

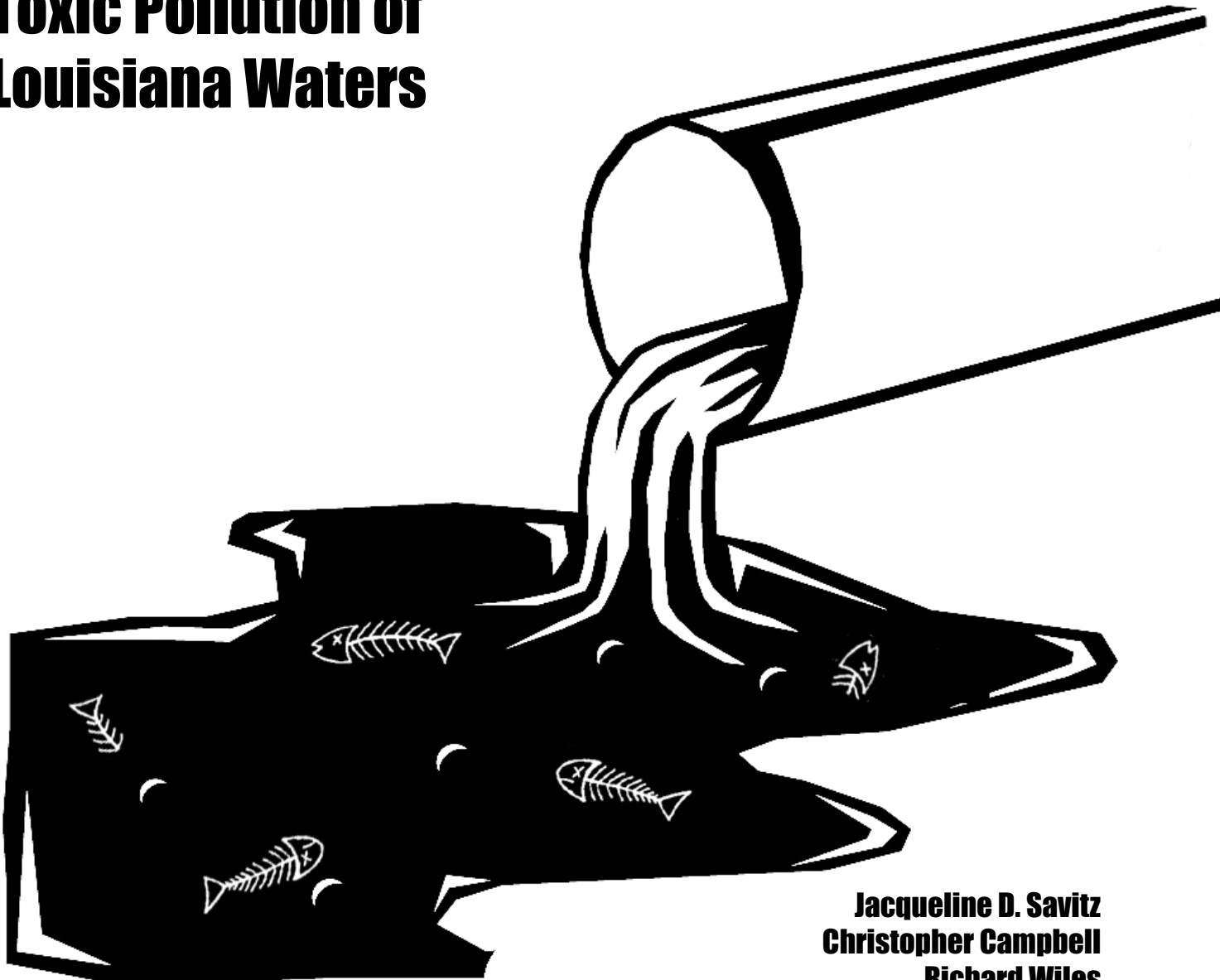


The State PIRGs



# Dishonorable Discharge

## Toxic Pollution of Louisiana Waters



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

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# Toxic Pollution of Louisiana Waters

### Executive Summary

Most Louisiana 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 Louisiana streams and rivers.

The citizens of Louisiana 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 Louisiana and nationwide.

