

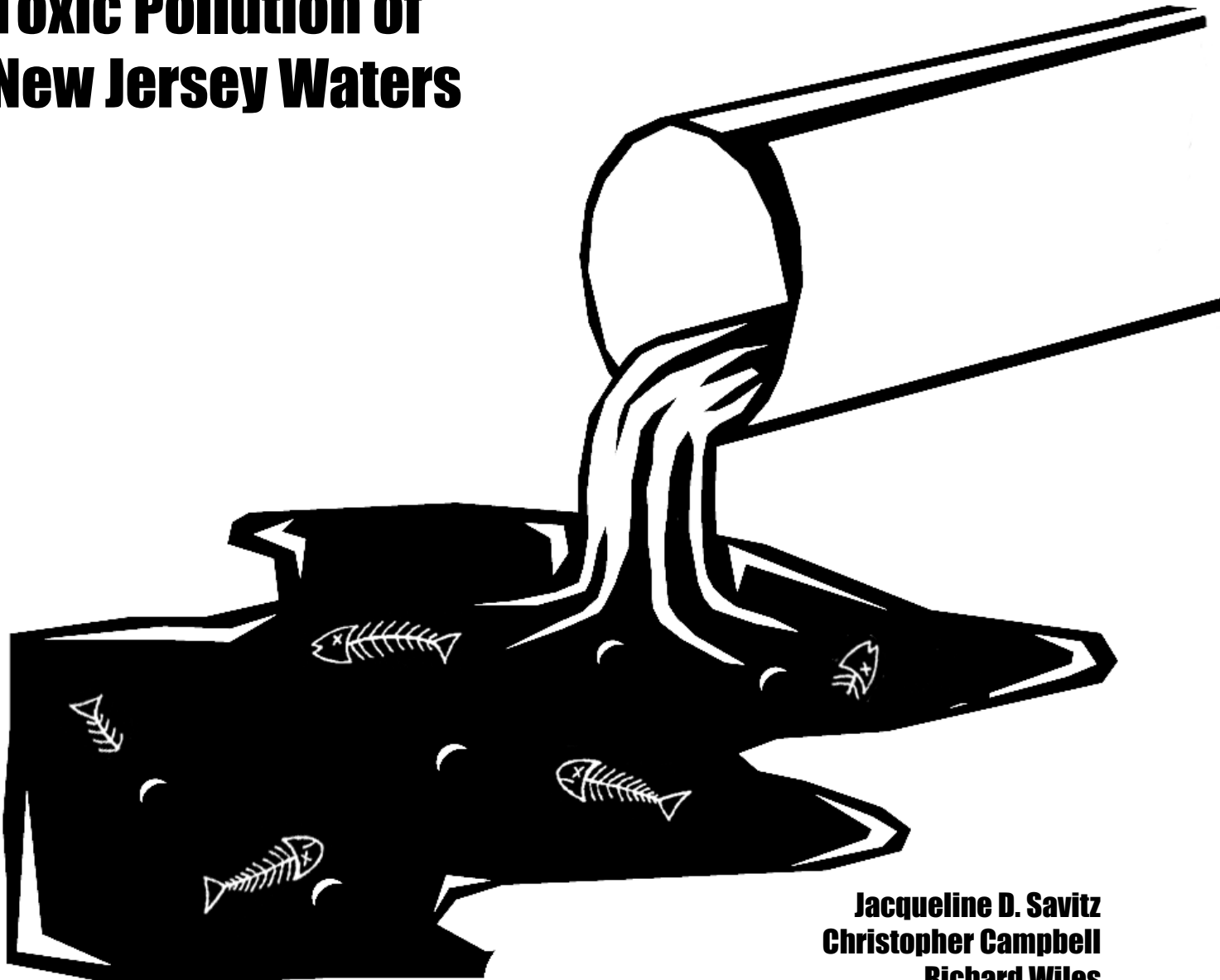


The State PIRGs



# Dishonorable Discharge

## Toxic Pollution of New Jersey Waters



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# Toxic Pollution of New Jersey Waters

### Executive Summary

Most New Jersey 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 New Jersey streams and rivers.

The citizens of New Jersey 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 New Jersey and nationwide.

