Danger Downwind

A Report on the Release of Billions of Pounds of Toxic Air Pollutants

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The source of all of the data in this report, unless otherwise indicated, is the EPA computer data summary of the Toxic Release Inventory, dated February 22, 1989.

EXECUTIVE SUMMARY

The nation's program for regulating toxic air pollutants has been a total failure. As detailed in this report, although the Clean Air Act was passed over 18 years ago, **more than 2.3 billion pounds of toxic chemicals were released to the air from manufacturing facilities in 1987.** This conclusion is based on data reported by industry to the federal Environmental Protection Agency (EPA) under Title III of the Superfund law. The reports cover 308 individual chemicals and 20 classes of toxic chemicals. According to the EPA data, ten chemicals were emitted in amounts greater than 100 million pounds; 32 chemicals were emitted at greater than 10 million pounds; and 80 chemicals were emitted at greater than one million pounds.

Texas, Louisiana, Tennessee, Virginia, Ohio, Michigan, Indiana and Illinois ranked the highest in annual emissions of air toxics with greater than 100 million pounds recorded. Industry in only 10 states emitted less than 10 million pounds; and, of these 10, only Hawaii reported releases of less than one million pounds.

As shocking as these data are, they underestimate the scope of the problem. Among other things, these numbers do not include air pollution from numerous small sources, from many industrial categories such as petroleum tank farms, or from federal facilities. Numerous known toxic chemicals are not included in the data and there is evidence that a significant number of industrial firms have failed to file the required reporting forms.

Despite the emission of hundreds of toxic chemicals in quantities measured in billions of pounds, EPA has set National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for only **seven** air toxics: arsenic, asbestos, benzene, beryllium, mercury, radon-222, and vinyl chloride. Only benzene is among the top 25 chemicals. Numerous carcinogens, mutagens, teratogens, neurotoxicants, reproductive toxicants, environmental toxicants, bioaccumulators and persistent chemicals are among the unregulated chemicals.

The amount of toxics currently being emitted into our air poses unacceptable risks to public health and the environment. One EPA study of 20 toxic air pollutants concluded that those 20 chemicals alone would cause 2,000 cancer cases per year. In addition to cancer, toxic air pollutants cause and contribute to other diseases, harm fish and wildlife and cause ecological damage. Among the chemicals being released are chloroflorocarbons that are damaging the earth's protective ozone layer exposing the world to even higher levels of dangerous ultraviolet radiation.

The nation needs a major effort to control these huge quantities of unregulated toxic air pollutants. A national strategy for controlling toxic air pollution should be implemented, including the following four initiatives:

1. **PASSAGE OF NATIONAL AIR TOXICS LEGISLATION.** The first and most critical action needed is passage of comprehensive legislation to control toxic air pollution. Such legislation should include provisions to:

- Reduce Routine Emissions from Major Stationary Sources such as industrial plants;
- Control toxic air pollution from Area Sources such as Dry cleaners; and
- Prevent Chemical Accidents.

2. **REFORM OF ENVIRONMENTAL PERMITTING REQUIREMENTS.** The Administrator of EPA has the legal authority to control many of these toxic emissions using existing law. He should implement immediately a comprehensive program to do so. Every industry applying for a new or revised air pollution control or other federal pollution control permit should be required to demonstrate that it is employing the best technology available to reduce toxic emissions into the air and other media.

3. **ADOPTION BY INDUSTRY OF GOALS FOR REDUCTION AND EVENTUAL ELIMINATION OF TOXIC AIR POLLUTION.** The Chief Executive Officer of Monsanto has announced that his company will reduce its emissions of toxic chemicals to the air by 90% by 1992. The company's long term goal is to reduce toxic air emissions to zero. Other corporations should adopt similar goals.

4. **INCREASED CITIZEN INVOLVEMENT.** Citizens need to be more actively involved in the effort to control toxic air pollution. Citizens should serve as environmental watchdogs promoting better local air quality by gathering and analyzing toxic release inventory data for facilities in their neighborhoods. Citizens can reduce chemical risks by demanding that each facility adopt reduction goals, that federal, state and local officials legislate rigorous reduction laws, and that environmental agencies promulgate and enforce reduction regulations. This report contains a list of contacts in each state where citizens can learn more about their local toxic air pollution problems.

