

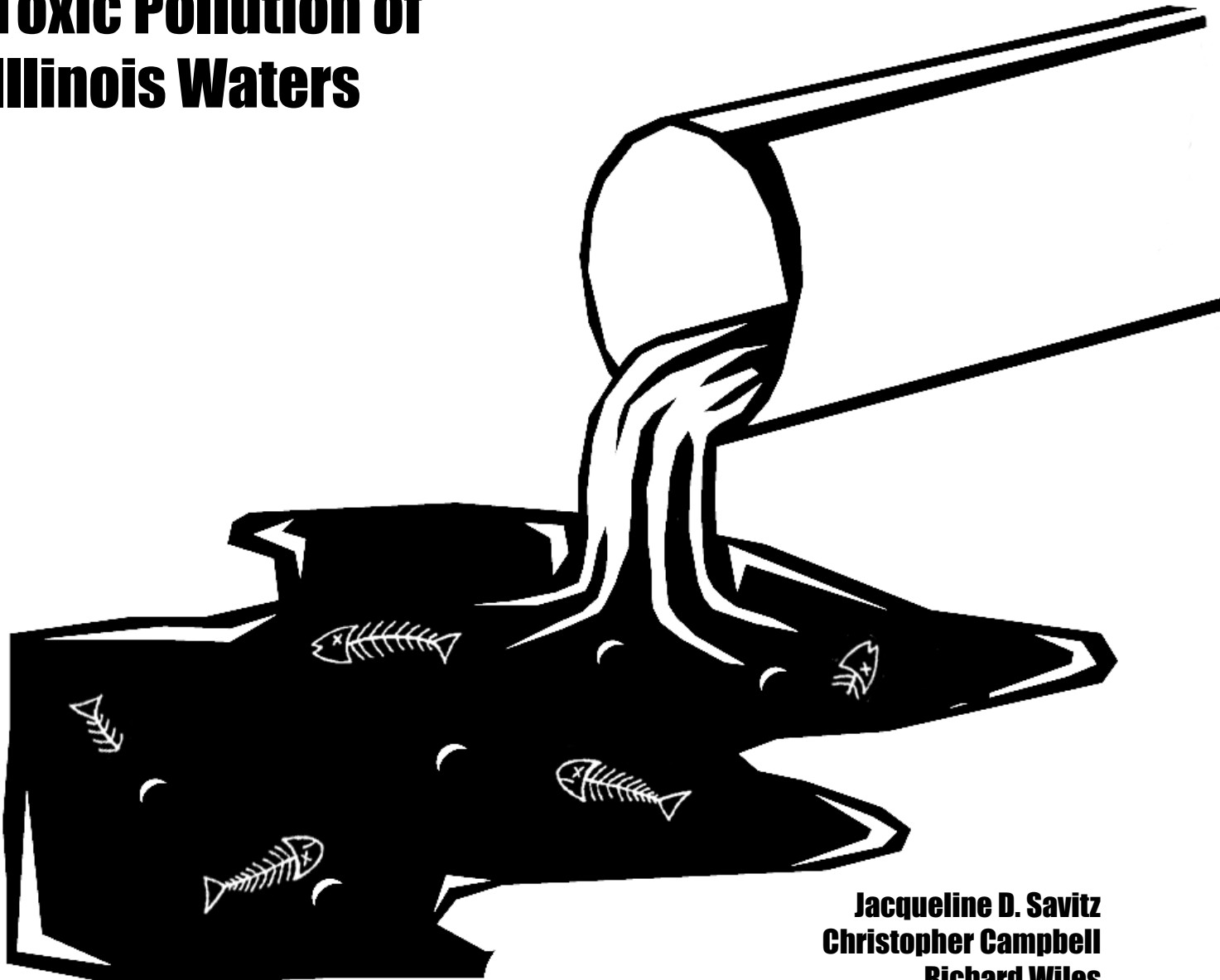


The State PIRGs



Dishonorable Discharge

Toxic Pollution of Illinois Waters



**Jacqueline D. Savitz
Christopher Campbell
Richard Wiles
Carolyn Hartmann**

Dishonorable Discharge was released in cooperation with the following organizations. Environmental Working Group is solely responsible for the analyses and information contained in this report.

National Organizations

Citizen Action and
affiliated state organizations
Clean Water Action
and affiliated state organizations
Environmental Information Center
River Network
Sierra Club Legal Defense Fund
U.S. Public Interest Research Group
and the State PIRGs

Regional, State and River Organizations

Alabama State River Coalition
Alaska Center for the Environment
Chesapeake Bay Foundation
Clean Water Fund of North Carolina
Colorado Rivers Alliance
Dakota Resource Council
Delaware Nature Society
Dog River Clearwater Revival
Florida Environmental Alliance
Friends of the Los Angeles River
Friends of the River of Virginia
Friends of the Tennessee River
Georgia Environmental Organization
Great Lakes United
Hudson River Sloop Clearwater
Idaho Conservation League
Idaho Rivers United
Kansas Natural Resource Council
Louisiana Environmental Action Network
Mid-South Peace and Justice Center
Mississippi River Basin Alliance
New York Rivers United
Northern Plains Resource Council
Office of the River Keeper Tennessee
Oregon Environmental Council
Pennsylvania Assoc. of Watersheds
and Rivers
People for Puget Sound
Rivers Alliance of Connecticut
Rivers Unlimited Ohio
Save Our Rivers North Carolina
Save San Francisco Bay
Sierra Club Kentucky Chapter
Sierra Club South Dakota Chapter
Tennessee Environmental Council
Tongass Conservation Society
Utah Rivers Conservation Council
Washington Toxics Coalition
West Virginia Rivers Coalition

Acknowledgments

We are grateful to Molly Evans who designed and produced the report and to Allison Daly who coordinated its release. Thanks to Ken Cook and Mark Childress for their editing and advice, and to Dale Klaus of U.S. PIRG who assisted with research.

Dishonorable Discharge was made possible by grants from The Joyce Foundation, the W. Alton Jones Foundation, The Pew Charitable Trusts, and Working Assets Funding Service. A computer equipment grant from the Apple Computer Corporation made our analysis possible. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of The Pew Charitable Trusts or our other supporters listed above.