Factories and other industrial facilities dumped more than 13.5 million pounds of toxic substances directly into New Jersey's waters between 1990 and 1994, according to a new analysis of the federal Toxics Release Inventory (TRI) (Table 1). New Jersey ranked 12th 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 215 million pounds of toxic materials were flushed to sewage treatment plants in New Jersey from 1990 through 1994, 2nd 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 New Jersey raises the total amount of toxics dumped to the state's waters to an estimated 67.5 million pounds (Table 1).

The Delaware River received the greatest amount of toxic water pollution in New Jersey from 1990-1994, a total of 12,100,000 pounds, followed by Platty Kill Creek, the Arthur Kill, and Rancocas Creek (Table 2). The ten most polluted waterways in New Jersey received 13,500,000 pounds of toxic pollution between 1990 and 1994, 99.8% percent of the total in the State.

The top three facilities reporting the most toxic pollution of New Jersey's waters over this period were Du Pont's Deepwater facility, which dumped 11,500,000 pounds

of toxic chemicals, followed by Rona, and Coastal Eagle Point Oil Company in the towns of Bayonne, and Westville, respectively (Table 3). The toxic chemicals dumped in the greatest amounts were ammonia, a total of 8,610,000 pounds, followed by ammonium sulfate solution, and ammonium nitrate solution (Table 4).

Du Pont dumped the most carcinogens into New Jersey's waters, a total of 158,000 pounds, followed by Sybron Chemicals Inc. and Bayway Refining Company (Table 8). The Delaware River received the greatest amount of cancer-causing toxic chemicals in New Jersey, a total of 165,000 pounds, followed by Rancocas Creek and the Arthur Kill (Table 7).

Du Pont dumped the greatest amount of persistent toxic metals in New Jersey's waters, a total of 61,000 pounds, followed by J. T. Baker Inc. and Bayway Chemical Plant (Table 8). The Delaware River received the greatest amount of persistent toxic metals, a total of 81,000 pounds, followed by the Arthur Kill and Rancocas Creek (Table 7).

Bayway Refining Company dumped the greatest amount of toxic chemicals that cause reproductive damage or birth defects into New Jersey's waters, a total of 46,000 pounds, followed by Goody Products Inc.\* and Du Pont (Table 8). The Arthur Kill received the greatest amount of toxic chemicals that cause reproductive damage or birth defects, a total of 46,000 pounds, followed by Dead Horse Creek and the Delaware River (Table 7).

These discharges to New Jersey's waters include only those wastes released by companies physically located in New Jersey. 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.

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\*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). 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 90<sup>1</sup> 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 343<sup>2</sup> 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 come 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 transferred 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 New Jersey’s waters, we used EPA’s assumption that 25 percent of all toxic chemicals transferred to POTWs pass-through untreated<sup>3</sup>. Table 1 presents the EWG estimate of toxic chemicals assumed to be discharged by the POTWs in New Jersey. 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 also 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 pounds<sup>4</sup> 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

<sup>1</sup>Estimate 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).

<sup>2</sup>The 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.

<sup>3</sup>EPA 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.

<sup>4</sup>This 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)
Benzotrichloride	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.

# New Jersey

## Toxic pollution of New Jersey waters (1990-1994)

**Table 1. Total reported toxic pollution of New Jersey waters (1990-1994).**

Direct Water Discharges	13,538,251 Pounds
Estimated Sewer Discharges‡	53,942,113 Pounds
<b>Total Discharges to Waters</b>	<b>67,480,364 Pounds</b>

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

River or Water Body	Toxic chemical release to waterbody (pounds)
Delaware River	12,064,013
Platty Kill Creek	1,006,020
Arthur Kill	288,088
Rancocas Creek	62,055
Dead Horse Creek	36,924
Rahway River	29,372
Atlantic Ocean	8,646
Marter's Ditch	4,107
Newark Bay	3,783
Musconetcong River	3,510

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

Facility	City	Toxic chemical release to waters (pounds)
Du Pont	Deepwater	11,478,906
Rona	Bayonne	1,006,020
Coastal Eagle Point Oil Co.	Westville	181,616
Monsanto Co.	Bridgeport	177,959
Bayway Refining Co.	Linden	138,861
Du Pont*	Linden	96,925
J. T. Baker Inc.	Phillipsburg	90,948
Sybron Chemicals Inc.	Birmingham	62,445
Occidental Chemical Corp.	Burlington	52,689
Goody Prods. Inc.*	Kearny	36,924