INTRODUCTION

"This may be how the world will end -- not with a bang but with an ecological whimper".

- Abu Abraham, referring to the accident in Bhopal (*Sunday Observer*, December 23, 1984)

In the early morning hours of December 3, 1984, a methyl isocyanate (MIC) storage tank at the Union Carbide plant in Bhopal, India burst open, releasing more than 30 metric tons of this highly toxic gas into the air. Inadequate safety systems at the plant failed to contain the noxious cloud, and it spread like a white pall over the nearby community. Many people died in their beds. Others awoke to the sounds of their own choking as they struggled to escape into the streets; those who were able to flee could only run so far before collapsing and writhing on the ground, engulfed by the deadly vapor. When the air cleared, nearly 3000 people lay dead and 100,000 more were left permanently disabled.

Growing evidence of the public's vulnerability to hazardous chemical emergencies, and the determination of environmentalists and labor activists to improve chemical safety, moved Congress to action. Building upon model legislation passed in more than 30 states and scores of counties to handle such situations, federal legislation was enacted to ensure that all communities exposed to hazardous material dangers would be knowledgeable and ready to respond.

On October 17, 1986, the Superfund Amendments and Reauthorization Act (SARA) was signed by the President. Not only did SARA address the potential for Bhopal type chemical accidents in the U.S., but it also broke new ground by creating a "toxic release inventory" containing the annual emissions of certain especially dangerous chemicals at selected manufacturing facilities. The toxic release inventory for 1987 provides the basis of this report.

Toxic Release Inventory Data

Starting July 1, 1988, certain facilities were required to submit annual reports to U.S. EPA and state agencies to be included in the "toxic release inventory" (TRI). Those reports cover information about the releases of more than 320 toxic chemicals to the environment. Facilities must report TRI data if they are classified as manufacturers (i.e. have a Standard Industrial Classification code of 20-39); have 10 or more full time employees; and handle TRI-listed chemicals above threshold amounts.

For the 1987 data in this report, the threshold amounts were 75,000 lb/year for

chemicals manufactured, imported or processed, and 10,000 lb/year for chemicals used in any other manner. The threshold requirement will drop to 50,000 lb/year for 1988 reports and 25,000 lb/year for subsequent years.

Required information includes facility identification, including all off-site locations to which toxic chemical wastes are transferred. In addition, for each reported chemical, manufacturers must include two pages of detailed information on chemical uses in manufacturing and processing; releases (in pounds per year) to: air (including point source and fugitive emissions), waterways, underground injection, and land; transfers to off-site waste treatment or disposal facilities; types of processes used; and optional information on waste minimization. Appendix A presents an annotated guide to Form R, the reporting form for the Toxic Release Inventory. Appendix B lists the state and federal contacts for access to Toxic Release Inventory data.

1. Facilities

Table 1 summarizes the ranked emissions identified by Standard Industrial Classification codes. The Chemical and Allied Product manufacturers released more than 886 million pounds of toxic chemicals to the air from fugitive (273 million pounds) and stack emissions (612 million pounds). Fugitive emissions are those which do not come from a stack and include such discharges as volatile hydrocarbon leaks from valve seals and asbestos escaping from exhaust systems. Paper (178 million pounds), Raw Metals (151 million pounds), and Transportation (121 million pounds) contributed the next highest amounts of stack emissions. Transportation (70 million pounds), Raw Metals (64 million pounds) and Petroleum (44 million pounds) contributed the highest amounts of fugitive air emissions.

The reported data underestimate the total burden of air toxics, due to non-compliance by covered facilities and also due to the failure to require reporting by other major sources of emissions. Federal facilities are excluded from the list of covered facilities, despite the fact that nearly one third of new sites on the National Priorities List sites under Superfund are federal facilities, primarily arsenals, munitions factories and bases operated by the Department of Defense. Significant releases of toxic chemicals have also been identified at Department of Energy facilities, such as the Lawrence Livermore Laboratory and the Hanford facilities.