Copyright © September 1996 by the Environmental Working Group/The Tides Center. All rights reserved. Manufactured in the United States of America, printed on recycled paper.

U.S. PIRG and The State PIRGs

The United States Public Interest Research Organization (U.S. PIRG) is the national lobbying office for the state PIRGs. PIRGs are nonpartisan, nonprofit watchdog organizations, working for environmental, consumer, and government reform in over thirty states.

Gene Karpinski, Executive Director

Environmental Working Group

The Environmental Working Group is a nonprofit environmental research organization based in Washington, D.C. The Environmental Working Group is a project of the Tides Center, a California Public Benefit Corporation based in San Francisco that provides administrative and program support services to nonprofit programs and projects.

Kenneth A. Cook, President
Mark B. Childress, Vice President for Policy
Richard Wiles, Vice President for Research

To order a copy

Copies of this report may be ordered for \$15.00 each (plus 6% sales tax or \$0.90 for Washington, D.C. residents) and \$3.00 for postage and handling. Payment must accompany all orders. Please make checks payable to:

Environmental Working Group
1718 Connecticut Avenue, N.W. Suite 600
Washington, D.C. 20009
(202) 667-6982 (phone) (202) 232-2592 (fax) info@ewg.org (e-mail)

World Wide Web

Environmental Working Group publications are available on the World Wide Web at: <<http://www.ewg.org>>

Toxic Pollution of Illinois Waters

Executive Summary

Most Illinois citizens would be surprised to learn that scores of businesses and facilities across the state *legally* dump tons of toxic chemicals into the state's rivers, streams, lakes, and bays. Many of these same polluters flush millions more pounds of toxic substances down the drain to sewage treatment plants that taxpayers pay to operate and maintain. None of the toxic chemicals sent to publicly financed sewage treatment systems are reported as pollution by the EPA, even though a great deal of the toxic load eventually finds its way to Illinois streams and rivers.

The citizens of Illinois have a right to know about any pollution of their water, air or land that may pose a risk to human health or the environment. The goal of *Dishonorable Discharge* is to inform the public about the massive level of toxic pollution of the waters in their state, and point out the need for more comprehensive reporting of toxic chemical use, transport, and pollution, in Illinois and nationwide.

Factories and other industrial facilities dumped more than 26.9 million pounds of toxic substances directly into Illinois' waters between 1990 and 1994, according to a new analysis of the federal Toxics Release Inventory (TRI) (Table 1). Illinois ranked 4th among the states in toxic water pollution reported over those five years. Because of weaknesses and loopholes in federal pollution laws, most, if not all of these toxic discharges are perfectly legal.

As large as they are, these figures substantially underestimate toxic releases to waters and the environment because the TRI requires reporting of only about 340 of the 73,000 chemicals in commerce. The TRI also exempts certain industries from reporting, including utilities, sewage treatment plants, municipal incinerators, and manufacturing facilities with fewer than ten employees.

In addition, over two hundred eighty-five million pounds of toxic materials were flushed to sewage treatment plants in Illinois from 1990 through 1994, first in the nation (Table 1.) EPA estimates that twenty-five percent of all discharges nationwide flow through sewage treatment plants untreated (EPA 1995). Applying this 25 percent estimate to Illinois raises the total amount of toxics dumped to the state's waters to an estimated 98.5 million pounds (Table 1).

The Mississippi River received the greatest amount of toxic water pollution in Illinois from 1990-1994, a total of 16,000,000 pounds, followed by the Rock River, the Illinois River, and Horseshoe Lake (Table 2). The ten most polluted waterways in Illinois received 26,600,000 pounds of toxic pollution between 1990 and 1994, 98.7% percent of the total in the State.

The top three facilities reporting the most toxic pollution of Illinois waters over this period were 3M in Cordova, which dumped 14,800,000 pounds of toxic chemicals, followed by IBP Inc., and BF Goodrich in the towns of Joslin, and Henry, respectively (Table 3). The toxic chemicals dumped in the greatest amounts were ammonia, a total of 20,200,000 pounds, followed by ammonium sulfate solution, and ethylene glycol (Table 4).

USS South Works* dumped the most carcinogens into Illinois waters, a total of 20,900 pounds, followed by Granite City Steel and BF Goodrich (Table 8). Lake Michigan received the greatest amount of cancer-causing toxic chemicals in Illinois, a total of 21,000 pounds, followed by the Illinois River and Horseshoe Lake (Table 7).

Granite City Steel dumped the greatest amount of persistent toxic metals in Illinois waters, a total of 86,000 pounds, followed by USS South Works* and Acme Steel Company (Table 8). Horseshoe Lake received the greatest amount of persistent toxic metals, a total of 86,000 pounds, followed by the Lake Michigan and the Mississippi River (Table 7).

Granite City Steel dumped the greatest amount of toxic chemicals that cause reproductive damage or birth defects into Illinois' waters, a total of 66,000 pounds, followed by TTT & T Business Units and Olin Corporation (Table 8). Horseshoe Lake received the greatest amount of toxic chemicals that cause reproductive damage or birth defects, a total of 66,000 pounds, followed by the Illinois River and the Mississippi River (Table 7).

These discharges to Illinois waters include only those wastes released by companies physically located in Illinois. Many waterways receive additional pollution from sources outside of the state. Information on toxic water pollution in other states can be found in EWG's state reports series, and in the national report, *Dishonorable Discharge*.

Recommendations

Americans have a right to know about any use, transport, or release of toxic substance in their communities that might pose a risk to human health or the environment. Required reporting under the TRI provides only a small portion of this information. Much more complete reporting is needed. Americans also have a right to know about toxic chemicals in the products they buy that may pose a risk to them and their children.

Full accounting of the use of toxic materials reveals many low cost opportunities for pollution prevention. In New Jersey, state officials estimate that every dollar spent on such materials accounting practices generates five to eight dollars in increased efficiency (GAO 1994). Without materials accounting industry will miss many opportunities for substantial low cost reductions in pollution, and the public and policy makers will be unable formulate strategies that most effectively reduce exposure to toxic substances in the environment and consumer products.

We recommend:

- Timely implementation of the EPA's proposed expansion of industries and facilities required to report toxic releases under the TRI.
- Expansion of TRI reporting requirements to include full materials accounting for any facility or industry that uses or releases a toxic substance that may pose a risk to human health and the environment.