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

Chemical	Toxic chemical release to waters (pounds)
Ammonia	8,609,831
Ammonium sulfate (solution)	2,956,054
Ammonium nitrate (solution)	1,208,305
Chlorine	83,097
Chloromethane	76,138
Chloroethane	51,772
Lead compounds	45,144
Methanol	44,069
Glycol ethers	37,617
1,2-Dichloroethane	31,451

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

Facility	City	Toxic chemical release to sewers (pounds)
Old Bridge Chemicals Inc.	Old Bridge	19,573,393
Sun Chemical Corp.	Newark	18,900,000
Merck & Co. Inc.	Rahway	17,693,994
Hoffmann-La Roche Inc.	Nutley	13,211,684
Hercules Inc.	Parlin	12,487,456
Givaudan-Roure Corp.	Clifton	10,498,001
Kalama Chemical Inc.	Garfield	9,634,532
Zeneca Inc.	Bayonne	9,513,827
Miles Inc.	Haledon	9,142,381
Cookson Pigments Inc.	Newark	8,839,501

‡ Total discharges of toxic chemicals to sewer systems in New Jersey was 215,768,454 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.

# New Jersey

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

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

Carcinogens	204,530 Pounds
Persistent Toxic Metals	111,459 Pounds
Reproductive Toxins	126,888 Pounds
<b>Total (see note)</b>	<b>374,150 Pounds</b>

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. New Jersey waters receiving the greatest amounts of carcinogens\*\*, persistent toxic metals, and reproductive toxins\*\* (1990-1994).**

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

River or Water Body	Carcinogens** released to waters (lbs.)
Delaware River	165,160
Rancocas Creek	20,807
Arthur Kill	8,000
Red River	2,005
Newark Bay	1,312

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

River or Water Body	Persistent toxic metals released to waters (lbs.)
Delaware River	80,560
Arthur Kill	10,809
Rancocas Creek	4,095
Hollow Brook	2,639
Woodbridge Creek	2,155

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

River or Water Body	Reproductive toxins** released to waters (lbs.)
Arthur Kill	45,859
Dead Horse Creek	36,857
Delaware River	34,982
Rancocas Creek	2,070
Deboise Creek	1,200

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

**Top dischargers of carcinogenic chemicals\*\* to New Jersey waters (1990-1994).**

Facility	City	Carcinogens** released to waters (lbs.)
Du Pont	Deepwater	158,180
Sybron Chemicals Inc.	Birmingham	21,197
Bayway Refining Co.	Linden	4,920
Roche Vitamins & Fine	Belvidere	3,505
Liquid Carbonic*	Harrison	3,480

**Top dischargers of persistent toxic metals to New Jersey waters (1990-1994).**

Facility	City	Persistent toxic metals released to waters (lbs.)
Du Pont	Deepwater	61,435
J. T. Baker Inc.	Phillipsburg	9,593
Bayway Chemical Plant	Linden	8,162
Hoeganaes Corp.	Riverton	5,280
Sybron Chemicals Inc.	Birmingham	4,095

**Top dischargers of reproductive toxins\*\* to New Jersey waters (1990-1994).**

Facility	City	Reproductive toxins** released to waters (lbs.)
Bayway Refining Co.	Linden	45,922
Goody Prods. Inc.*	Kearny	36,857
Du Pont	Deepwater	32,815
Liquid Carbonic*	Harrison	3,480
Sybron Chemicals Inc.	Birmingham	2,070

\* 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.

