



Dishonorable Discharge



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>

Dishonorable Discharge

Toxic Pollution of New Mexico Waters

Executive Summary

Most New Mexico 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 Mexico streams and rivers.

The citizens of New Mexico 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 Mexico and nationwide.

Factories and other industrial facilities dumped more than 8,300 pounds of toxic substances directly into New Mexico's waters between 1990 and 1994, according to a new analysis of the federal Toxics Release Inventory (TRI) (Table 1). 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 one (1.2) million pounds of toxic materials were flushed to sewage treatment plants in New Mexico from 1990 through 1994, 40th 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 Mexico raises the total amount of toxics dumped to the state's waters to an estimated 300,000 pounds (Table 1).

The Rio Grande received the greatest amount of toxic water pollution in New Mexico from 1990-1994, a total of 8,300 pounds (Table 2). The most polluted waterway in New Mexico received 8,300 pounds of toxic pollution between 1990 and 1994, 99.6% percent of the total in the State.

The top two facilities reporting the most toxic pollution of New Mexico's waters over this period were U.S. DOE in Los Alamos, which dumped 6,000 pounds of toxic chemicals, followed by Academy Corporation in Albuquerque (Table 3). The toxic

chemicals dumped in the greatest amounts were chlorine, a total of 6,000 pounds, followed by copper, and silver (Table 4).

Academy Corporation dumped the greatest amount of persistent toxic metals in New Mexico's waters, a total of 2,000 pounds (Table 8). The Rio Grande received the greatest amount of persistent toxic metals, a total of 2,250 pounds (Table 7).

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

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 New Mexico, 67,00 acres of lakes surveyed 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 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 Mexico's 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 New Mexico. 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 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

1,1-Dimethylhydrazine (UDMH) (alar trans. prod.)

1,2-Dibromo-3-chloropropane (DBCP) 1.3-Butadiene

1,3-Dichloropropylene 1,3-Propane sultone

1,4-Dioxane

1-Amino-2-methylanthraquinone

1-Naphthylamine 2,4,6-Trichlorophenol

2 4-Diaminoanisole 2,4-Diaminoanisole sulfate 2.4-Diaminotoluene

2,4-Dinitrotoluene 2-Acetylaminofluorene

2-Aminoanthraquinone

2-Methylaziridine (Propyleneimine)

2-Naphthylamine 2-Nitropropane

3,3'-Dichlorobenzidine

3,3'-Dimethoxybenzidine (ortho-Dianisidine)

3.3'-Dimethylbenzidine

4,4'-Diaminodiphenyl ether (4,4'-Oxydianiline)

4,4'-Methylene bis(2-chloroaniline)

4,4'-Methylene bis(N,N-dimethyl) benzenamine

4,4'-Methylenedianiline 4,4'-Thiodianiline

4-Aminobiphenyl (4-aminodiphenyl)

4-Dimethylaminoazobenzene

4-Nitrobiphenyl 5-Nitro-o-anisidine Acetaldehyde

Acetamide Acrylamide Acrylonitrile

Allyl chloride Aniline

Arsenic Arsenic compounds

Asbestos Auramine

Benzene Benzidine [and its salts] Benzotrichloride

Benzyl chloride

Beryllium and beryllium compounds

Beryllium compounds

beta-Propiolactone Bis (2-chloroethyl) ether Bis(chloromethyl) ether Bromodichloromethane Bromoform

Cadmium compounds Captan

Carbon tetrachloride

Chlordane Chloroethane (Ethyl chloride)

Chloroform

Cadmium

Chloromethyl methyl ether

Chlorophenols

Chlorothalonil Chromium Cupferron

D&C Red No. 19 DDVP (Dichlorvos) Di -(2-ethylhexyl)phthalate

Dichloromethane (Methylene chloride)

Diepoxybutane Diethyl sulfate

Dimethyl sulfate

Dimethylcarbamoyl chloride

Direct Black 38 Direct Blue 6 Direct Brown 95 Epichlorohydrin Ethyl acrylate

Ethylene dibromide Ethylene dichloride (1,2-Dichloroethane)

Ethylene oxide

Ethylene thiourea (EBDC trans prod.)