*This facility reported no discharges in 1994, and may also have reported zero discharges for other years.

Dishonorable Discharge

Toxic pollution of rivers, lakes, streams, and bays is a serious problem in all 50 states. Twenty five years after the passage of the Clean Water Act, nearly forty (40) percent of America's rivers, lakes, and coastal waters remain unsafe for fishing, swimming or basic recreation (EPA 1996b). In Illinois, over half of the lake acres surveyed (75,000 acres excluding the Great Lakes) had elevated levels of toxic chemicals (EPA 1995b). The pollution that fouls these waterways costs the state's economy millions of dollars in tourism, fishing, and development revenues that otherwise could be earned on or near these waters were they not so polluted (EPA 1996b).

***Dishonorable Discharge* Underestimates Toxic Pollution**

The Toxics Release Inventory (TRI) provides a rough estimate of a small portion of the toxic chemicals that flow into America's waters. The toxic discharges reported in this study are based on TRI reported toxic releases to waterways and so-called "transfers" of toxics to publicly owned treatment works (POTWs) — the term of art that industry and the EPA use when an industrial facility dumps toxic chemicals into the local sewer.

The figures reported in *Dishonorable Discharge* dramatically underestimate the total amounts of toxic compounds that have been discharged, dumped, or made their way into rivers and lakes across the country over the past five years.

About 90¹ percent of all toxic discharges coming out of pipes into water (so-called point source discharges) are not reported to the TRI. This is because the TRI requires reporting on only about 343² of some 73,000 chemicals used in commerce, and because the TRI exempts many polluters (utilities, certain industries, and those with fewer than ten employees) from reporting requirements (EPA 1996).

About half of all toxics that pollute rivers comes from surface runoff and air deposition, as opposed to pipes. Comprehensive accounting of this "nonpoint source" pollution is not available for all rivers on a national basis.

Taking all of the limitations of the existing information into account, Environmental Working Group believes that an accurate estimate of the total load of toxic pollution in many rivers and lakes over the past five years might be 20 times greater than the amounts reported here.

Hiding Toxics in the Sewer

The EPA does not include so-called "transfers" of toxic chemicals to sewer systems as an official "release" of a toxic chemical into the environment (EPA 1996). At the same time, the EPA estimates that 25 percent of all toxic chemicals trans-

ferred to sewers from industrial facilities pass through treatment and into the waterways that receive wastewater (EPA 1995).

Transfers of toxic chemicals to publicly owned treatment works (POTWs) — otherwise known as sewage treatment plants — were four times greater in 1994 than the amount of toxic chemicals released directly to water that are reported in the entire TRI that year. To estimate the total amounts of toxic substances dumped into Illinois' waters, we used EPA's assumption that 25 percent of all toxic chemicals transferred to POTWs pass-through untreated³. Table 1 presents the EWG estimate of toxic chemicals assumed to be discharged by the POTWs in Illinois. Estimates of toxic discharges from POTWs to specific rivers and bodies of water could not be accurately estimated because the sewage treatment plants are not required to report to the TRI.

Assuming a 25 percent flow-through does not permit discharge estimates for individual toxic chemicals that flow through the sewer system into waterways. In reality some chemicals flow through POTW's untouched, while others are removed and held in the sludge, broken down in treatment, or allowed to evaporate into the ambient air as toxic pollutants.

How Toxic is Toxic?

Some 340 substances were required to be reported to the EPA for the years analyzed in this report. According to the EPA:

“For a chemical or chemical category to remain on or be added to the TRI list, it must be known to cause or reasonably be anticipated to cause one of the following:

- Significant adverse acute health effects at concentration levels that are reasonably likely to exist beyond facility boundaries as a result of continuous, or frequently recurring releases;
- In humans — cancer; teratogenic effects; or serious irreversible reproductive dysfunction, neurologic disorders, heritable genetic mutations, or other chronic health effects;
- A significant adverse effect on the environment because of its toxicity, its toxicity and persistence in the environment, or its toxicity and tendency to bioaccumulate in the environment of sufficient seriousness to warrant reporting under EPCRA section 313” (EPA 1996).

For most of the TRI chemicals, federal regulators and scientists have a disturbingly incomplete understanding of the long term toxic effects on the environment or human health. The vast majority of compounds reported in the TRI are not fully studied, even though they have triggered one of the above criteria.

Toxic discharges and runoff to water are a serious and largely unaddressed environmental and human health problem. Most, if not all of the pollution reported in Dishonorable Discharge is legal. Current pollution control laws like the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the Toxic Substances Control Act (TSCA) do little to move the nation towards reducing the toxic pollution cited in this report. In effect, these laws issue pollution licenses or exemptions from regulations.

One of the more glaring exemptions may be the so-called “domestic sewage exclusion” under RCRA, whereby toxic contaminants sent to sewage treatment plants escape otherwise applicable federal hazardous waste regulations. This accounts for the huge amounts of toxic chemicals that were dumped down the drain by American industry and end up in the nation’s rivers and streams. Another major source of toxic pollution of waters is agricultural pesticides. The runoff of pesticides from agricultural fields is not regulated under any federal law, and is not tabulated by the TRI nor included in this report. About 1.1 billion pounds⁴ of pesticides were used in the United States in 1993 alone (Aspelin 1994).

Dishonorable Discharge is based on data collected by the U.S. Environmental Protection Agency’s Toxics Release Inventory (TRI) for the reporting years 1990 through 1994, which includes the most recent data available. It includes the releases of only 343 chemicals from about 27,000 manufacturing facilities. The limitations of these data have been described above.

Analyzing Discharges by Body of Water

Discharges from TRI facilities were assigned to a given waterway based on the “receiving stream” reported to the EPA. Most waterways reported as “tributary” streams were included with their respective rivers in this report when it was possible to link them. For purposes of this analysis, toxic release data for major rivers themselves are tabulated separately, not summed as part of larger watersheds. For example, a “Tributary to the Mississippi River” was counted as Mississippi River, while the Missouri River was not, even though it eventually joins the Mississippi just above St. Louis. Small streams receiving large quantity discharges (such as Gravelly Run in Virginia and Clear Creek in Colorado) were reported individually, just as they are recorded in the TRI. State-level reports only include discharges to a given river from facilities that are physically located in this state, not discharges from facilities located in other states upstream.

