>2,280</b>
Phosphoric acid	Detroit River	250	250	250	5	5	<b>760</b>
Nitric acid	Detroit River	250	250	250	5	5	<b>760</b>
Zinc compounds	Detroit River	250	250	250	5	5	<b>760</b>

City: Warren, Michigan  
Facility: **Carboloy Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		505	254	265			<b>1,024</b>
Cobalt	Clinton River	250	220	250			<b>720</b>
Acetone	Clinton River	250	34	15			<b>299</b>
1,1,1-Trichloroethane	Clinton River	5					<b>5</b>

## Table 9

# Toxic water pollution in Michigan

### Companies reporting toxic discharges to water (1990-1994)

City: Warren, Michigan

Facility: **Gmc**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>					100	120	<b>220</b>
Zinc compounds	Red Run Drain				100		<b>100</b>
Zinc compounds	Clinton River					100	<b>100</b>
Copper	Clinton River					20	<b>20</b>

City: Wayne, Michigan

Facility: **Unistrut Diversified Prods.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>				51	42	42	<b>135</b>
Zinc compounds	Lower Rouge River				39	39	<b>78</b>
Zinc compounds	Lower Rouge River Wayne Mi			48			<b>48</b>
Copper compounds	Lower Rouge River Wayne Mi			2			<b>2</b>
Copper compounds	Lower Rouge River Via City Of				2		<b>2</b>
Copper compounds	Lower Rouge River Via City Of					2	<b>2</b>
Nickel compounds	Lower Rouge River Wayne Mi			1			<b>1</b>
Nickel compounds	Lower Rouge River				1		<b>1</b>
Nickel compounds	Lower Rouge River Via City Of					1	<b>1</b>

City: Wixom, Michigan

Facility: **Ford Motor Co.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		84,625	5,081				<b>89,706</b>
Glycol ethers	Congdon Drain	72,000	4,800				<b>76,800</b>
Ethylene glycol	Congdon Drain	9,900	270				<b>10,170</b>
Manganese compounds	Congdon Drain	1,900	1				<b>1,901</b>
Zinc compounds	Congdon Drain	290	3				<b>293</b>
Methyl isobutyl ketone	Congdon Drain	290					<b>290</b>
Nickel compounds	Congdon Drain	220					<b>220</b>
Lead compounds	Congdon Drain	25					<b>25</b>
Barium compounds	Congdon Drain		7				<b>7</b>

City: Woodhaven, Michigan

Facility: **Mobil Woodhaven Lube Plant**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>		750	255	500	250	250	<b>2,005</b>
Zinc compounds	Detroit River	250	250	250	250	250	<b>1,250</b>
Copper compounds	Detroit River		5	250			<b>255</b>
Chlorine	Detroit River	250					<b>250</b>
Butyl benzyl phthalate	Detroit River	250					<b>250</b>

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Wyandotte, Michigan

Facility: **BASF Corp.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>		67,110					<b>67,110</b>
Propylene oxide	Detroit River	66,000					<b>66,000</b>
Methanol	Detroit River	250					<b>250</b>
Ethylene oxide	Detroit River	250					<b>250</b>
Styrene	Detroit River	250					<b>250</b>
Acrylonitrile	Detroit River	250					<b>250</b>
Diaminotoluene (mixed)	Detroit River	110					<b>110</b>

City: Wyandotte, Michigan

Facility:

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>			5,614	2,062	1,520	1,270	<b>10,466</b>
Propylene oxide	Detroit River		4,800	1,000	250	250	<b>6,300</b>
Methanol	Detroit River		250	250	250	250	<b>1,000</b>
Ethylene oxide	Detroit River		250	250	250	250	<b>1,000</b>
Styrene	Detroit River		250	250	250	250	<b>1,000</b>
Diaminotoluene (mixed)	Detroit River		59	47	250	250	<b>606</b>
4,4'-Isopropylidenediphenol	Detroit River			250	250		<b>500</b>
Acrylonitrile	Detroit River		5	5	5	5	<b>20</b>
o-Toluidine	Detroit River			5	5	5	<b>15</b>
sec-Butyl alcohol	Detroit River				5	5	<b>10</b>
Ethylene glycol	Detroit River			5		5	<b>10</b>
Toluene	Detroit River				5		<b>5</b>

City: Wyoming, Michigan

Facility: **Electro Chemical Finishing Co.**

Chemical discharged	Receiving water	Pounds of toxic chemicals discharged to water					1990-1994
		1990	1991	1992	1993	1994	
<b>All toxic chemicals</b>					20	505	<b>525</b>
Hydrochloric acid	Roys Creek				5	250	<b>255</b>
Nitric acid	Roys Creek					250	<b>250</b>
Sulfuric acid	Roys Creek				5	5	<b>10</b>
Copper compounds	Roys Creek				5		<b>5</b>
Nickel compounds	Roys Creek				5		<b>5</b>

## Table 9

# Toxic water pollution in Michigan

Companies reporting toxic discharges to water (1990-1994)

City: Ypsilanti, Michigan

Facility: **Gmc Powertrain**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>						181	<b>181</b>
Manganese compounds	Tyler Pond Of Willow Creek					124	<b>124</b>
Copper compounds	Tyler Pond Of Willow Creek					57	<b>57</b>

City: Zeeland, Michigan

Facility: **Bil Mar Foods Inc.**

		Pounds of toxic chemicals discharged to water					
Chemical discharged	Receiving water	1990	1991	1992	1993	1994	1990-1994
<b>All toxic chemicals</b>			5	5	5	750	<b>765</b>
Ammonia	Pigeon Creek		5	5	5	750	<b>765</b>