

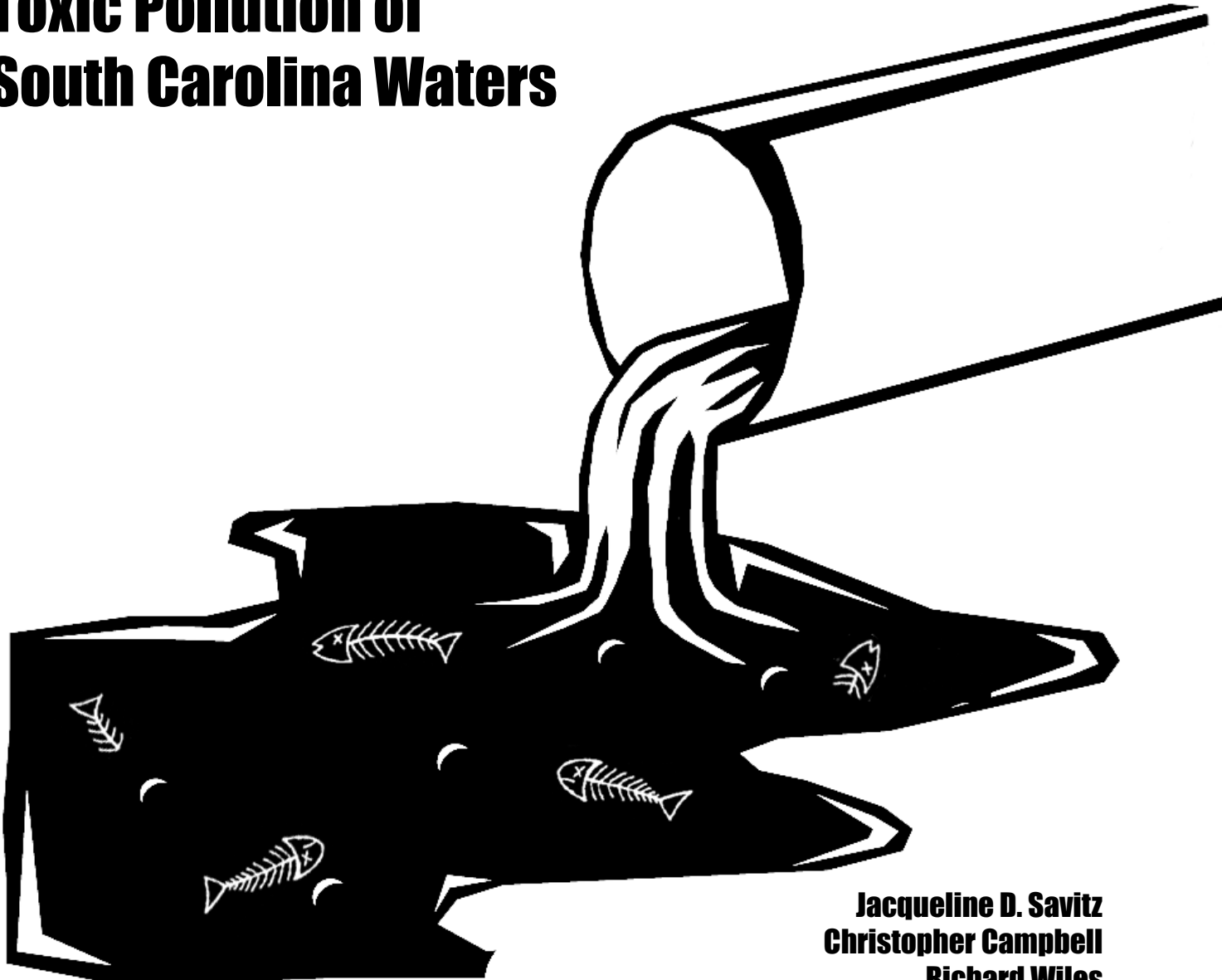


The State PIRGs



Dishonorable Discharge

Toxic Pollution of South Carolina Waters



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Toxic Pollution of South Carolina Waters

Executive Summary

Most South Carolina 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 South Carolina streams and rivers.