Reporting Toxics Dumped Down the Drain

Enormous quantities of toxic chemicals are discharged to waterways via sewer systems. These so-called “transfers” of toxic chemicals to publicly owned treatment works (POTWs) totaled more than 250 million pounds in 1994, compared to 66 million pounds of direct discharges to waters reported in that same year. While the EPA does not count these transfers as environmental releases in the TRI, the Agency estimates that an average of 25 percent of these transfers flow through sewer systems into receiving waters (EPA 1995).

To better illustrate the amount of toxic chemicals that actually make it into the nation’s waters each year, we assumed that on average 25 percent of the toxic chemicals transferred to POTWs (a.k.a. sewers) by a reporting facility, ultimately pass through the sewage treatment plant untreated and in most cases are discharged to receiving waters.

Toxic chemical releases through POTWs were estimated statewide, but were not attributed to specific rivers at the state level due to the difficulty of verifying the receiving waters. Environmental Working Group will attempt to identify receiving waters more precisely future reports. All other analyses including facility discharges and top chemicals reflect direct discharges only, and not POTW release estimations.

Total discharges of persistent toxic metals, known or possible carcinogens, and chemicals known to cause reproductive effects, were calculated for specific rivers

based on information characterizing the toxic properties of these substances previously published by the EPA, the State of California, and the State of New Jersey, as well as other toxicological literature (Environmental Protection Agency, 1996; California Code of Regulations; New Jersey Department of Health; and Dixon, 1986). EPA's inclusion of known, probable, and possible carcinogens is based on determinations made by the Occupational Safety and Health Administration (OSHA), the National Toxicology Program (NTP), and the International Agency for Research on Cancer (IARC) (EPA 1996). Lists of chemicals included are found in the Appendix.

Notes

¹Estimate based on EPA report (National Sediment Contaminant Point Source Inventory: Analysis of Release Data for 1992. Final Draft.) (EPA, 1995) where data from TRI were compared to the Permit Compliance System (PCS) Database and found to represent only about 9%, at most, of discharges reported in PCS. Estimates from the GAO indicate that PCS regulates only 23% of all toxic water pollution (GAO, 1994).

²The exact number of chemicals required varies with the year. In 1994, 343 chemicals were reported. EPA has recently expanded the inventory to include about 650. These data, to be reported for 1995, will be available in 1997.

³EPA uses this factor since it is unlikely to greatly overestimate or underestimate the exact treatment efficiency (EPA 1995). This number will vary for any specific chemical; however it estimates pass through for chemicals as a whole, and is not applied to specific chemicals in this report.

⁴This value refers to pesticide active ingredients. The total volume of pesticide products, including so-called inert ingredients is far higher.

Appendix

Carcinogens

1,1,2,2-Tetrachloroethane	beta-Propiolactone	Michler's ketone
1,1-Dimethylhydrazine (UDMH) (alar trans. prod.)	Bis (2-chloroethyl) ether	Mustard Gas
1,2-Dibromo-3-chloropropane (DBCP)	Bis(chloromethyl) ether	N-Nitroso-N-ethylurea
1,3-Butadiene	Bromodichloromethane	N-Nitroso-N-methylurea
1,3-Dichloropropylene	Bromoform	N-Nitrosodi-n-butylamine
1,3-Propane sultone	Cadmium	N-Nitrosodi-n-propylamine
1,4-Dioxane	Cadmium compounds	N-Nitrosodiethylamine
1-Amino-2-methylantraquinone	Captan	N-Nitrosodimethylamine
1-Naphthylamine	Carbon tetrachloride	N-Nitrosodiphenylamine
2,4,6-Trichlorophenol	Chlordane	N-Nitrosomethylvinylamine
2,4-Diaminoanisole	Chloroethane (Ethyl chloride)	N-Nitrosomorpholine
2,4-Diaminoanisole sulfate	Chloroform	N-Nitrososarcosine
2,4-Diaminotoluene	Chloromethyl methyl ether	N-Nitrosopiperidine
2,4-Dinitrotoluene	Chlorophenols	Nickel
2-Acetylaminofluorene	Chlorothalonil	Nickel compounds
2-Aminoanthraquinone	Chromium	Nitritotriacetic acid
2-Methylaziridine (Propyleneimine)	Cupferron	Nitrofen
2-Naphthylamine	D&C Red No. 19	Nitrogen mustard (Mechlorethamine)
2-Nitropropane	DDVP (Dichlorvos)	ortho-Anisidine
3,3'-Dichlorobenzidine	Di-(2-ethylhexyl)phthalate	ortho-Anisidine hydrochloride
3,3'-Dimethoxybenzidine (ortho-Dianisidine)	Dichloromethane (Methylene chloride)	ortho-Toluidine
3,3'-Dimethylbenzidine	Diepoxybutane	ortho-Toluidine hydrochloride
4,4'-Diaminodiphenyl ether (4,4'-Oxydianiline)	Diethyl sulfate	p-Aminoazobenzene
4,4'-Methylene bis(2-chloroaniline)	Dimethyl sulfate	p-Cresidine
4,4'-Methylene bis(N,N-dimethyl) benzenamine	Dimethylcarbamoyl chloride	p-Dichlorobenzene
4,4'-Methylenedianiline	Direct Black 38	p-Nitrosodiphenylamine
4,4'-Thiodianiline	Direct Blue 6	Pentachlorophenol
4-Aminobiphenyl (4-aminodiphenyl)	Direct Brown 95	Polybrominated biphenyls
4-Dimethylaminoazobenzene	Epichlorohydrin	Polychlorinated biphenyls
4-Nitrobiphenyl	Ethyl acrylate	Propylene oxide
5-Nitro-o-anisidine	Ethylene dibromide	Saccharin
Acetaldehyde	Ethylene dichloride (1,2-Dichloroethane)	Safrole
Acetamide	Ethylene oxide	Styrene
Acrylamide	Ethylene thiourea (EBDC trans prod.)	Styrene oxide
Acrylonitrile	Ethyleneimine	Tetrachloroethylene (Perchloroethylene)
Allyl chloride	Formaldehyde	Thioacetamide
Aniline	Hexachlorobenzene	Thiourea
Arsenic	Hexachloroethane	Toluene-2,4-diisocyanate
Arsenic compounds	Hexamethylphosphoramide	Toluene-2,6-diisocyanate
Asbestos	Hydrazine	Toxaphene (Polychlorinated camphenes)
Auramine	Hydrazine sulfate	Trichloroethylene
Benzene	Hydrazobenzene (1,2-Diphenylhydrazine)	Tris(2,3-dibromopropyl)phosphate
Benzidine [and its salts]	Isosafrole	Urethane (Ethyl carbamate)
Benzotrithloride	Lead	Vinyl bromide
Benzyl chloride	Lead compounds	Vinyl chloride
Beryllium and beryllium compounds	Lindane	Vinyl trichloride (1,1,2-Trichloroethane)
Beryllium compounds	Methyl iodide	