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# The Delaware River in New Jersey

Total toxic pollution reported (1990-1994): 12,064,013 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Delaware River in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Du Pont	Deepwater	11,478,906
Coastal Eagle Point Oil Co.	Westville	181,616
Monsanto Co.	Bridgeport	177,959
J. T. Baker Inc.	Phillipsburg	90,948
Occidental Chemical Corp.	Burlington	48,582
Roche Vitamins & Fine	Belvidere	36,052
Mobil Oil Paulsboro Refy.	Paulsboro	28,132
Du Pont*	Gibbstown	7,181
Hoeganaes Corp.	Riverton	6,030
BF Goodrich*	Pedricktown	

**Table 2. Toxic chemicals discharged in the greatest amounts to the Delaware River in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	8,394,628
Ammonium sulfate (solution)	2,956,054
Ammonium nitrate (solution)	202,285
Chlorine	78,957
Chloromethane	76,138
Chloroethane	51,772
Lead compounds	42,542
1,2-Dichloroethane	31,451
m-Dinitrobenzene	23,843
Dichloromethane	17,225

‡ 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 Delaware River in New Jersey (1990-1994).**

Carcinogens	165,160 Pounds
Persistent Toxic Metals	80,560 Pounds
Reproductive Toxins	34,982 Pounds
<b>Total‡</b>	<b>229,104 Pounds</b>

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

**Top dischargers of carcinogens\*\* to the Delaware River in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Du Pont	Deepwater	158,180
Roche Vitamins & Fine	Belvidere	3,505
Hoeganaes Corp.	Riverton	2,000
J. T. Baker Inc.	Phillipsburg	789
Coastal Eagle Point Oil Co.	Westville	290

**Top dischargers of persistent toxic metals to the Delaware River in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
Du Pont	Deepwater	61,435
J. T. Baker Inc.	Phillipsburg	9,593
Hoeganaes Corp.	Riverton	5,280
Roche Vitamins & Fine	Belvidere	1,817
Coastal Eagle Point Oil Co.	Westville	1,485

**Top dischargers of reproductive toxins\*\* to the Delaware River in New Jersey (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Du Pont	Deepwater	32,815
Coastal Eagle Point Oil Co.	Westville	1,015
Hoeganaes Corp.	Riverton	500
Advance Process Supply Co.*	Pennsauken	255
Occidental Chemical Corp.	Burlington	182

# Platty Kill Creek in New Jersey

Total toxic pollution reported (1990-1994): 1,006,020 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to Platty Kill Creek in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Rona	Bayonne	1,006,020

**Table 2. Toxic chemicals discharged in the greatest amounts to Platty Kill Creek in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonium nitrate (solution)	1,006,020

‡ 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 Platty Kill Creek in New Jersey (1990-1994).**

Carcinogens	0 Pounds
Persistent Toxic Metals	0 Pounds
Reproductive Toxins	0 Pounds
<b>Total‡</b>	<b>0 Pounds</b>

**Table 4. Polluters reporting the greatest amounts of carcinogens\*\*, persistent toxic metals, and reproductive toxins\*\* discharged to Platty Kill Creek in New Jersey (1990-1994).**

**Top dischargers of carcinogens\*\* to Platty Kill Creek in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

**Top dischargers of persistent toxic metals to Platty Kill Creek in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)

**Top dischargers of reproductive toxins\*\* to Platty Kill Creek in New Jersey (1990-1994).**

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

# The Arthur Kill in New Jersey

Total toxic pollution reported (1990-1994): 288,088 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Arthur Kill in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Bayway Refining Co.	Linden	138,532
Du Pont*	Linden	96,925
Amerada Hess Corp.	Port Reading	25,482
Bayway Chemical Plant	Linden	22,839
ISP Environmental Services Inc.	Linden	4,310

**Table 2. Toxic chemicals discharged in the greatest amounts to the Arthur Kill in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	204,984
Xylene (mixed isomers)	22,382
Toluene	18,953
sec-Butyl alcohol	9,783
Zinc compounds	7,118
Benzene	4,524
Ethylbenzene	4,048
Chlorine	4,000
Phenol	3,331
Naphthalene	2,760

‡ 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 Arthur Kill in New Jersey (1990-1994).**

Carcinogens	8,000 Pounds
Persistent Toxic Metals	10,809 Pounds
Reproductive Toxins	45,859 Pounds
<b>Total‡</b>	<b>57,497 Pounds</b>

**Table 4. Polluters reporting the greatest amounts of carcinogens\*\*, persistent toxic metals, and reproductive toxins\*\* discharged to the Arthur Kill in New Jersey (1990-1994).**