Facilities may manufacture, process, or otherwise use a covered chemical at levels above the designated threshold even though their major SIC code designation lies outside codes 20-39. Tank farms, publicly owned treatment works, incinerators, other treatment, storage and disposal facilities (TSDFs) are not included in the TRI data. In the New Jersey Industrial Survey which has contributed greatly to EPA's approach on Section 313, one of the largest chemical user groups was SIC 42 (warehousing, presumably SIC 4226 - special warehousing and storage), and significant contributions were found in SIC 56 (Apparel and Accessories) and SIC 67 (Holding and Investment Companies).

Finally, emissions from facilities with fewer than 10 employees, such as dry cleaners, can contribute significantly to impaired air quality.

2. Toxic Release Inventory Chemicals

Almost 70,000 known chemicals are used in commerce in the United States. In addition, a large number of other chemicals are formed during chemical processes in industry and in the atmosphere. Substantial portions of these can become airborne and when inhaled by people at sufficient concentrations can cause a multitude of adverse effects. For one effect, cancer, EPA has recently ranked exposure to hazardous and toxic air pollutants as among the highest relative risks. A quantitative assessment of just 20 toxic chemicals to which people are exposed in ambient air resulted in a calculation of more than 2000 cancer cases per year. U.S. Environmental Protection Agency, - *Unfinished Business: A Comparative Assessment of Environmental Problems. Appendix 1. Report of the Cancer Risk Work Group*, Office of Policy Analysis, (February, 1987).

Also alarming is the evidence that hazardous chemicals move from one media to another. PCBs and the banned pesticide DDT have migrated from contaminated soils, into the air and eventually have accumulated in the fish and wildlife of the Great Lakes many hundreds of miles away. (Fitchko, J., *Literature Review of the Effects of Persistent Toxic Substances on Great Lakes Biota*, International Joint Commission, Windsor, Ontario (December, 1986).) Similarly, persistent toxic chemicals emitted into the air eventually fallout onto the earth and surface waters.

Finally, an important lesson in caution must be drawn from our experience with chlorofluorocarbons (CFCs). CFCs are volatile chemicals which pose relatively low risks to people from direct exposure. However, CFCs can deplete the stratospheric ozone layer, thereby increasing the earth's exposure to cancer-causing ultraviolet radiation. Each year's wasteful emissions of CFCs have added to the global burden, such that EPA has projected a steadily increasing risk of melanoma and non-melanoma skin cancers resulting in over 20,000 annual deaths by the year 2100. (U.S. Environmental Protection Agency, *Unfinished Business: A Comparative Assessment of Environmental Problems. Appendix 1. Report of the Cancer Risk Work Group*, Office of Policy Analysis, Washington, D.C. (February, 1987).) Prevention of additional emissions is essential. However, the existing burden of CFCs will continue to deplete the ozone layer for several years to come.

The original TRI list of 329 chemicals was generated from a combined list of chemicals used by the states of Maryland and New Jersey for their emissions reporting requirements. Unfortunately, the chemical list does not include every hazardous chemical found in each neighborhood.

Congress intended the TRI list to include: 1) chemicals which can cause acute health effects; 2) chemicals which can cause cancer, teratagenic effects, serious or

irreversible reproductive dysfunctions, serious or irreversible neurological disorders, serious or irreversible heritable genetic mutations, or other serious or irreversible other chronic health effects; and 3) chemicals which can cause, or can reasonably be anticipated to cause, because of their toxicity, because of their toxicity and environmental persistance, or because of their toxicity and bioaccumulative potential, a significant and serious adverse environmental effect. Appendix C presents EPA's preliminary screening of the TRI chemicals for ten adverse health and environmental effects.

During 1987, eighty of these chemicals were emitted in amounts greater than one million pounds, thirty-two chemicals were emitted in amounts greater than 10 million pounds, and ten chemicals were released in amounts greater than 100 million pounds (Table 2, ranked list and Table 3, alphabetized list). Carcinogens, neurotoxicants, reproductive toxicants, environmental toxicants and chemicals capable of indirect environmental damage such as stratospheric ozone depletion and low-level ozone pollution constitute the list of the twenty-five highest emitted chemicals.

