

1996 Inventory of Toxic Air Emissions: A Product of the Great Lakes Regional Air Toxic Emissions Project

Part 1: Point and Area Sources

Sample Data

December 1999

The new emissions inventory, which addresses 82 targeted toxic air contaminants, found the highest emissions in the Great Lakes basin to be Manganese at 3.251 million lbs/year and Chromium at almost 1.0 million lbs/year. The top two PAHs (polycyclic aromatic hydrocarbons) were Naphthalene at 13.8 million lbs/year and Phenanthrene at 6.4 million lbs/year. The top two non-metals (not PAH) were Toluene at 265.2 million lbs/year and Xylene (various forms) at 141.0 million lbs/year.

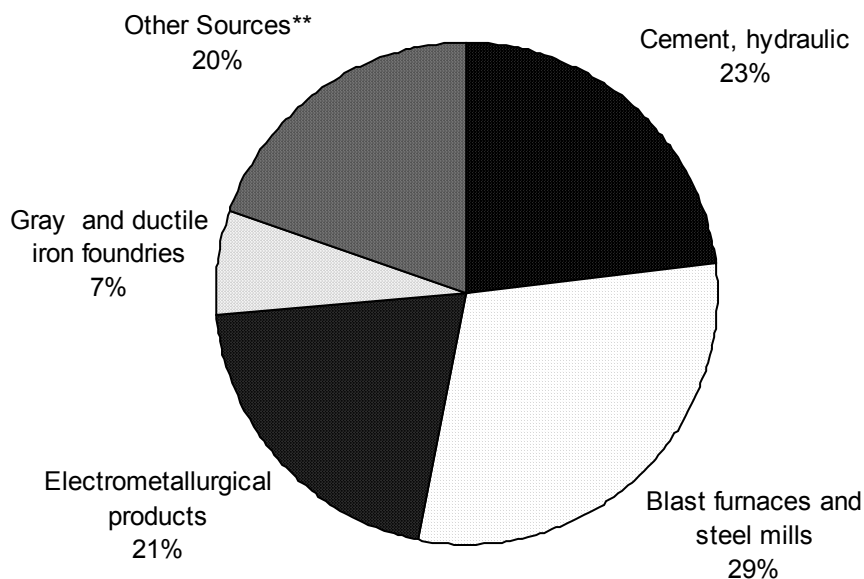
On behalf of:

Illinois Environmental Protection Agency, Bureau of Air
Indiana Department of Environmental Management, Office of Air Management
Michigan Department of Environmental Quality, Air Quality Division
Minnesota Pollution Control Agency, Environmental Outcomes Division
New York Department of Environmental Conservation, Division of Air Resources
Ohio Environmental Protection Agency, Division of Air Pollution Control
Ontario Ministry of Environment, Environmental Monitoring and Reporting Branch
Pennsylvania Department of Environmental Protection, Air Quality Control
Wisconsin Department of Natural Resources, Bureau of Air Management

Great Lakes Commission
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Figure 1:

MANGANESE
1996 Estimated Emissions* by Source Category for
Point and Area Sources



SIC	DESCRIPTION	EMISSIONS (LB)	IL	IN	MI	MN	NY	OH	ON	PA	WI
3241	Cement, hydraulic	752,891.65	X	X	X		X			X	
3312	Blast furnaces and steel mills	976,500.90	X	X	X	X	X	X	X	X	X
3313	Electrometallurgical products	668,204.00						X			
3321	Gray and ductile iron foundries	214,689.86	X	X	X	X		X		X	X
-----	Other Sources**	639,390.39	X	X	X	X	X	X	X	X	X

Total Estimated Emissions: 3,251,676.81 lbs.