Factories and other industrial facilities dumped more than 680.6 million pounds of toxic substances directly into Louisiana's waters between 1990 and 1994, according to a new analysis of the federal Toxics Release Inventory (TRI) (Table 1). Louisiana ranked first 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 714,000 pounds of toxic materials were flushed to sewage treatment plants in Louisiana from 1990 through 1994, 44th 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 Louisiana raises the total amount of toxics dumped to the state's waters to an estimated 680.7 million pounds (Table 1).

The Mississippi River received the greatest amount of toxic water pollution in Louisiana from 1990-1994, a total of 672,200,000 pounds, followed by the Calcasieu River, the Ouachita River, and Staulkinghead Creek (Table 2). The ten most polluted waterways in Louisiana received 680,000,000 pounds of toxic pollution between 1990 and 1994, 99.9% percent of the total in the State.

The top three facilities reporting the most toxic pollution of Louisiana's waters over this period were IMC-Agrico Company in Saint James, which dumped 336,000,000

pounds of toxic chemicals, followed by IMC-Agrico Company, in Uncle Sam, and Arcadian Fertilizer L.P. in Geismar (Table 3). The toxic chemicals dumped in the greatest amounts were phosphoric acid, a total of 530,800,000 pounds, followed by sulfuric acid, and ammonia (Table 4).

Union Carbide Corporation dumped the most carcinogens into Louisiana's waters, a total of 254,000 pounds, followed by PPG Ind. Inc. and Dow Chemical Company (Table 8). The Mississippi River received the highest amount of cancer-causing toxic chemicals in Louisiana, a total of 540,000 pounds, followed by the Calcasieu River and the Sterlington Ditch (Table 7).

Riverwood International, Inc. dumped the greatest amount of persistent toxic metals in Louisiana's waters, a total of 375,000 pounds, followed by International Paper and Vista Chemical Company (Table 8). The Ouachita River received the greatest amount of persistent toxic metals, a total of 382,000 pounds, followed by the Mississippi River and Staulkinghead Creek (Table 7).

Firestone Synthetic Rubber dumped the greatest amount of toxic chemicals that cause reproductive damage or birth defects into Louisiana's waters, a total of 45,000 pounds, followed by Star Enterprise and Ferro Corporation (Table 8). The Mississippi River received the greatest amount of toxic chemicals that cause reproductive damage or birth defects, a total of 85,000 pounds, followed by the Calcasieu River and the Ouachita River (Table 7).

These discharges to Louisiana's waters include only those wastes released by companies physically located in Louisiana. 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 Louisiana, over 49,000 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 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 Louisiana’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 Louisiana. Estimates of toxic discharges from POTWs to specific rivers and bodies of water could not be accurately estimated because the sewage treatment plants are not required to report to the TRI.

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

## How Toxic is Toxic?

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

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

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

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

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

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

## Toxic pollution of Louisiana waters (1990-1994)

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

Direct Water Discharges	680,653,256 Pounds
Estimated Sewer Discharges‡	178,552 Pounds
<b>Total Discharges to Waters</b>	<b>680,831,808 Pounds</b>

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

River or Water Body	Toxic chemical release to waterbody (pounds)
Mississippi River	672,221,661
Calcasieu River	5,427,508
Ouachita River	884,309
Staulkinghead Creek	531,269
Red River	225,953
Sterlington Ditch	191,235
Anacoco Bayou	154,135
Intercoastal Waterway	127,096
Redwind Creek	124,000
Bayou Trepanier	115,339

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

Facility	City	Toxic chemical release to waters (pounds)
IMC-Agrico Co.	Saint James	335,952,405
IMC-Agrico Co.	Uncle Sam	205,451,043
Arcadian Fertilizer L.P.	Geismar	103,872,585
Laroche Chemicals Inc.*	Baton Rouge	4,600,200
Le Chem Inc.*	Baton Rouge	3,897,392
CF Ind. Inc.	Donaldsonville	3,852,015
Melamine Chemicals Inc.	Donaldsonville	2,542,686
Dow Chemical Co.	Plaquemine	2,145,939
PPG Ind. Inc.	Lake Charles	1,953,140
IMC-Agrico Co.	Hahnville	1,950,755

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

Chemical	Toxic chemical release to waters (pounds)
Phosphoric acid	530,788,579
Sulfuric acid	110,035,273
Ammonia	18,615,429
Ammonium sulfate (solution)	7,103,524
Methanol	5,353,116
Ammonium nitrate (solution)	5,296,834
Zinc compounds	619,428
Ethylene glycol	396,416
Acetone	313,399
1,4-Dioxane	271,938