The citizens of South Carolina 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 South Carolina and nationwide.

Factories and other industrial facilities dumped more than 5.2 million pounds of toxic substances directly into South Carolina's waters between 1990 and 1994, according to a new analysis of the federal Toxics Release Inventory (TRI) (Table 1). South Carolina ranked 23rd 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 seventeen (17.2) million pounds of toxic materials were flushed to sewage treatment plants in South Carolina from 1990 through 1994, 22nd 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 South Carolina raises the total amount of toxics dumped to the state's waters to an estimated 9.5 million pounds (Table 1).

The Cooper River received the greatest amount of toxic water pollution in South Carolina from 1990-1994, a total of 1,010,000 pounds, followed by the Catawba River, the Congaree River, and the Wateree River (Table 2). The ten most polluted waterways in South Carolina received 4,430,000 pounds of toxic pollution between 1990 and 1994, 85.1% percent of the total in the State.

The top three facilities reporting the most toxic pollution of South Carolina's waters over this period were Bowater Inc. in Catawba, which dumped 578,000 pounds of toxic

chemicals, followed by Bayer Corporation - Bushy Park, and Albemarle Corporation in the towns of Goose Creek, and Orangeburg, respectively (Table 3). The toxic chemicals dumped in the greatest amounts were ammonia, a total of 2,060,000 pounds, followed by methanol, and 1,4-dioxane (Table 4).

Wellman Inc. dumped the most carcinogens into South Carolina's waters, a total of 128,000 pounds, followed by Hoechst Celanese Corporation and Du Pont (Table 8). Black Creek received the greatest amount of cancer-causing toxic chemicals in South Carolina, a total of 129,000 pounds, followed by the Pacolet River and the Great Pee Dee River (Table 7).

Amoco Chemical Company dumped the greatest amount of persistent toxic metals in South Carolina's waters, a total of 256,000 pounds, followed by Union Camp Corporation and Galey & Lord Society Hill (Table 8). The Cooper River received the greatest amount of persistent toxic metals, a total of 259,000 pounds, followed by the Wateree River and the Pee Dee River (Table 7).

Carolina Eastman Div. dumped the greatest amount of toxic chemicals that cause reproductive damage or birth defects into South Carolina's waters, a total of 116,000 pounds, followed by Albemarle Corporation and Galey & Lord Society Hill (Table 8). The Congaree River received the greatest amount of toxic chemicals that cause reproductive damage or birth defects, a total of 116,000 pounds, followed by the Edisto River and the Pee Dee River (Table 7).

These discharges to South Carolina's waters include only those wastes released by companies physically located in South Carolina. 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 South Carolina, over 1,000 miles of rivers and streams and over 1000 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 South Carolina’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 South Carolina. 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	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).

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South Carolina

Toxic pollution of South Carolina waters (1990-1994)

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

Direct Water Discharges	5,210,139 Pounds
Estimated Sewer Discharges‡	4,299,700 Pounds
Total Discharges to Waters	9,509,839 Pounds

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

River or Water Body	Toxic chemical release to waterbody (pounds)
Cooper River	1,008,168
Catawba River	625,429
Congaree River	577,247
Wateree River	486,934
Edisto River	483,842
Sampit River	478,619
Great Pee Dee River	333,736
Black Creek	185,868
Pacolet River	126,452
Coneross Creek	126,085

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

Facility	City	Toxic chemical release to waters (pounds)
Bowater Inc.	Catawba	578,300
Bayer Corp. Bushy Park	Goose Creek	522,091
Albemarle Corp.	Orangeburg	477,265
Du Pont	Camden	441,979
International Paper	Georgetown	410,819
Amoco Chemical Co.	Wando	313,300
Carolina Eastman Div.	Eastman Columbia	301,127
Teepak Inc.	Swansea	242,250
Wellman Inc.	Darlington	182,090
Du Pont	Florence	161,430