Ethyleneimine Formaldehyde Hexachlorobenzene Hexachloroethane

Hexamethylphosphoramide Hydrazine

Hydrazine sulfate

Hydrazobenzene (1,2-Diphenylhydrazine)

Isosafrole Lead

Lead compounds Lindane

Methyl iodide

Michler's ketone Mustard Gas

N-Nitroso-N-ethylurea N-Nitroso-N-methylurea N-Nitrosodi-n-butylamine N-Nitrosodi-n-propylamine N-Nitrosodiethylamine

N-Nitrosodimethylamine N-Nitrosodiphenylamine N-Nitrosomethylvinylamine N-Nitrosomorpholine N-Nitrosonornicotine

N-Nitrosopiperidine Nickel Nickel compounds

Nitrilotriacetic acid

Nitrofen Nitrogen mustard (Mechlorethamine)

ortho-Anisidine

ortho-Anisidine hydrochloride ortho-Toluidine ortho-Toluidine hydrochloride

p-Aminoazobenzene p-Cresidine p-Dichlorobenzene p-Nitrosodiphenylamine Pentachlorophenol Polybrominated biphenyls Polychlorinated biphenyls

Propylene oxide Saccharin Safrole Styrene

Styrene oxide Tetrachloroethylene (Perchloroethylene)

Thioacetamide Thiourea

Toluene-2,4-diisocyanate Toluene-2.6-diisocyanate

Toxaphene (Polychorinated camphenes)

Trichloroethylene

Tris(2,3-dibromopropyl)phosphate Urethane (Ethyl carbamate)

Vinyl bromide Vinyl chloride

Vinyl trichloride (1,1,2-Trichloroethane)

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

Zinc & Zinc Compounds

Manganese & Manganese Compounds Mercury & Mercury Compounds Nickel & Nickel Compounds Selenium & Selenium Compound Silver & Silver Compounds Thallium & Thallium 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

Toulene Trichloroethylene Xylene(mixed isomers)

o-xylene m-xvlene 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).

Dishonorable Discharge

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 Mexico

Toxic pollution of New Mexico waters (1990-1994)

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

Direct Water Discharges 8,308 Pounds
Estimated Sewer Discharges‡ 290,872 Pounds

Total Discharges to Waters 299,180 Pounds

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

River or Water Body	Toxic chemical release to waterbody (pounds)
Rio Grande	8,275

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

Facility	City	Toxic chemical release to waters (pounds)
U.S. DOE	Los Alamos	6,020
Academy Corp.	Albuquerque	2,250

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

Chemical	Toxic chemical release to waters (pounds)
Chlorine	6,020
Copper	1,750
Silver	500

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

Facility	City	Toxic chemical release to sewers (pounds)
Intel Corp.	Rio Rancho	767,738
Elastimold	Albuquerque	89,475
Digital Equipment Corp.	Albuquerque	83,062
Philips Electronics N.a. Corp.	Albuquerque	64,939
Borden Inc.	Albuquerque	58,000
General Tech. Corp.	Albuquerque	42,431
U.S. DOE Albuquerque	Albuquerque	37,200
Unichem	Hobbs	7,890
Academy Corp.	Albuquerque	7,065
Wellborn De Corp.	Albuquerque	1,250

[‡] Total discharges of toxic chemicals to sewer systems in New Mexico was 1,163,489 in 1990-94. EPA estimates that 25% of all toxic discharges to sewers pass through sewage treatment plants to receiving waters (EPA 1995).

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

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





New Mexico

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

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

Total (see note)	2,278	Pounds
Reproductive Toxins	13	Pounds
Persistent Toxic Metals	2,278	Pounds
Carcinogens	19	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. New Mexico 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 Mexico (1990-1994).

River or Water Body	Carcinogens** released to waters (lbs.)

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

River or Water Body	Persistent toxic metals released to waters (lbs.)
Rio Grande	2,250

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

River or Water Body	Reproductive toxins** released to waters (lbs.)

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

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

Facility	City	Carcinogens** released to waters (lbs.)

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

Facility	City	Persistent toxic metals released to waters (lbs.)
Academy Corp.	Albuquerque	2,250

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

Facility	City	Reproductive toxins** released to waters (lbs.)

^{*} 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.

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

^{**} 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.





The Rio Grande in New Mexico

Total toxic pollution reported (1990-1994): 8,275 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Rio Grande in New Mexico (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
U.S. DOE	Los Alamos	6,020
Academy Corp.	Albuquerque	2,250

Table 2. Toxic chemicals discharged in the greatest amounts to the Rio Grande in New Mexico (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Chlorine	6,020
Copper	1,750
Silver	500

[‡] 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.

Table 3. Total carcinogens**, persistent toxic metals, and
reproductive toxins** discharged to the Rio Grande in
New Mexico (1990-1994).

Total‡	2.250	Pounds
Reproductive Toxins	0	Pounds
Persistent Toxic Metals	2,250	Pounds
Carcinogens	0	Pounds

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

Top dischargers of carcinogens** to the Rio Grande in New Mexico (1990-1994).

Facility	City	Carcinogens** released to water (lbs)

Top dischargers of persistent toxic metals to the Rio Grande in New Mexico (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Academy Corp.	Albuquerque	2,250

Top dischargers of reproductive toxins** to the Rio Grande in New Mexico (1990-1994).

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

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

^{*} 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.