Persistent Toxic Metals

Antimony & Antimony Compounds
 Arsenic & Arsenic Compounds
 Barium & Barium Compounds
 Beryllium & Beryllium Compounds
 Cadmium & Cadmium Compounds
 Chromium & Chromium Compounds
 Cobalt & Cobalt Compounds
 Copper & Copper Compounds
 Lead & Lead Compounds
 Manganese & Manganese Compounds
 Mercury & Mercury Compounds
 Nickel & Nickel Compounds
 Selenium & Selenium Compound
 Silver & Silver Compounds
 Thallium & Thallium Compounds
 Zinc & Zinc Compounds

Chemicals that Affect Reproduction

1,2-Dibromo-3-chloropropane
 Cadmium
 Carbon disulfide
 Diethylhexyl phthalate
 o-Dinitrobenzene
 m-Dinitrobenzene
 p-Dinitrobenzene
 Ethylene glycol monoethyl ether
 Ethylene glycol monomethyl ether
 Ethylene oxide
 Hexamethylphosphoramide
 Lead
 Styrene
 Toluene
 Trichloroethylene
 Xylene(mixed isomers)
 o-xylene
 m-xylene
 p-xylene
 Di-n-butyl phthalate
 Glycol ethers
 Mercury Compounds
 Mercury
 Benzene
 Aluminum
 Arsenic
 Nickel
 Lindane
 Vinyl Chloride

Source: Environmental Working Group. Compiled from California Proposition 65, EPA's TRI Public Data Release, New Jersey Department of Health, Hazardous Substances Fact Sheets, and Toxic Responses of the Reproductive System (Dixon 1986).

References

Aspelin, A.L. 1994. Pesticides Industry Sales and Usage: 1992 and 1993 Market Estimates. EPA, Washington, DC.

California Code of Regulations, Title 22. Chapter 3. Safe Drinking Water and Toxic Enforcement Act of 1986. Social Security, S 12000, Chemicals Known to the State to Cause Cancer or Reproductive Toxicity.

Dixon, R. L. 1986. Toxic Responses of the Reproductive System. In: Casarett and Doull's Toxicology: The Basic Science of Poisons, Third Edition. C.D. Klaassen, M.O. Amdur, and J. Doull, Eds. Macmillan Publishing Company, New York. pp. 432-477.

Environmental Protection Agency. 1995. National Sediment Contaminant Point Source Inventory: Analysis of Release Data for 1992. Final Draft, March 22, 1995.

Environmental Protection Agency. 1995b. National Water Quality Inventory: 1994 Report to Congress. EPA841-R-95-005. 497pp.

Environmental Protection Agency. 1996. 1994 Toxics Release Inventory, Public Data Release. Office of Pollution Prevention and Toxics. EPA 745-R-96-002.

Environmental Protection Agency. 1996b. Liquid Assets: A Summertime Perspective on the Importance of Clean Water to the Nation's Economy. 800-R-96-002.

Federal Register Notice, (June 27, 1996) 40 CFR Part 372. Addition of Facilities in Certain Industry Sectors; Toxic Chemical Release Reporting; Community Right-to-Know; Proposed Rule. pp.33588-33618.

New Jersey Department of Health. Right to Know Program. Hazardous Substances Fact Sheets.

Office of Technology Assessment, 1989. Statement before the Subcommittee on Superfund, Ocean and Water Protection, Committee on Environment and Public Works, United States Senate, May 10, 1989. (As cited in Federal Register Notice, (June 27, 1996) 40 CFR Part 372. Addition of Facilities in Certain Industry Sectors; Toxic Chemical Release Reporting; Community Right-to-Know; Proposed Rule. pp.33588-33618.)

United States Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, Bureau of the Census. 1993. 1991 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. U.S. Government Printing Office, Washington, DC.

United States Government Accounting Office. 1991. EPA's Toxics Release Inventory is Useful but Can Be Improved. GAO/RCED-91-121. 89pp.

United States Government Accounting Office. 1994. Poor quality assurance and limited pollutant coverage undermine EPA's Control of Toxic Substances. GAO/PEMD-94-9. 87pp.

Illinois

Toxic pollution of Illinois waters (1990-1994)

Table 1. Total reported toxic pollution of Illinois waters (1990-1994).

Direct Water Discharges	26,972,777 Pounds
Estimated Sewer Discharges‡	71,539,134 Pounds
Total Discharges to Waters	98,511,911 Pounds

Table 2. Illinois waters receiving the greatest amounts of toxic pollution (1990-1994).

River or Water Body	Toxic chemical release to waterbody (pounds)
Mississippi River	15,995,834
Rock River	8,163,860
Illinois River	976,507
Horseshoe Lake	363,817
Ohio River	355,017
Platte River	204,593
Chicago Ship Canal	200,079
Sugar Creek	185,355
Calumet River	129,106
Lake Michigan	55,237

Table 3. Polluters reporting the greatest amounts of toxic chemicals discharged to Illinois waters (1990-1994).

Facility	City	Toxic chemical release to waters (pounds)
3M	Cordova	14,802,439
IBP Inc.	Joslin	8,144,910
BF Goodrich	Henry	662,326
Phoenix Chemical Co.	East Dubuque	466,306
Shell Oil Co.	Roxana	450,980
Granite City Steel	Granite City	363,822
Allied Signal Inc.	Metropolis	355,017
Van Den Bergh Foods Co.	Channahon	207,593
Marathon Oil Co.	Robinson	185,370
Uno-Ven Co.	Lemont	141,059

Table 4. Toxic chemicals discharged in the greatest amounts to Illinois waters (1990-1994).