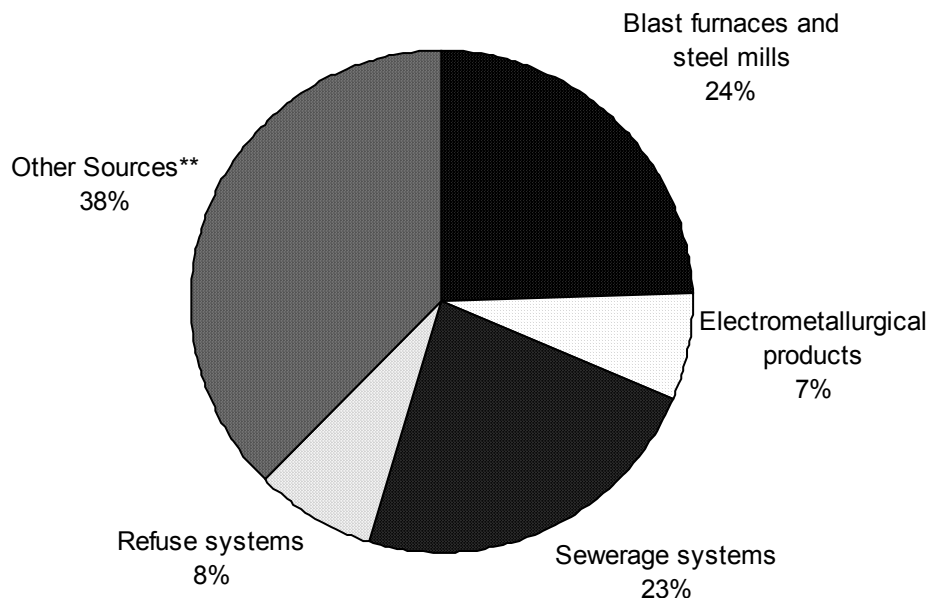
* Each jurisdiction estimated emissions for those sources for which they had data available.

** Other Sources: Individually less than five percent of the total.

(X) Denotes jurisdictions that have contributed emissions data for this pollutant.

Figure 2:

CHROMIUM
1996 Estimated Emissions* by Source Category for
Point and Area Sources



SIC	DESCRIPTION	EMISSIONS (LB)	IL	IN	MI	MN	NY	OH	ON	PA	WI
3312	Blast furnaces and steel mills	232,817.54	X	X	X	X	X	X		X	X
3313	Electrometallurgical products	68,001.60						X	X		
4952	Sewerage systems	221,454.43	X		X	X	X		X	X	X
4953	Refuse systems	75,332.00	X	X	X	X	X			X	
-----	Other Sources**	358,335.41	X	X	X	X	X	X	X	X	X

Total Estimated Emissions: 955,940.96 lbs.

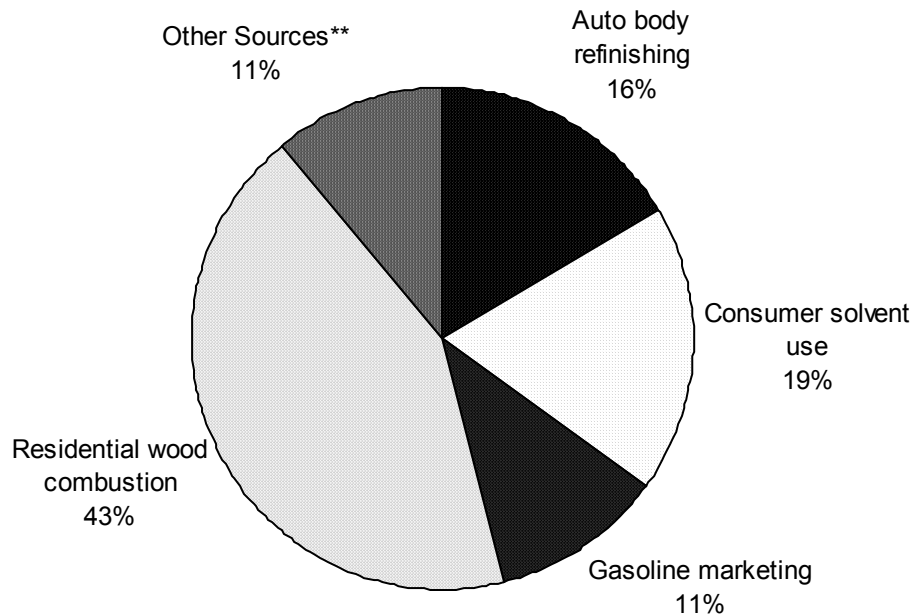
* Each jurisdiction estimated emissions for those sources for which they had data available.

** Other Sources: Individually less than five percent of the total.

(X) Denotes jurisdictions that have contributed emissions data for this pollutant.