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

Facility	City	Toxic chemical release to sewers (pounds)
Martin Mills Inc.	Saint Martinville	417,391
Witco Corp.	Harahan	55,957
Pacific Dunlop Holdings	Haynesville	55,500
AT&T	Shreveport	38,254
Continental Grain	Bossier City	34,780
Borden Inc. Dairy Div.	Baton Rouge	29,624
Colfax Creosoting Co.	Pineville	12,821
Borden Inc.	Lafayette	12,455
Borden Inc.	Monroe	11,558
Complex Chemicals Co. Inc.	Tallulah	6,040

‡ Total discharges of toxic chemicals to sewer systems in Louisiana was 714,211 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.

# Louisiana

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

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

Carcinogens	870,381 Pounds
Persistent Toxic Metals	789,293 Pounds
Reproductive Toxins	195,268 Pounds
<b>Total (see note)</b>	<b>1,679,024 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. Louisiana waters receiving the greatest amounts of carcinogens\*\*, persistent toxic metals, and reproductive toxins\*\* (1990-1994).**

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

River or Water Body	Carcinogens** released to waters (lbs.)
Mississippi River	539,524
Calcasieu River	186,063
Sterlington Ditch	34,730
Ouachita River	29,307
Anacoco Bayou	26,018

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

River or Water Body	Persistent toxic metals released to waters (lbs.)
Ouachita River	382,309
Mississippi River	161,390
Staulkinghead Creek	118,061
Calcasieu River	101,370
Sterlington Ditch	11,100

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

River or Water Body	Reproductive toxins** released to waters (lbs.)
Mississippi River	85,055
Calcasieu River	57,372
Ouachita River	19,338
Sterlington Ditch	11,100
Borrow Pit	5,714

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

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

Facility	City	Carcinogens** released to waters (lbs.)
Union Carbide Corp.	Taft	254,045
PPG Ind. Inc.	Lake Charles	109,740
Dow Chemical Co.	Plaquemine	100,635
Angus Chemical Co.	Sterlington	59,940
Firestone Synthetic Rubber	Sulphur	45,422

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

Facility	City	Persistent toxic metals released to waters (lbs.)
Riverwood Intl. Inc.	West Monroe	375,248
International Paper	Bastrop	118,061
Vista Chemical Co.	Westlake	42,282
Arcadian Fertilizer L.P.	Geismar	28,000
Exxon Co. USA - Refinery	Baton Rouge	22,100

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

Facility	City	Reproductive toxins** released to waters (lbs.)
Firestone Synthetic Rubber	Sulphur	45,422
Star Enterprise	Union	23,061
Ferro Corp.	Zachary	22,520
Angus Chemical Co.	Sterlington	17,750
Riverwood Intl. USA Inc.*	West Monroe	12,688

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

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

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

# The Mississippi River in Louisiana

Total toxic pollution reported (1990-1994): 672,221,661 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
IMC-Agrico Co.	Saint James	335,947,505
IMC-Agrico Co.	Uncle Sam	205,451,043
Arcadian Fertilizer L.P.	Geismar	103,844,175
Laroche Chemicals Inc.*	Baton Rouge	4,600,200
Le Chem Inc.*	Baton Rouge	3,897,392
CF Ind. Inc.	Donaldsonville	3,851,995
Melamine Chemicals Inc.	Donaldsonville	2,542,686
Dow Chemical Co.	Plaquemine	2,145,934
IMC-Agrico Co.	Hahnville	1,950,755
Triad Chemical	Donaldsonville	

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

Chemical	Toxic chemical release to waterbody (pounds)
Phosphoric acid	530,782,792
Sulfuric acid	109,907,795
Ammonia	13,303,720
Ammonium sulfate (solution)	6,258,524
Ammonium nitrate (solution)	5,267,137
Methanol	4,906,268
Ethylene glycol	350,049
1,4-Dioxane	271,938
Propylene	170,120
Acetone	95,834

‡ 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 the Mississippi River in Louisiana (1990-1994).**

Carcinogens	539,524 Pounds
Persistent Toxic Metals	161,390 Pounds
Reproductive Toxins	85,055 Pounds
<b>Total‡</b>	<b>734,535 Pounds</b>