Chemical	Toxic chemical release to waters (pounds)
Ammonia	20,196,175
Ammonium sulfate (solution)	5,449,010
Ethylene glycol	262,275
Phosphoric acid	199,009
Methanol	132,442
Zinc compounds	97,943
Chlorine	78,343
Manganese	56,472
Aluminum (fume or dust)	53,900
Copper	35,153

Table 5. Polluters reporting the greatest amounts of toxic chemicals discharged to Illinois sewage treatment facilities (1990-1994).

Facility	City	Toxic chemical release to sewers (pounds)
Monsanto Co.	Sauget	124,307,379
Mgf Ind. Corp.	Rockford	32,064,255
Corn Prods. & Best Foods	Bedford Park	22,174,500
Harcros Pigments Inc.	East Saint Louis	17,280,795
115th Street Corp.	Chicago	10,866,725
Amoco	Wood River	10,738,010
Ethyl Petroleum Additives Inc.	Sauget	8,277,829
Viskase Corp.	Bedford Park	7,612,250
A-1 Wire Tech Inc.	Rockford	7,153,060
Occidental Chemical Corp.	Sauget	7,088,069

‡ Total discharges of toxic chemicals to sewer systems in Illinois was 286,156,538 in 1990-94. EPA estimates that 25% of all toxic discharges to sewers pass through sewage treatment plants to receiving waters (EPA 1995).

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

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

Illinois

Toxic pollution of Illinois waters (1990-1994). Carcinogens, persistent toxic metals, and reproductive toxins

Table 6. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged into Illinois waters (1990-1994).**

Carcinogens	90,616 Pounds
Persistent Toxic Metals	399,702 Pounds
Reproductive Toxins	111,145 Pounds
Total (see note)	496,945 Pounds

Note: The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 6 may be larger than the total because a chemical may be in one or more categories, i.e. a chemical may be both a carcinogen and a reproductive toxin. Chemicals were counted only once for the total in Table 6.

Table 7. Illinois waters receiving the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** (1990-1994).**

Waters receiving the greatest amounts of carcinogenic chemicals in Illinois (1990-1994).**

River or Water Body	Carcinogens** released to waters (lbs.)
Lake Michigan	21,372
Illinois River	17,669
Horseshoe Lake	15,825
Chicago Ship Canal	10,559
Mississippi River	5,582

Waters receiving the greatest amounts of persistent toxic metals in Illinois (1990-1994).

River or Water Body	Persistent toxic metals released to waters (lbs.)
Horseshoe Lake	85,905
Lake Michigan	52,420
Mississippi River	48,857
Little Calumet River	39,253
Illinois River	32,628

Waters receiving the greatest amounts of reproductive toxins in Illinois (1990-1994).**

River or Water Body	Reproductive toxins** released to waters (lbs.)
Horseshoe Lake	66,275
Illinois River	19,438
Mississippi River	8,785
Des Plaines River	3,869
East Fork Wood River	3,551

Table 8. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to Illinois waters (1990-1994).**

Top dischargers of carcinogenic chemicals to Illinois waters (1990-1994).**

Facility	City	Carcinogens** released to waters (lbs.)
USS South Works*	Chicago	20,910
Granite City Steel	Granite City	15,830
BF Goodrich	Henry	10,267
Uno-Ven Co.	Lemont	10,049
Olin Corp.	East Alton	6,922

Top dischargers of persistent toxic metals to Illinois waters (1990-1994).

Facility	City	Persistent toxic metals released to waters (lbs.)
Granite City Steel	Granite City	85,905
USS South Works*	Chicago	52,420
Acme Steel Co.	Riverdale	39,253
Olin Corp.	East Alton	36,726
Shell Oil Co.	Roxana	26,605

Top dischargers of reproductive toxins to Illinois waters (1990-1994).**

Facility	City	Reproductive toxins** released to waters (lbs.)
Granite City Steel	Granite City	66,280
TTT & T Business Units	East Peoria	13,734
Olin Corp.	East Alton	6,922
National Starch & Chemical	Meredosia	2,873
Shell Oil Co.	Roxana	2,645

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

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

The Mississippi River in Illinois

Total toxic pollution reported (1990-1994): 15,995,834 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Mississippi River in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
3M	Cordova	14,802,439
Phoenix Chemical Co.	East Dubuque	466,306
Shell Oil Co.	Roxana	443,982
Laclede Steel Co.*	Alton	97,819
Amoco*	Wood River	80,373
Olin Corp.	East Alton	53,265
Jefferson Smurfit Corp.*	Alton	38,080
John Deere Harvester Works	East Moline	6,688
Clark Refining & Marketing Inc	Hartford	4,520
Olin Corp.	East Alton	

Table 2. Toxic chemicals discharged in the greatest amounts to the Mississippi River in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	15,699,441
Ethylene glycol	105,358
Methanol	93,086
Acetone	22,126
Zinc compounds	16,889
Chromium compounds	12,620
Diethanolamine	9,800
Copper	7,508
Phosphorus (yellow or white)	5,144
Manganese	4,740

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Mississippi River in Illinois (1990-1994).**

Carcinogens	5,582 Pounds
Persistent Toxic Metals	48,857 Pounds
Reproductive Toxins	8,785 Pounds
Total‡	54,049 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Mississippi River in Illinois (1990-1994).**

Top dischargers of carcinogens to the Mississippi River in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Olin Corp.	East Alton	3,294
Clark Refining & Marketing Inc	Hartford	1,265
Olin Corp.	East Alton	306
Shell Oil Co.	Roxana	263
John Deere Harvester Works	East Moline	228

Top dischargers of persistent toxic metals to the Mississippi River in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Shell Oil Co.	Roxana	25,480
Olin Corp.	East Alton	15,852
Clark Refining & Marketing Inc	Hartford	2,250
Phoenix Chemical Co.	East Dubuque	1,750
Olin Corp.	East Alton	1,525

Top dischargers of reproductive toxins to the Mississippi River in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Olin Corp.	East Alton	3,294
Shell Oil Co.	Roxana	2,645
Clark Refining & Marketing Inc	Hartford	2,265
Olin Corp.	East Alton	306
3M	Cordova	201