Figure 3:

NAPHTHALENE
1996 Estimated Emissions* by Source Category for
Point and Area Sources



SIC	DESCRIPTION	EMISSIONS (LB)	IL	IN	MI	MN	NY	OH	ON	PA	WI
-----	Autobody refinishing	2,253,594.15	X	X	X	X	X	X		X	X
-----	Consumer and Commercial Solvent Use	2,554,555.31	X	X	X	X	X				X
-----	Gasoline marketing	1,554,947.09	X		X	X			X	X	X
-----	Residential wood combustion	5,871,027.19	X	X	X	X		X	X		X
-----	Other Sources**	1,538,362.12	X	X	X	X	X	X	X	X	X

Total Estimated Emissions: 13,772,485.87 lbs.

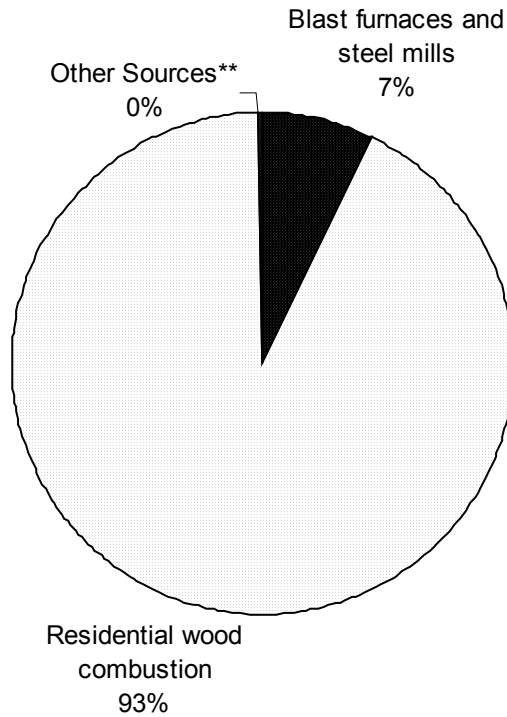
* Each jurisdiction estimated emissions for those sources for which they had data available.

** Other Sources: Individually less than five percent of the total.

(X) Denotes jurisdictions that have contributed emissions data for this pollutant.

Figure 4:

PHENANTHRENE
1996 Estimated Emissions* by Source Category for
Point and Area Sources



SIC	DESCRIPTION	EMISSIONS (LB)	IL	IN	MI	MN	NY	OH	ON	PA	WI
3312	Blast furnaces and steel mills	459,767.27	X	X					X		
-----	Residential wood combustion	5,967,145.20	X	X	X	X		X	X		X
-----	Other Sources**	17,513.64	X	X	X	X	X	X	X	X	

Total Estimated Emissions: 6,444,426.11 lbs.

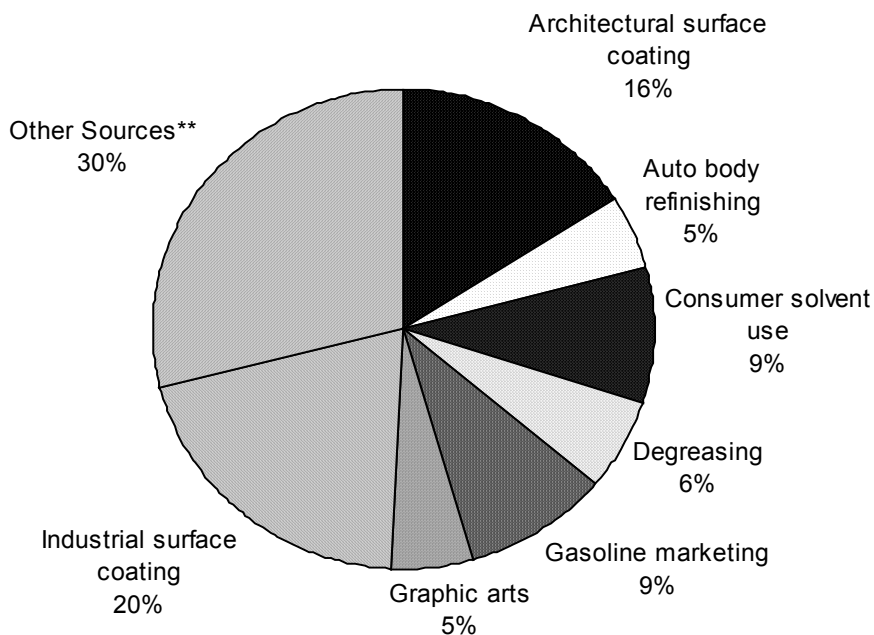
* Each jurisdiction estimated emissions for those sources for which they had data available.