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

Chemical	Toxic chemical release to waters (pounds)
Ammonia	2,060,548
Methanol	541,340
1,4-Dioxane	409,131
Ethylene glycol	289,729
Ammonium sulfate (solution)	257,489
Chlorine	247,465
Manganese compounds	216,243
Acetone	177,282
Glycol ethers	141,895
2-Methoxyethanol	115,800

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

Facility	City	Toxic chemical release to sewers (pounds)
Albright & Wilson	Charleston	6,890,534
Fermpro Mfg. L.P.	Kingstree	1,280,750
Hodgson Chemicals Inc.	Rock Hill	1,190,518
U.S. Finishing	Greenville	917,400
Wellman Inc.	Johnsonville	855,334
AMP-Akzo Co.	Greenville	582,685
Santee Print Works	Sumter	423,289
3M	Greenville	398,650
Graniteville Co.	Graniteville	356,755
Boots Pharmaceuticals Inc.	Kingstree	351,326

‡ Total discharges of toxic chemicals to sewer systems in South Carolina was 17,198,802 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.

South Carolina

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

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

Carcinogens	639,181 Pounds
Persistent Toxic Metals	388,436 Pounds
Reproductive Toxins	287,248 Pounds
Total (see note)	1,290,979 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. South Carolina waters receiving the greatest amounts of carcinogens, persistent toxic metals, and reproductive toxins** (1990-1994).**

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

River or Water Body	Carcinogens** released to waters (lbs.)
Black Creek	128,847
Pacolet River	99,655
Great Pee Dee River	94,816
Congaree River	79,392
White Plains Branch	64,699

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

River or Water Body	Persistent toxic metals released to waters (lbs.)
Cooper River	259,424
Wateree River	34,011
Pee Dee River	30,900
Great Pee Dee River	8,162
Blue Hill Creek	6,625

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

River or Water Body	Reproductive toxins** released to waters (lbs.)
Congaree River	116,298
Edisto River	109,700
Pee Dee River	34,900
Betsy Creek	5,192
Saluda River	3,540

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

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

Facility	City	Carcinogens** released to waters (lbs.)
Wellman Inc.	Darlington	128,470
Hoechst Celanese Corp.	Spartanburg	99,655
Du Pont	Florence	81,466
Carolina Eastman Div.	Eastman Columbia	78,892
Hoechst Celanese Corp.	Greer	64,699

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

Facility	City	Persistent toxic metals released to waters (lbs.)
Amoco Chemical Co.	Wando	255,800
Union Camp Corp.	Eastover	32,000
Galey & Lord Society Hill	Society Hill	30,900
Willamette Ind. Inc.	Bennettsville	8,145
Milliken & Co.	Abbeville	6,625

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

Facility	City	Reproductive toxins** released to waters (lbs.)
Carolina Eastman Div.	Eastman Columbia	116,043
Albemarle Corp.	Orangeburg	109,700
Galey & Lord Society Hill	Society Hill	34,900
Owens-Corning	Anderson	5,192
Milliken & Co.	Marietta	3,540

* 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 Environmental Working Group is a non-profit environmental research organization based in Washington, D.C.
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The Cooper River in South Carolina

Total toxic pollution reported (1990-1994): 1,008,168 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Bayer Corp. Bushy Park	Goose Creek	522,091
Amoco Chemical Co.	Wando	297,300
Westvaco Corp.	North Charleston	141,315
Du Pont	Charleston	46,334
RM Engineered Prods. Inc.*	North Charleston	1,108

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

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	466,352
Manganese compounds	213,200
Methanol	101,424
Cobalt compounds	42,600
Chlorine	40,464
Catechol	37,301
Ethylene glycol	26,099
1,4-Dioxane	21,525
Acetone	14,700
Methyl ethyl ketone	14,220