Only 308 individual chemicals and 20 classes of chemicals have been included on the Toxic Release Inventory (TRI). Some TRI chemicals may be familiar, such as the hydrocarbon benzene, the pesticide chlordane, and the metal mercury. Many will be unfamiliar: 1,3-butadiene, hydrogen fluoride and 1,1,1-trichloroethane. Appendix D presents chemical profiles identifying the total amount released, emissions for important states, and brief toxicology summaries for each of the twenty-five highest emitted chemicals.

3. State-By-State Emissions Inventories

Texas, Louisiana, Tennessee, Virginia, Ohio, Michigan, Indiana and Illinois ranked the highest in annual emissions of air toxics with greater than 100 million pounds recorded (Table 4). Only 10 states emitted less than 10 million pounds; and of these 10 only Hawaii reported releases of less than one million pounds.

During 1987, in nineteen states more than 10 pounds of air toxic chemicals were released for every resident (based upon 1986 estimates from the U.S. Bureau of Census). In twenty-three states, releases amounted to more than 1000 pounds per square mile of land area. Appendix E presents a state-by-state air emissions inventory for Toxic Release Inventory chemicals.

RECOMMENDATIONS

The nation needs a series of major new initiatives to control toxic air pollution. A national strategy for controlling toxic air pollution should include the following four key elements:

1. **PASSAGE OF NATIONAL AIR TOXICS LEGISLATION.** Congress should pass a comprehensive Air Toxics Bill that will:

A. Reduce Routine Emissions from Major Stationary Sources.

* *Expand the list of Toxic Pollutants.* Congress should establish a list of all important hazardous pollutants, including those on the Superfund section 313 list.

* *Establish Health-Based Standards.* Public-health based standards must be required for all listed pollutants.

* *Implement Best Technology Standards.* EPA must establish standards for pollution control equipment within 5 years. Best available control technology (BACT) must be used.

* *Promote Safe Substitution.* EPA should encourage industry to seek safer substitutes for dangerous chemicals.

* *Assure Compliance by New and Existing Sources.* All new sources must comply immediately; existing sources must comply within 2 years, with a maximum 3 year extension.

* *Require Permits.* Each source must obtain a state operating permit.

* *Conduct Emission Audits.* Each major source must employ an EPA-certified auditor to monitor emissions rates.

* *Monitor Toxic Emissions.* Continuous monitoring with state-of-the-art technology must be required, and regular public reports must be issued.

B. Control Area Sources (Dry cleaners, solvent users, etc.).

* *Reduce by 90%.* A 90% reduction in each pollutant from each type of area source must be required within 10 years.

* *Phase-Out Asbestos.* A complete phase-out by December, 1992.

* *Phase-Down Chlorinated Solvents.* Chlorinated solvents, which include both

probable carcinogens and ozone-depleters, should be phased down to 50% of current production and import within 10 years. EPA should be granted authority to require faster cuts if warranted.

C. Prevent Chemical Accidents.

* *Shift the Burden of Proof onto Facilities.* All facilities using listed chemicals should be required to:

    1. Register with EPA, and pay a program support fee.

    2. Perform hazard assessments for ALL hazardous chemicals used.

    3. Show financial responsibility for the consequences of all accidents.

* *Establish a Chemical Safety and Hazards Investigation Board.* An independent board, modeled after the National Transportation Safety Board, should be established to investigate all accidents, report on their causes, and make recommendations for preventing recurrences.

* *Build an Effective EPA Prevention Program.* EPA should:

    1. Maintain a national computer database of facilities handling extremely hazardous chemicals.

    2. Establish standards for tanks, valves and all other equipment that can cause accidental releases.

    3. Require containment and treatment equipment where dangerous quantities of chemicals are used.

2. REFORM OF ENVIRONMENTAL PERMITTING REQUIREMENTS

The Bush Administration should implement immediately a comprehensive program of source reduction for every toxic chemical emitted into the nation's air shed. The Environmental Protection Agency should institute thorough reform of air, water and waste disposal permitting processes. At every permit renewal, cumulative and multimedia impacts should be analyzed and a time schedule for adopting best available reduction and control technology should be established.