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

The Environmental Working Group is a non-profit environmental research organization based in Washington, D.C.
Phone: (202) 667-6982 • Fax: (202) 232-2592 • Email: info@ewg.org • Web: http://www.ewg.org

The Rock River in Illinois

Total toxic pollution reported (1990-1994): 8,163,860 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Rock River in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
IBP Inc.	Joslin	8,144,910
Northwestern Steel & Wire Co.	Sterling	12,456
Sall-Eclipse Inc.	Rockford	3,750
Quality Metal Finishing Co.	Byron	1,387
Sonoco Prods. Co.*	Rockton	1,250

Table 2. Toxic chemicals discharged in the greatest amounts to the Rock River in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ammonium sulfate (solution)	5,449,010
Ammonia	2,695,920
Zinc compounds	6,837
Manganese compounds	3,440
Chromium compounds	2,381
Zinc (fume or dust)	1,500
Lead	1,250
Copper	1,000
Lead compounds	855
Nickel compounds	805

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Rock River in Illinois (1990-1994).**

Carcinogens	2,910 Pounds
Persistent Toxic Metals	18,587 Pounds
Reproductive Toxins	1,500 Pounds
Total‡	18,837 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Rock River in Illinois (1990-1994).**

Top dischargers of carcinogens to the Rock River in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Sall-Eclipse Inc.	Rockford	1,250
Northwestern Steel & Wire	Sterling	855
Quality Metal Finishing Co.	Byron	805

Top dischargers of persistent toxic metals to the Rock River in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Northwestern Steel & Wire	Sterling	12,456
Sall-Eclipse Inc.	Rockford	3,750
Quality Metal Finishing Co.	Byron	1,324
IBP Inc.	Joslin	1,000

Top dischargers of reproductive toxins to the Rock River in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Sall-Eclipse Inc.	Rockford	1,250
IBP Inc.	Joslin	250

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

The Environmental Working Group is a non-profit environmental research organization based in Washington, D.C.
Phone: (202) 667-6982 • Fax: (202) 232-2592 • Email: info@ewg.org • Web: http://www.ewg.org

The Illinois River in Illinois

Total toxic pollution reported (1990-1994): 976,507 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Illinois River in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
BF Goodrich	Henry	662,326
Pekin Energy Co.	Pekin	108,978
Sherex Chemical Co. Inc.	Mapleton	86,235
TTT & T Business Units	East Peoria	38,485
ETI	Morris	16,800
Midwest Grain Prods. Of Il	Pekin	14,501
National Starch & Chemical	Meredosia	11,487
Caterpillar Inc.	Mossville	7,600
Keystone Steel & Wire Co.	Peoria	7,020
Caterpillar Inc.	Mossville	

Table 2. Toxic chemicals discharged in the greatest amounts to the Illinois River in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	843,344
Ammonium nitrate (solution)	27,800
Ethylene glycol	16,348
Glycol ethers	12,284
Zinc compounds	10,532
Formaldehyde	9,940
Chlorine	8,536
Manganese	7,075
Manganese compounds	6,731
Vinyl acetate	4,957

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Illinois River in Illinois (1990-1994).**

Carcinogens	17,669 Pounds
Persistent Toxic Metals	32,628 Pounds
Reproductive Toxins	19,438 Pounds
Total‡	61,072 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Illinois River in Illinois (1990-1994).**

Top dischargers of carcinogens to the Illinois River in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
BF Goodrich	Henry	10,267
TTT & T Business Units	East Peoria	2,846
Caterpillar Inc.	Mapleton	1,250
Keystone Steel & Wire Co.	Peoria	1,200
Quantum Chemical Corp.*	Morris	1,025

Top dischargers of persistent toxic metals to the Illinois River in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
TTT & T Business Units	East Peoria	18,004
Keystone Steel & Wire Co.	Peoria	7,020
Caterpillar Inc.	Mapleton	2,005
LTV Steel Co.	Hennepin	1,750
Caterpillar Inc.	Mossville	1,374

Top dischargers of reproductive toxins to the Illinois River in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
TTT & T Business Units	East Peoria	13,734
National Starch & Chemical	Meredosia	2,873
Quantum Chemical Corp.*	Morris	1,545
BF Goodrich	Henry	985
Caterpillar Inc.	Mossville	250

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

The Environmental Working Group is a non-profit environmental research organization based in Washington, D.C.
Phone: (202) 667-6982 • Fax: (202) 232-2592 • Email: info@ewg.org • Web: http://www.ewg.org

Horseshoe Lake in Illinois

Total toxic pollution reported (1990-1994): 363,817 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to Horseshoe Lake in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
Granite City Steel	Granite City	363,817

Table 2. Toxic chemicals discharged in the greatest amounts to Horseshoe Lake in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	205,000
Aluminum (fume or dust)	53,400
Manganese	33,600
Barium	20,400
Zinc (fume or dust)	11,800
Nickel	10,590
Vanadium (fume or dust)	10,000
Chlorine	3,490
Cyanide compounds	3,390
Chromium	2,950

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to Horseshoe Lake in Illinois (1990-1994).**

Carcinogens	15,825 Pounds
Persistent Toxic Metals	85,905 Pounds
Reproductive Toxins	66,275 Pounds
Total‡	139,325 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to Horseshoe Lake in Illinois (1990-1994).**

Top dischargers of carcinogens to Horseshoe Lake in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Granite City Steel	Granite City	15,825

Top dischargers of persistent toxic metals to Horseshoe Lake in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Granite City Steel	Granite City	85,905

Top dischargers of reproductive toxins to Horseshoe Lake in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Granite City Steel	Granite City	66,275

The Ohio River in Illinois

Total toxic pollution reported (1990-1994): 355,017 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Ohio River in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
Allied Signal Inc.	Metropolis	355,017

Table 2. Toxic chemicals discharged in the greatest amounts to the Ohio River in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	355,017

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Ohio River in Illinois (1990-1994).**

Carcinogens	0 Pounds
Persistent Toxic Metals	0 Pounds
Reproductive Toxins	0 Pounds
Total‡	0 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Ohio River in Illinois (1990-1994).**