‡ 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 Cooper River in South Carolina (1990-1994).**

Carcinogens	29,496 Pounds
Persistent Toxic Metals	259,424 Pounds
Reproductive Toxins	1,182 Pounds
Total‡	290,102 Pounds

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

Top dischargers of carcinogens to the Cooper River in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Du Pont	Charleston	22,100
Bayer Corp. Bushy Park	Goose Creek	4,291
Westvaco Corp.	North Charleston	3,069

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

Facility	City	Persistent toxic metals released to water (lbs)
Amoco Chemical Co.	Wando	255,800
Bayer Corp. Bushy Park	Goose Creek	3,354
Du Pont	Charleston	250

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

Facility	City	Reproductive toxins** released to water (lbs)
Westvaco Corp.	North Charleston	630
Bayer Corp. Bushy Park	Goose Creek	500

The Catawba River in South Carolina

Total toxic pollution reported (1990-1994): 625,429 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Bowater Inc.	Catawba	578,300
Hoechst-Celanese Corp.	Rock Hill	45,944
R-M Ind.	Fort Mill	1,151

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

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	417,245
Methanol	93,610
Acetone	37,760
Formaldehyde	14,363
Phenol	13,517
Chloroform	10,862
Methyl ethyl ketone	9,538
Naphthalene	8,910
Acetonitrile	7,601
Catechol	5,966

‡ 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 Catawba River in South Carolina (1990-1994).**

Carcinogens	28,876 Pounds
Persistent Toxic Metals	34 Pounds
Reproductive Toxins	2,827 Pounds
Total‡	30,700 Pounds

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

Top dischargers of carcinogens to the Catawba River in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Hoechst-Celanese Corp.	Rock Hill	15,456
Bowater Inc.	Catawba	13,162
R-M Ind.	Fort Mill	258

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

Facility	City	Persistent toxic metals released to water (lbs)

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

Facility	City	Reproductive toxins** released to water (lbs)
Bowater Inc.	Catawba	1,730
Hoechst-Celanese Corp.	Rock Hill	1,037

The Congaree River in South Carolina

Total toxic pollution reported (1990-1994): 577,247 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Carolina Eastman Div.	Eastman Columbia	301,127
Teepak Inc.	Swansea	242,250
Westinghouse Electric Corp.	Columbia	29,905
Lindau Chemicals Inc.*	Columbia	3,965

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

Chemical	Toxic chemical release to waterbody (pounds)
Ammonium sulfate (solution)	242,000
2-Methoxyethanol	115,800
Ammonia	92,700
1,4-Dioxane	71,270
Ethylene glycol	39,700
Acetaldehyde	7,622
Methanol	3,644
Cobalt compounds	1,176
Acetone	1,100
Biphenyl	772

‡ 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 Congaree River in South Carolina (1990-1994).**

Carcinogens	79,392 Pounds
Persistent Toxic Metals	1,373 Pounds
Reproductive Toxins	116,298 Pounds
Total‡	196,813 Pounds

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

Top dischargers of carcinogens to the Congaree River in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Carolina Eastman Div.	Eastman Columbia	78,892
Lindau Chemicals Inc.*	Columbia	500

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

Facility	City	Persistent toxic metals released to water (lbs)
Carolina Eastman Div.	Eastman Columbia	1,373

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

Facility	City	Reproductive toxins** released to water (lbs)
Carolina Eastman Div.	Eastman Columbia	116,043
Lindau Chemicals Inc.*	Columbia	255

The Wateree River in South Carolina

Total toxic pollution reported (1990-1994): 486,934 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Du Pont	Camden	441,979
Union Camp Corp.	Eastover	36,300
Nipa Hardwicke Inc.	Elgin	7,155
Oak Mitsui Partnership	Camden	1,500

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

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	440,308
Zinc compounds	32,500
Methanol	4,434
Dichloromethane	3,055
Ethylene glycol	1,500
Copper compounds	1,000
Acetaldehyde	1,000
Phenol	997
Copper	511
1,2-Dichloroethane	366