In order to make reduction a multimedia program, source reduction certification should be made a part of each permit to discharge, emit, or dispose of hazardous chemicals to any environmental medium. Reduction certification should be required on all permits for all substances listed as toxic or hazardous pollutants.

The basis for the source reduction program should be establishment of national source reduction goals. Multimedia reduction permit certification should require all applicants to certify that the facility is reducing its toxic chemical emissions and hazardous waste generation consistent with the national goals. Putative permittees should be required to substantiate their claimed reduction through the submission of detailed product-specific and process-specific information. Permit applicants who are not achieving reductions consistent with the national goal should bear the burden of providing detailed information substantiating why they are not meeting the goal.

At least one state has employed a similar permitting program. In an effort to expand waste reduction efforts beyond its RCRA authorized program, New Jersey has experimented with reduction certification language in selected air and water permits. This has allowed the state to collect significant information concerning technologies which result in reducing air and water pollutants at their source.

The information provided through this certification program should be compiled into a database to enable EPA to assess which particular facilities and which categories of industries are not achieving reduction as called for by the national goal and thus warrant performance standards, and technical and financial assistance. This information should also be appended to the Toxic Risk Inventory data and be made public. This is essential if the public is to take a proactive role in reducing hazardous waste generation and toxic risk in their communities.

3. ADOPTION BY INDUSTRY OF GOALS FOR REDUCTION AND EVENTUAL ELIMINATION OF TOXIC AIR POLLUTION.

The Chief Executive Officer of Monsanto has announced that his company will reduce its emissions of toxic air pollutants to the air by 90% by 1992. The company's long term goal is to reduce toxic emissions to zero. Other corporations should adopt similar goals.

Source reduction can not only help protect the environment but will save industry money in the long run. The Congressional Budget Office has projected savings of $2.7 billion in annual industrial expenditures if waste reduction opportunities are pursued. (U.S. Congressional Budget Office, *Hazardous Waste Management: Recent Changes and Policy Alternatives*, U.S. Government Printing Office, Washington, D.C., (1985).) Actual cost savings for specific industries have been measured. For example, Exxon and Stauffer saved more than $200,000 annually from waste reduction practices. (Sarokin, D. et. al., *Cutting Chemical Waste*, Inform, New York, (1985).) Over the last twelve years, 3M has instituted

nearly 2100 projects which eliminated the annual discharge of nearly 110,000 tons of air pollutants, one billion gallons of wastewater, and 280,000 tons of sludge and solid waste, while saving over $390 million by reducing pollution control facilities, operating costs, manufacturing costs, and increasing the acceptability of environmentally sound products. (The Woodlands Forum, Robert P. Bringer, *World Should Share Environmental Protection Technology*, Woodlands, TX (1987).) However, the waste reduction opportunities taken to date represent only the tip of the cost savings iceberg. Too few industrial facilities and too few processes within facilities have been targeted for waste reduction programs.

4. INCREASE CITIZEN INVOLVEMENT

Before July 1, 1988, EPA anticipated receiving reports from as many as 30,000 facilities nationwide, with an average of 10 chemicals per facility, for a total of 300,000 reports. Currently, EPA has received approximately 75,000 reports from less than 19,000 facilities. Understaffed and underfunded, EPA cannot be a vigilant watchdog enforcing compliance with the TRI data reporting.

Citizens should become effective environmental advocates promoting better local air quality by gathering and analyzing toxic release inventory data for facilities in their neighborhood. Citizens can reduce chemical risks by demanding that each facility adopt reduction goals, that federal, state and local officials legislate rigorous reduction laws, and that environmental agencies promulgate and enforce reduction regulations.