Top dischargers of carcinogens to the Ohio River in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

Top dischargers of persistent toxic metals to the Ohio River in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)

Top dischargers of reproductive toxins to the Ohio River in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)

The Platte River in Illinois

Total toxic pollution reported (1990-1994): 204,593 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Platte River in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
Van Den Bergh Foods Co.	Channahon	204,593

Table 2. Toxic chemicals discharged in the greatest amounts to the Platte River in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Phosphoric acid	196,680
Acetone	5,120
Ammonia	2,793

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Platte River in Illinois (1990-1994).**

Carcinogens	0 Pounds
Persistent Toxic Metals	0 Pounds
Reproductive Toxins	0 Pounds
Total‡	0 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Platte River in Illinois (1990-1994).**

Top dischargers of carcinogens to the Platte River in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

Top dischargers of persistent toxic metals to the Platte River in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)

Top dischargers of reproductive toxins to the Platte River in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)

The Chicago Ship Canal in Illinois

Total toxic pollution reported (1990-1994): 200,079 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Chicago Ship Canal in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
Uno-Ven Co.	Lemont	141,059
Corn Prods. & Best Foods*	Bedford Park	55,000
K. A. Steel Chemicals Inc.*	Lemont	3,000
Austeel Lemont Co. Inc.	Lemont	1,000

Table 2. Toxic chemicals discharged in the greatest amounts to the Chicago Ship Canal in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	121,900
Chlorine	55,010
Lead compounds	6,428
Nickel compounds	3,989
Molybdenum trioxide	3,532
Chromium compounds	3,208
Hydrochloric acid	3,000
Phenol	1,767
Zinc compounds	500
Ethylbenzene	209

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Chicago Ship Canal in Illinois (1990-1994).**

Carcinogens	10,559 Pounds
Persistent Toxic Metals	14,125 Pounds
Reproductive Toxins	350 Pounds
Total‡	14,475 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Chicago Ship Canal in Illinois (1990-1994).**

Top dischargers of carcinogens to the Chicago Ship Canal in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Uno-Ven Co.	Lemont	10,049
Austeel Lemont Co. Inc.	Lemont	500

Top dischargers of persistent toxic metals to the Chicago Ship Canal in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Uno-Ven Co.	Lemont	13,115
Austeel Lemont Co. Inc.	Lemont	1,000

Top dischargers of reproductive toxins to the Chicago Ship Canal in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Uno-Ven Co.	Lemont	350

Sugar Creek in Illinois

Total toxic pollution reported (1990-1994): 185,355 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to Sugar Creek in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
Marathon Oil Co.	Robinson	185,355

Table 2. Toxic chemicals discharged in the greatest amounts to Sugar Creek in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ethylene glycol	134,600
Methanol	34,350
Ammonia	14,000
Benzene	2,180
Chromium compounds	110

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to Sugar Creek in Illinois (1990-1994).**

Carcinogens	2,180 Pounds
Persistent Toxic Metals	110 Pounds
Reproductive Toxins	2,235 Pounds
Total‡	2,345 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to Sugar Creek in Illinois (1990-1994).**

Top dischargers of carcinogens to Sugar Creek in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Marathon Oil Co.	Robinson	2,180

Top dischargers of persistent toxic metals to Sugar Creek in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Marathon Oil Co.	Robinson	110

Top dischargers of reproductive toxins to Sugar Creek in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Marathon Oil Co.	Robinson	2,235

The Calumet River in Illinois

Total toxic pollution reported (1990-1994): 129,106 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Calumet River in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
LTV Steel Co.	Chicago	117,950
Acme Steel Co.	Chicago	8,378
Acme Steel Co.	Chicago	2,510
Prestone Prods. Corp.*	Alsip	263

Table 2. Toxic chemicals discharged in the greatest amounts to the Calumet River in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	123,118
Manganese compounds	2,510
Phenol	1,985
Cyanide compounds	1,085
Ethylene glycol	250

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Calumet River in Illinois (1990-1994).**

Carcinogens	40 Pounds
Persistent Toxic Metals	2,515 Pounds
Reproductive Toxins	80 Pounds
Total‡	2,595 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to the Calumet River in Illinois (1990-1994).**

Top dischargers of carcinogens to the Calumet River in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

Top dischargers of persistent toxic metals to the Calumet River in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Acme Steel Co.	Chicago	2,510

Top dischargers of reproductive toxins to the Calumet River in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)

Lake Michigan in Illinois

Total toxic pollution reported (1990-1994): 55,237 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to Lake Michigan in Illinois (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
USS South Works*	Chicago	52,420
Abbott Labs.	North Chicago	2,605
OMC Waukegan*	Waukegan	212

Table 2. Toxic chemicals discharged in the greatest amounts to Lake Michigan in Illinois (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Lead compounds	18,200
Copper compounds	14,300
Zinc compounds	8,920
Chromium compounds	4,400
Manganese compounds	3,890
Nickel compounds	2,710
Methanol	2,330
Chloroform	250
Trichloroethylene	212

‡ The sum of carcinogens, persistent toxic metals, and reproductive toxins listed in Table 3 may be larger than the total because a chemical may be in one or more categories. Chemicals were counted only once for the total in Table 3.

* This polluter did not report any discharges to water in 1994. See Table 9 for year to year pollution figures.

** Carcinogens and reproductive toxins defined by the State of California Proposition 65, EPA's TRI Public Data Release and other literature. See full report for references.

Table 3. Total carcinogens, persistent toxic metals, and reproductive toxins** discharged to Lake Michigan in Illinois (1990-1994).**

Carcinogens	21,372 Pounds
Persistent Toxic Metals	52,420 Pounds
Reproductive Toxins	232 Pounds
Total‡	52,902 Pounds

Table 4. Polluters reporting the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** discharged to Lake Michigan in Illinois (1990-1994).**

Top dischargers of carcinogens to Lake Michigan in Illinois (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
USS South Works*	Chicago	20,910
Abbott Labs.	North Chicago	250
OMC Waukegan*	Waukegan	212

Top dischargers of persistent toxic metals to Lake Michigan in Illinois (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
USS South Works*	Chicago	52,420

Top dischargers of reproductive toxins to Lake Michigan in Illinois (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
OMC Waukegan*	Waukegan	212