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

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

Facility	City	Carcinogens** released to water (lbs)
Union Carbide Corp.	Taft	254,045
Dow Chemical Co.	Plaquemine	100,630
Monsanto Co.	Luling	39,830
BASF Corp.	Geismar	30,569
Ferro Corp.	Zachary	25,044

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

Facility	City	Persistent toxic metals released to water (lbs)
Arcadian Fertilizer L.P.	Geismar	28,000
Exxon Co. USA - Refinery	Baton Rouge	22,100
Laroche Ind. Inc.	Gramercy	16,000
Allied-Signal Inc.	Baton Rouge	13,976
BP Oil Co.	Belle Chasse	13,411

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

Facility	City	Reproductive toxins** released to water (lbs)
Star Enterprise	Union	23,061
Ferro Corp.	Zachary	22,520
Geon Co.*	Plaquemine	10,750
Exxon Chemical Plant	Baton Rouge	5,947
Dow Chemical Co.	Plaquemine	5,143

# The Calcasieu River in Louisiana

Total toxic pollution reported (1990-1994): 5,427,508 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
PPG Ind. Inc.	Lake Charles	1,953,140
Olin Corp.	Westlake	838,147
Arcadian Fertilizer L.P.*	Lake Charles	831,100
W. R. Grace & Co.	Sulphur	681,000
Conoco Lake Charles Refy.	Westlake	497,531
Citgo Petroleum Corp.	Lake Charles	496,821
Vista Chemical Co.	Westlake	61,432
Firestone Synthetic Rubber	Sulphur	45,422
M-I Drilling Fluids Co.*	Westlake	12,950
Louisiana Pigment Co. L.P.	Westlake	

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

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	4,001,577
Ammonium sulfate (solution)	800,000
Chlorine	190,139
Methanol	74,419
Chloroform	53,087
Zinc compounds	52,216
Styrene	45,551
1,2-Dichloroethane	23,594
Diethanolamine	23,000
Methyl ethyl ketone	22,900

‡ 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 Calcasieu River in Louisiana (1990-1994).**

Carcinogens	186,063 Pounds
Persistent Toxic Metals	101,370 Pounds
Reproductive Toxins	57,372 Pounds
<b>Total‡</b>	<b>272,648 Pounds</b>

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

**Top dischargers of carcinogens\*\* to the Calcasieu River in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
PPG Ind. Inc.	Lake Charles	109,740
Firestone Synthetic Rubber	Sulphur	45,422
Olin Corp.	Westlake	21,543
Vista Chemical Co.	Westlake	7,203
Arizona Chemical*	Oakdale	751

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

Facility	City	Persistent toxic metals released to water (lbs)
Vista Chemical Co.	Westlake	42,282
Olin Corp.	Westlake	15,957
PPG Ind. Inc.	Lake Charles	13,210
M-I Drilling Fluids Co.*	Westlake	12,950
Arcadian Fertilizer L.P.*	Lake Charles	8,100

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

Facility	City	Reproductive toxins** released to water (lbs)
Firestone Synthetic Rubber	Sulphur	45,422
PPG Ind. Inc.	Lake Charles	9,354
Calcasieu Refining Co.	Lake Charles	1,278
Conoco Lake Charles Refy.	Westlake	614
Louisiana Pigment Co. L.P.	Westlake	250

# The Ouachita River in Louisiana

Total toxic pollution reported (1990-1994): 884,309 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Riverwood Intl. Inc.	West Monroe	427,082
Koch Nitrogen Co.	Sterlington	315,862
Angus Chemical Co.	Sterlington	128,606
Riverwood Intl. USA Inc.*	West Monroe	12,759

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

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	392,841
Zinc compounds	374,241
Acetone	33,508
Methanol	22,000
Acetaldehyde	13,510
Toluene	12,679
Methyl ethyl ketone	8,820
Nickel	6,650
Catechol	6,057
2-Nitropropane	5,400

‡ 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 Ouachita River in Louisiana (1990-1994).**

Carcinogens	29,307 Pounds
Persistent Toxic Metals	382,309 Pounds
Reproductive Toxins	19,338 Pounds
<b>Total‡</b>	<b>417,609 Pounds</b>

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

**Top dischargers of carcinogens\*\* to the Ouachita River in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Angus Chemical Co.	Sterlington	25,210
Riverwood Intl. Inc.	West Monroe	4,052