‡ 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 Wateree River in South Carolina (1990-1994).**

Carcinogens	5,012 Pounds
Persistent Toxic Metals	34,011 Pounds
Reproductive Toxins	78 Pounds
Total‡	39,100 Pounds

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

Top dischargers of carcinogens to the Wateree River in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Nipa Hardwicke Inc.	Elgin	3,444
Union Camp Corp.	Eastover	1,270
Du Pont	Camden	298

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

Facility	City	Persistent toxic metals released to water (lbs)
Union Camp Corp.	Eastover	32,000
Oak Mitsui Partnership	Camden	1,500
Nipa Hardwicke Inc.	Elgin	511

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

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

The Edisto River in South Carolina

Total toxic pollution reported (1990-1994): 483,842 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Albemarle Corp.	Orangeburg	477,265
Fashion Fabrics Of America*	Orangeburg	6,005
Cox Wood Preserving Co.	Orangeburg	312
Okonite Co.	Orangeburg	260

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

Chemical	Toxic chemical release to waterbody (pounds)
Methanol	262,200
Glycol ethers	103,950
Formaldehyde	43,100
Ammonia	37,800
Phenol	13,450
Sulfuric acid	6,005
Toluene	4,500
Dichloromethane	3,110
Aniline	2,750
Manganese compounds	1,900

‡ 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 Edisto River in South Carolina (1990-1994).**

Carcinogens	49,801 Pounds
Persistent Toxic Metals	2,472 Pounds
Reproductive Toxins	109,700 Pounds
Total‡	161,637 Pounds

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

Top dischargers of carcinogens to the Edisto River in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Albemarle Corp.	Orangeburg	49,465
Okonite Co.	Orangeburg	250

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

Facility	City	Persistent toxic metals released to water (lbs)
Albemarle Corp.	Orangeburg	1,900
Cox Wood Preserving Co.	Orangeburg	312
Okonite Co.	Orangeburg	260

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

Facility	City	Reproductive toxins** released to water (lbs)
Albemarle Corp.	Orangeburg	109,700

The Sampit River in South Carolina

Total toxic pollution reported (1990-1994): 478,619 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
International Paper	Georgetown	410,569
3V Inc.	Georgetown	68,050

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

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	366,856
Ethylene glycol	46,000
Catechol	17,900
Chloroform	16,000
Acetone	15,060
Diethanolamine	10,582
Methyl ethyl ketone	2,200
Acetaldehyde	2,060
Phenol	1,350
Aniline	302

‡ 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 Sampit River in South Carolina (1990-1994).**

Carcinogens	18,402 Pounds
Persistent Toxic Metals	0 Pounds
Reproductive Toxins	269 Pounds
Total‡	18,671 Pounds

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

Top dischargers of carcinogens to the Sampit River in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
International Paper	Georgetown	18,100
3V Inc.	Georgetown	302

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

Facility	City	Persistent toxic metals released to water (lbs)

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

Facility	City	Reproductive toxins** released to water (lbs)
3V Inc.	Georgetown	250

The Great Pee Dee River in South Carolina

Total toxic pollution reported (1990-1994): 333,736 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Great Pee Dee River in South Carolina (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
Du Pont	Florence	161,430
Willamette Ind. Inc.	Bennettsville	106,682
Stone Container Corp. Inc.	Florence	38,975
Delta Mills Marketing	Wallace	18,894
Delta Mills Marketing Co.	Wallace	7,181
Stanley Works	Cheraw	574

Table 2. Toxic chemicals discharged in the greatest amounts to the Great Pee Dee River in South Carolina (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	78,076
1,4-Dioxane	66,221
Methanol	65,065
Ethylene glycol	38,071
Acetone	35,353
Acetaldehyde	16,422
Chloroform	8,839
Catechol	8,254
Zinc compounds	8,145
Tetrachloroethylene	2,790