**Top dischargers of carcinogens\*\* to the Arthur Kill in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Bayway Refining Co.	Linden	4,900
Amerada Hess Corp.	Port Reading	2,271
Du Pont*	Linden	829

**Top dischargers of persistent toxic metals to the Arthur Kill in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
Bayway Chemical Plant	Linden	8,162
Amerada Hess Corp.	Port Reading	2,217
Bayway Refining Co.	Linden	430

**Top dischargers of reproductive toxins\*\* to the Arthur Kill in New Jersey (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Bayway Refining Co.	Linden	45,720
Amerada Hess Corp.	Port Reading	139



# Rancocas Creek in New Jersey

Total toxic pollution reported (1990-1994): 62,055 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to Rancocas Creek in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Sybron Chemicals Inc.	Birmingham	62,055

**Table 2. Toxic chemicals discharged in the greatest amounts to Rancocas Creek in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Methanol	33,057
Formaldehyde	18,509
Zinc compounds	4,095
1,2-Dichloropropane	3,110
Styrene	1,233
Epichlorohydrin	852
Toluene	837
Acrylonitrile	164

‡ 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 Rancocas Creek in New Jersey (1990-1994).**

Carcinogens	20,807 Pounds
Persistent Toxic Metals	4,095 Pounds
Reproductive Toxins	2,070 Pounds
<b>Total‡</b>	<b>25,739 Pounds</b>

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

**Top dischargers of carcinogens\*\* to Rancocas Creek in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Sybron Chemicals Inc.	Birmingham	20,807

**Top dischargers of persistent toxic metals to Rancocas Creek in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
Sybron Chemicals Inc.	Birmingham	4,095

**Top dischargers of reproductive toxins\*\* to Rancocas Creek in New Jersey (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Sybron Chemicals Inc.	Birmingham	2,070

# Dead Horse Creek in New Jersey

Total toxic pollution reported (1990-1994): 36,924 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to Dead Horse Creek in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Goody Prods. Inc.*	Kearny	36,924

**Table 2. Toxic chemicals discharged in the greatest amounts to Dead Horse Creek in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Glycol ethers	36,834

‡ 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 Dead Horse Creek in New Jersey (1990-1994).**

Carcinogens	85 Pounds
Persistent Toxic Metals	85 Pounds
Reproductive Toxins	36,857 Pounds
<b>Total‡</b>	<b>36,919 Pounds</b>

**Table 4. Polluters reporting the greatest amounts of carcinogens\*\*, persistent toxic metals, and reproductive toxins\*\* discharged to Dead Horse Creek in New Jersey (1990-1994).**

**Top dischargers of carcinogens\*\* to Dead Horse Creek in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

**Top dischargers of persistent toxic metals to Dead Horse Creek in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)

**Top dischargers of reproductive toxins\*\* to Dead Horse Creek in New Jersey (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Goody Prods. Inc.*	Kearny	36,857

# The Rahway River in New Jersey

Total toxic pollution reported (1990-1994): 29,372 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Rahway River in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Max Marx Color Co.*	Irvington	29,018
Bayway Refining Co.	Linden	329

**Table 2. Toxic chemicals discharged in the greatest amounts to the Rahway River in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Hydrochloric acid	29,018
Xylene (mixed isomers)	101

‡ 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 Rahway River in New Jersey (1990-1994).**

Carcinogens	45 Pounds
Persistent Toxic Metals	0 Pounds
Reproductive Toxins	227 Pounds
<b>Total‡</b>	<b>227 Pounds</b>

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

**Top dischargers of carcinogens\*\* to the Rahway River in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

**Top dischargers of persistent toxic metals to the Rahway River in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)

**Top dischargers of reproductive toxins\*\* to the Rahway River in New Jersey (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Bayway Refining Co.	Linden	202

# The Atlantic Ocean in New Jersey

## Total toxic pollution reported (1990-1994): 8,646 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Atlantic Ocean in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Ciba-Geigy*	Toms River	8,646

**Table 2. Toxic chemicals discharged in the greatest amounts to the Atlantic Ocean in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	4,854
Phosphoric acid	2,382
n-Butyl alcohol	261
Formaldehyde	261
Methanol	261
Methyl ethyl ketone	261
Copper compounds	166