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

Facility	City	Persistent toxic metals released to water (lbs)
Riverwood Intl. Inc.	West Monroe	375,248
Angus Chemical Co.	Sterlington	6,650
Koch Nitrogen Co.	Sterlington	411

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

Facility	City	Reproductive toxins** released to water (lbs)
Riverwood Intl. USA Inc.*	West Monroe	12,688
Angus Chemical Co.	Sterlington	6,650

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



# Staulkinghead Creek in Louisiana

Total toxic pollution reported (1990-1994): 531,269 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
International Paper	Bastrop	531,269

**Table 2. Toxic chemicals discharged in the greatest amounts to Staulkinghead Creek in Louisiana (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	216,000
Methanol	146,620
Zinc compounds	118,000
Acetone	30,200
Chloroform	10,100
Methyl ethyl ketone	4,700
Catechol	4,217
Acetaldehyde	900
Dichloromethane	160
Phenol	150

‡ 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 Staulkinghead Creek in Louisiana (1990-1994).**

Carcinogens	11,160 Pounds
Persistent Toxic Metals	118,061 Pounds
Reproductive Toxins	0 Pounds
<b>Total‡</b>	<b>129,221 Pounds</b>

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

**Top dischargers of carcinogens\*\* to Staulkinghead Creek in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
International Paper	Bastrop	11,160

**Top dischargers of persistent toxic metals to Staulkinghead Creek in Louisiana (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
International Paper	Bastrop	118,061

**Top dischargers of reproductive toxins\*\* to Staulkinghead Creek in Louisiana (1990-1994).**

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

# The Red River in Louisiana

Total toxic pollution reported (1990-1994): 225,953 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Willamette Ind. Inc.	Campti	112,136
International Paper	Pineville	108,520
International Paper*	Mansfield	5,093
Olin Corp.*	Shreveport	204

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

Chemical	Toxic chemical release to waterbody (pounds)
Methanol	96,989
Ammonia	80,430
Acetone	30,350
Catechol	13,170
Methyl ethyl ketone	3,896
Acetaldehyde	529
Zinc compounds	250
Sulfuric acid	204
Phenol	130

‡ 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 Red River in Louisiana (1990-1994).**

Carcinogens	529 Pounds
Persistent Toxic Metals	250 Pounds
Reproductive Toxins	0 Pounds
<b>Total‡</b>	<b>779 Pounds</b>

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

**Top dischargers of carcinogens\*\* to the Red River in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
International Paper	Pineville	280
Willamette Ind. Inc.	Campti	249

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

Facility	City	Persistent toxic metals released to water (lbs)
Willamette Ind. Inc.	Campti	250

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

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

# The Sterlington Ditch in Louisiana

Total toxic pollution reported (1990-1994): 191,235 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Sterlington Ditch in Louisiana (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Angus Chemical Co.	Sterlington	170,770
Koch Nitrogen Co.	Sterlington	20,465

**Table 2. Toxic chemicals discharged in the greatest amounts to the Sterlington Ditch in Louisiana (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	129,465
Acetaldehyde	17,900
Methanol	16,000
Nickel	11,100
Acetonitrile	6,300
Acetone	4,380
Formaldehyde	4,250
2-Nitropropane	1,480
n-Butyl alcohol	340

‡ 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 Sterlington Ditch in Louisiana (1990-1994).**

Carcinogens	34,730 Pounds
Persistent Toxic Metals	11,100 Pounds
Reproductive Toxins	11,100 Pounds
<b>Total‡</b>	<b>34,730 Pounds</b>

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

**Top dischargers of carcinogens\*\* to the Sterlington Ditch in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Angus Chemical Co.	Sterlington	34,730

**Top dischargers of persistent toxic metals to the Sterlington Ditch in Louisiana (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
Angus Chemical Co.	Sterlington	11,100

**Top dischargers of reproductive toxins\*\* to the Sterlington Ditch in Louisiana (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Angus Chemical Co.	Sterlington	11,100

# Anacoco Bayou in Louisiana

Total toxic pollution reported (1990-1994): 154,135 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to Anacoco Bayou in Louisiana (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Boise Cascade Corp.	De Ridder	154,135

**Table 2. Toxic chemicals discharged in the greatest amounts to Anacoco Bayou in Louisiana (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	48,495
Acetone	36,863
Methanol	34,644
Chloroform	25,987
Methyl ethyl ketone	5,602
Catechol	2,335