‡ 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 Great Pee Dee River in South Carolina (1990-1994).**

Carcinogens	94,816 Pounds
Persistent Toxic Metals	8,162 Pounds
Reproductive Toxins	750 Pounds
Total‡	103,711 Pounds

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

Top dischargers of carcinogens to the Great Pee Dee River in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Du Pont	Florence	81,466
Willamette Ind. Inc.	Bennettsville	9,590
Delta Mills Marketing	Wallace	2,790
Stone Container Corp. Inc.	Florence	953

Top dischargers of persistent toxic metals to the Great Pee Dee River in South Carolina (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Willamette Ind. Inc.	Bennettsville	8,145

Top dischargers of reproductive toxins to the Great Pee Dee River in South Carolina (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Delta Mills Marketing	Wallace	750

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

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Black Creek in South Carolina

Total toxic pollution reported (1990-1994): 185,868 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to Black Creek in South Carolina (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
Wellman Inc.	Darlington	182,090
Sonoco Prods. Co.	Hartsville	2,028
IMC Global Operations Inc.	Hartsville	1,750

Table 2. Toxic chemicals discharged in the greatest amounts to Black Creek in South Carolina (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
1,4-Dioxane	88,192
Ethylene glycol	51,370
Acetaldehyde	40,278
Ammonium nitrate (solution)	1,750
Antimony compounds	1,500
Phenol	1,315
Antimony	750
Formaldehyde	377
Sulfuric acid	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 Black Creek in South Carolina (1990-1994).**

Carcinogens	128,847 Pounds
Persistent Toxic Metals	2,250 Pounds
Reproductive Toxins	0 Pounds
Total‡	131,097 Pounds

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

Top dischargers of carcinogens to Black Creek in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Wellman Inc.	Darlington	128,470
Sonoco Prods. Co.	Hartsville	377

Top dischargers of persistent toxic metals to Black Creek in South Carolina (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)
Wellman Inc.	Darlington	2,250

Top dischargers of reproductive toxins to Black Creek in South Carolina (1990-1994).**

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

The Pacolet River in South Carolina

Total toxic pollution reported (1990-1994): 126,452 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Hoechst Celanese Corp.	Spartanburg	126,452

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

Chemical	Toxic chemical release to waterbody (pounds)
1,4-Dioxane	97,300
Ethylene glycol	23,382
Acetaldehyde	2,355
Antimony compounds	1,250
Ammonia	1,070
Methanol	736
Manganese compounds	339

‡ 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 Pacolet River in South Carolina (1990-1994).**

Carcinogens	99,655 Pounds
Persistent Toxic Metals	1,589 Pounds
Reproductive Toxins	0 Pounds
Total‡	101,244 Pounds

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

Top dischargers of carcinogens to the Pacolet River in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Hoechst Celanese Corp.	Spartanburg	99,655

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

Facility	City	Persistent toxic metals released to water (lbs)
Hoechst Celanese Corp.	Spartanburg	1,589

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

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

Coneross Creek in South Carolina

Total toxic pollution reported (1990-1994): 126,085 Pounds

Table 1. Polluters discharging the greatest amounts of toxic chemicals to Coneross Creek in South Carolina (1990-1994).

Facility	City	Toxic chemical release to water (pounds)
Coneross Creek Wastewater	Seneca	126,085

Table 2. Toxic chemicals discharged in the greatest amounts to Coneross Creek in South Carolina (1990-1994).

Chemical	Toxic chemical release to waterbody (pounds)
Chlorine	126,085

‡ 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 Coneross Creek in South Carolina (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 Coneross Creek in South Carolina (1990-1994).**

Top dischargers of carcinogens to Coneross Creek in South Carolina (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

Top dischargers of persistent toxic metals to Coneross Creek in South Carolina (1990-1994).

Facility	City	Persistent toxic metals released to water (lbs)

Top dischargers of reproductive toxins to Coneross Creek in South Carolina (1990-1994).**

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