Table 1:

Reported Releases of Toxic Air Pollutants
by Industrial Category, 1987
(EPA, Toxic Release Inventory Data, 1989)

Reported Releases of Toxic Air Pollutants by Industrial Category, 1987

SIC CODE	INDUSTRIAL CATEGORY	TOTAL AIR RELEASES	FUGITIVE EMISSIONS	POINT SOURCE EMISSIONS
28	Chemicals	886,571,603	273,875,903	612,695,700
33	Primary metals	215,100,461	64,071,870	151,028,591
26	Paper	207,880,906	29,353,004	178,527,902
37	Transportation Equip.	192,046,240	70,689,366	121,356,874
	Multiple categories	184,786,760	61,571,314	123,215,446
30	Rubber & plastics	132,037,605	33,040,460	98,997,145
34	Fabricated metals	110,227,308	39,059,266	71,168,042
36	Electrical	89,709,015	29,240,278	60,468,737
29	Petroleum & coal	75,513,697	44,419,358	31,094,339
27	Printing	47,002,058	30,824,505	16,177,553
35	Machinery	46,242,666	21,692,815	24,549,851
25	Furniture	45,252,222	5,797,413	39,454,809
38	Instruments	41,622,386	11,990,294	29,632,092
22	Textiles	34,916,077	8,538,070	26,378,007
	Non-manufacturing	32,751,890	8,284,424	24,467,466
32	Stone, clay & glass	25,690,460	9,734,378	15,956,082
24	Lumber & wood	24,986,722	6,156,806	18,829,916
39	Miscellaneous	21,748,310	5,061,147	16,687,163
20	Food	15,651,659	11,135,474	4,516,185
31	Leather	13,783,466	1,523,985	12,259,481
21	Tobacco	7,460,460	4,219,217	3,241,243
23	Apparel	2,092,960	-1,458,673	634,287
TOTAL		2,453,074,931	771,738,020	1,681,336,911

Table 2:

Toxic Air Pollutants, 1987
ranked in order of pounds released
(EPA, Toxic Release Inventory Data, 1989)

Toxic Air Pollutants Released, 1987 (Sorted in Order of Pounds Released)

CHEMICAL NAME	POUNDS RELEASED
TOLUENE	235,686,684
AMMONIA	233,435,468
ACETONE	186,153,611
METHANOL	182,521,041
CARBON DISULFIDE	137,239,693
1,1,1-TRICHLOROETHANE	130,932,398
METHYL ETHYL KETONE	124,626,050
XYLENE (MIXED ISOMERS)	120,120,266
DICHLOROMETHANE	112,252,293
CHLORINE	103,423,754
ALUMINUM OXIDE	73,132,776
ETHYLENE	54,199,221
HYDROCHLORIC ACID	50,474,094
FREON 113	49,061,620
TRICHLOROETHYLENE	47,509,637
PROPYLENE	37,832,734
GLYCOL ETHERS	32,865,927
TETRACHLOROETHYLENE	28,093,496
N-BUTYL ALCOHOL	27,144,279
METHYL ISOBUTYL KETONE	25,284,541
BENZENE	24,895,833
STYRENE	24,694,164
CHLOROFORM	23,728,300
CHLOROMETHANE	20,858,189
CARBONYL SULFIDE	19,775,085
SULFURIC ACID	15,422,225
FORMALDEHYDE	15,026,270
ISOPROPYL ALCOHOL (MANUFACTURING)	14,363,700
ETHYLENE GLYCOL	13,337,401
CHLORINE DIOXIDE	12,086,233
HYDROGEN FLUORIDE	11,793,228
CYCLOHEXANE	10,621,381
1,3-BUTADIENE	9,872,710
PHENOL	8,513,582

CHEMICAL NAME	POUNDS RELEASED
AMMONIUM NITRATE (SOLUTION)	8,321,561
2-METHOXYETHANOL	8,113,631
P-XYLENE	7,094,911
NITRIC ACID	6,660,433
ALUMINUM (FUME OR DUST)	6,045,198
VINYL ACETATE	5,954,126
1,2-DICHLOROETHANE	5,712,143
SODIUM HYDROXIDE (SOLUTION)	5,484,290
ACETALDEHYDE	5,205,755
ETHYLBENZENE	5,008,405
ETHYLENE OXIDE	4,950,571
SODIUM SULFATE (SOLUTION)	4,435,245
CHLOROETHANE	4,400,509
TOTAL FOR MIXTURES	4,357,364
CARBON TETRACHLORIDE	4,259,720
ACRYLONITRILE	4,035,384
CHLOROBENZENE	3,875,644
PROPYLENE OXIDE	3,660,826
CUMENE	3,501,738
METHYL METHACRYLATE	3,275,442
ZINC COMPOUNDS	3,161,659
NAPHTHALENE	3,142,805
ZINC (FUME OR DUST)	2,938,830
O-XYLENE	2,880,900
ACETONITRILE	2,721,212
COPPER COMPOUNDS	2,662,047
2-ETHOXYETHANOL	2,581,257
M-XYLENE	2,495,507
COPPER	2,397,474
1,2,4-TRIMETHYLBENZENE	2,276,124
DIMETHYL PHTHALATE	2,113,257
METHYL TERT-BUTYL ETHER	2,067,002
1,1,2-TRICHLOROETHANE	1,690,764
BUTYRALDEHYDE	1,671,714