** Other Sources: Individually less than five percent of the total.

(X) Denotes jurisdictions that have contributed emissions data for this pollutant.

Figure 5:

TOLUENE
1996 Estimated Emissions* by Source Category for
Point and Area Sources



SIC	DESCRIPTION	EMISSIONS (LB)	IL	IN	MI	MN	NY	OH	ON	PA	WI
-----	Architectural surface coatings	42,099,012.88	X	X	X	X	X	X	X	X	X
-----	Autobody refinishing	13,351,772.64	X	X	X	X	X	X		X	X
-----	Consumer and Commercial Solvent Use	23,774,241.14	X	X	X	X	X				X
-----	Solvent cleaning	16,770,811.23	X	X	X	X				X	X
-----	Gasoline marketing	24,996,870.56	X	X	X	X			X	X	X
-----	Graphic arts	13,823,283.96		X	X	X	X	X	X		X
-----	Industrial surface coating	54,103,261.14	X	X	X	X				X	X
-----	Other Sources**	76,237,741.36	X	X	X	X	X	X	X	X	X

Total Estimated Emissions: 265,156,994.91 lbs.

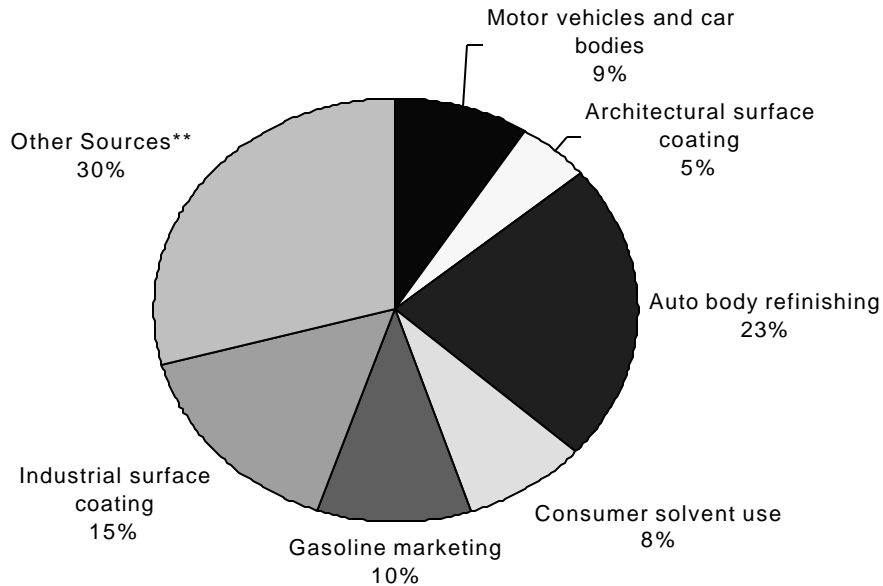
* Each jurisdiction estimated emissions for those sources for which they had data available.

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(X) Denotes jurisdictions that have contributed emissions data for this pollutant.

Figure 6:

XYLENES(ISO)
1996 Estimated Emissions* by Source Category for
Point and Area Sources



SIC	DESCRIPTION	EMISSIONS (LB)	IL	IN	MI	MN	NY	OH	ON	PA	WI
3711	Motor vehicles and car bodies	12,506,168.82	X	X	X	X	X	X	X		X
-----	Architectural surface coating	7,248,807.21	X	X	X	X	X	X	X	X	X
-----	Auto body refinishing	31,905,350.80	X	X	X	X	X	X		X	X
-----	Consumer solvent use	11,956,326.76	X	X	X	X	X				X
-----	Gasoline marketing	14,473,695.11	X	X	X	X			X		X
-----	Industrial surface coating	21,769,246.60	X	X	X	X				X	X
-----	Other Sources**	41,136,757.52	X	X	X	X	X	X	X	X	X

Total Estimated Emissions: 140,996,352.81 lbs.

* Each jurisdiction estimated emissions for those sources for which they had data available.

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