‡ 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 Anacoco Bayou in Louisiana (1990-1994).**

Carcinogens	26,018 Pounds
Persistent Toxic Metals	0 Pounds
Reproductive Toxins	114 Pounds
<b>Total‡</b>	<b>26,106 Pounds</b>

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

**Top dischargers of carcinogens\*\* to Anacoco Bayou in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Boise Cascade Corp.	De Ridder	26,018

**Top dischargers of persistent toxic metals to Anacoco Bayou in Louisiana (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)

**Top dischargers of reproductive toxins\*\* to Anacoco Bayou in Louisiana (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Boise Cascade Corp.	De Ridder	114

# The Intercoastal Waterway in Louisiana

## Total toxic pollution reported (1990-1994): 127,096 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to the Intercoastal Waterway in Louisiana (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Air Prods. & Chemicals Inc.	New Orleans	125,854
Exxon Co. USA - Refinery	Baton Rouge	986
Castrol N.A. Automative Inc.	Port Allen	256

**Table 2. Toxic chemicals discharged in the greatest amounts to the Intercoastal Waterway in Louisiana (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	113,037
Methanol	12,817
Phenol	297
Zinc compounds	254
Xylene (mixed isomers)	254
Toluene	203
Benzene	102

‡ 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 Intercoastal Waterway in Louisiana (1990-1994).**

Carcinogens	102 Pounds
Persistent Toxic Metals	256 Pounds
Reproductive Toxins	559 Pounds
<b>Total‡</b>	<b>815 Pounds</b>

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

**Top dischargers of carcinogens\*\* to the Intercoastal Waterway in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Exxon Co. USA - Refinery	Baton Rouge	102

**Top dischargers of persistent toxic metals to the Intercoastal Waterway in Louisiana (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
Castrol N.A. Automative Inc.	Port Allen	256

**Top dischargers of reproductive toxins\*\* to the Intercoastal Waterway in Louisiana (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Exxon Co. USA - Refinery	Baton Rouge	559

## Redwind Creek in Louisiana

Total toxic pollution reported (1990-1994): 124,000 Pounds

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

Facility	City	Toxic chemical release to water (pounds)
Pabco Insulation*	Grambling	124,000

**Table 2. Toxic chemicals discharged in the greatest amounts to Redwind Creek in Louisiana (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Sulfuric acid	124,000

‡ 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 Redwind Creek in Louisiana (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 Redwind Creek in Louisiana (1990-1994).**

**Top dischargers of carcinogens\*\* to Redwind Creek in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)

**Top dischargers of persistent toxic metals to Redwind Creek in Louisiana (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)

**Top dischargers of reproductive toxins\*\* to Redwind Creek in Louisiana (1990-1994).**

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

# Bayou Trepanier in Louisiana

Total toxic pollution reported (1990-1994): 115,339 Pounds

**Table 1. Polluters discharging the greatest amounts of toxic chemicals to Bayou Trepanier in Louisiana (1990-1994).**

Facility	City	Toxic chemical release to water (pounds)
Shell Oil Co. Norco Chemical	Norco	115,339

**Table 2. Toxic chemicals discharged in the greatest amounts to Bayou Trepanier in Louisiana (1990-1994).**

Chemical	Toxic chemical release to waterbody (pounds)
Ammonia	64,800
Ammonium sulfate (solution)	45,000
Zinc compounds	2,400
Acetonitrile	1,870
Phenol	530
Nickel	440
Copper compounds	290

‡ 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 Bayou Trepanier in Louisiana (1990-1994).**

Carcinogens	440 Pounds
Persistent Toxic Metals	3,130 Pounds
Reproductive Toxins	440 Pounds
<b>Total‡</b>	<b>3,130 Pounds</b>

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

**Top dischargers of carcinogens\*\* to Bayou Trepanier in Louisiana (1990-1994).**

Facility	City	Carcinogens** released to water (lbs)
Shell Oil Co. Norco Chemical	Norco	440

**Top dischargers of persistent toxic metals to Bayou Trepanier in Louisiana (1990-1994).**

Facility	City	Persistent toxic metals released to water (lbs)
Shell Oil Co. Norco Chemical	Norco	3,130

**Top dischargers of reproductive toxins\*\* to Bayou Trepanier in Louisiana (1990-1994).**

Facility	City	Reproductive toxins** released to water (lbs)
Shell Oil Co. Norco Chemical	Norco	440