‡ 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 Atlantic Ocean in New Jersey (1990-1994).**

Carcinogens	292 Pounds
Persistent Toxic Metals	227 Pounds
Reproductive Toxins	31 Pounds
<b>Total‡</b>	<b>550 Pounds</b>

**Table 4. Polluters reporting the greatest amounts of carcinogens\*\*, persistent toxic metals, and reproductive toxins\*\* discharged to the Atlantic Ocean in New Jersey (1990-1994).**

**Top dischargers of carcinogens\*\* to the Atlantic Ocean in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Ciba-Geigy*	Toms River	292

**Top dischargers of persistent toxic metals to the Atlantic Ocean in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
Ciba-Geigy*	Toms River	227

**Top dischargers of reproductive toxins\*\* to the Atlantic Ocean in New Jersey (1990-1994).**

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

# Marter's Ditch in New Jersey

Total toxic pollution reported (1990-1994): 4,107 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to Marter's Ditch in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Occidental Chemical Corp.	Burlington	4,107

**Table 2. Toxic chemicals discharged in the greatest amounts to Marter's Ditch in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	4,100

‡ 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 Marter's Ditch in New Jersey (1990-1994).**

Carcinogens	7 Pounds
Persistent Toxic Metals	0 Pounds
Reproductive Toxins	7 Pounds
<b>Total‡</b>	<b>7 Pounds</b>

**Table 4. Polluters reporting the greatest amounts of carcinogens\*\*, persistent toxic metals, and reproductive toxins\*\* discharged to Marter's Ditch in New Jersey (1990-1994).**

**Top dischargers of carcinogens\*\* to Marter's Ditch in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

**Top dischargers of persistent toxic metals to Marter's Ditch in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)

**Top dischargers of reproductive toxins\*\* to Marter's Ditch in New Jersey (1990-1994).**

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

# Newark Bay in New Jersey

## Total toxic pollution reported (1990-1994): 3,783 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to Newark Bay in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Allied-Signal Inc.*	Elizabeth	3,003
Reichhold Chemicals Inc.	Newark	780

**Table 2. Toxic chemicals discharged in the greatest amounts to Newark Bay in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Trichlorofluoromethane (CFC-11)	1,243
Dichloromethane	779
Phthalic anhydride	500
1,1,1-Trichloroethane	314
n-Butyl alcohol	250
Tetrachloroethylene	226
Chloroform	182
Trichloroethylene	125

‡ 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 Newark Bay in New Jersey (1990-1994).**

Carcinogens	1,312 Pounds
Persistent Toxic Metals	48 Pounds
Reproductive Toxins	145 Pounds
<b>Total‡</b>	<b>1,380 Pounds</b>

**Table 4. Polluters reporting the greatest amounts of carcinogens\*\*, persistent toxic metals, and reproductive toxins\*\* discharged to Newark Bay in New Jersey (1990-1994).**

**Top dischargers of carcinogens\*\* to Newark Bay in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Allied-Signal Inc.*	Elizabeth	1,312

**Top dischargers of persistent toxic metals to Newark Bay in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
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**Top dischargers of reproductive toxins\*\* to Newark Bay in New Jersey (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Allied-Signal Inc.*	Elizabeth	125

# The Musconetcong River in New Jersey

## Total toxic pollution reported (1990-1994): 3,510 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Musconetcong River in New Jersey (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Bp Performance Polymers	Hackettstown	3,510

**Table 2. Toxic chemicals discharged in the greatest amounts to the Musconetcong River in New Jersey (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Antimony compounds	1,500
Mixtures and other trade names	1,260
Decabromodiphenyl oxide	500
Zinc compounds	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 Musconetcong River in New Jersey (1990-1994).**

Carcinogens	0 Pounds
Persistent Toxic Metals	1,750 Pounds
Reproductive Toxins	0 Pounds
<b>Total‡</b>	<b>1,750 Pounds</b>

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

**Top dischargers of carcinogens\*\* to the Musconetcong River in New Jersey (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

**Top dischargers of persistent toxic metals to the Musconetcong River in New Jersey (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
Bp Performance Polymers	Hackettstown	1,750

**Top dischargers of reproductive toxins\*\* to the Musconetcong River in New Jersey (1990-1994).**

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