Toxic Air Pollutants Released, 1987 (Sorted in Order of Pounds Released)

CHEMICAL NAME	POUNDS RELEASED
MANGANESE COMPOUNDS	1,649,650
DI-(2-ETHYLHEXYL) PHTHALATE	1,597,832
BIPHENYL	1,523,883
VINYL CHLORIDE	1,511,157
PHOSPHORIC ACID	1,468,915
ISOBUTYRALDEHYDE	1,380,605
1,2,4-TRICHLOROBENZENE	1,370,307
LEAD	1,154,909
CHLOROPRENE	1,136,385
CYANIDE COMPOUNDS	1,094,278
PROPIONALDEHYDE	1,053,740
1,2-DICHLOROPROPANE	1,026,307
METHYLENEBIS(PHENYLISOCYANATE)	990,902
BARIUM COMPOUNDS	964,486
LEAD COMPOUNDS	953,057
TERT-BUTYL ALCOHOL	911,353
VINYLIDENE CHLORIDE	836,371
ACRYLIC ACID	832,211
CRESOL (MIXED ISOMERS)	818,206
SEC-BUTYL ALCOHOL	770,297
CHROMIUM COMPOUNDS	691,292
BROMOMETHANE	683,998
METHYL ACRYLATE	673,021
BUTYL ACRYLATE	636,506
ANILINE	627,170
MANGANESE	597,018
AMMONIUM SULFATE (SOLUTION)	579,686
1,2-DICHLOROBENZENE	574,666
HYDROGEN CYANIDE	534,942
TOLUENE-2,4-DIISOCYANATE	492,666
NICKEL	489,132
CHROMIUM	480,332
DIETHANOLAMINE	480,065
MALEIC ANHYDRIDE	470,922

Toxic Air Pollutants Released, 1987 (Sorted in Order of Pounds Released)

CHEMICAL NAME	POUNDS RELEASED
TEREPHTHALIC ACID	443,325
PHTHALIC ANHYDRIDE	419,751
URETHANE	374,600
1,4-DICHLOROBENZENE	341,189
1,4-DIOXANE	337,514
DIBUTYL PHTHALATE	328,315
EPICHLOROHYDRIN	310,580
PYRIDINE	297,938
2-NITROPROPANE	287,740
CATECHOL	272,241
NICKEL COMPOUNDS	265,436
MELAMINE	248,484
ETHYL ACRYLATE	239,466
ANTHRACENE	218,011
4,4'-METHYENEDIANILINE	217,500
4,4'-ISOPROPYLIDENEDIPHENOL	216,087
BUTYL BENZYL PHTHALATE	213,701
CUMENE HYDROPEROXIDE	182,527
DIETHYL PHTHALATE	163,001
TITANIUM TETRACHLORIDE	162,968
VINYL BROMIDE	162,900
METHYL ISOCYANATE	148,181
CADMIUM COMPOUNDS	137,428
1,2-DICHLOROETHYLENE	132,392
ARSENIC COMPOUNDS	130,742
MERCURY	130,579
2,4-D (ACETIC ACID)	130,216
N,N-DIMETHYLANILINE	129,799
NITROBENZENE	128,419
TOLUENE-2,6-DIISOCYANATE	126,471
1,1,2,2-TETRACHLOROETHANE	126,289
P-PHENYLENEDIAMINE	117,230
BIS(2-ETHYLHEXYL) ADIPATE	111,602
MOLYBDENUM TRIOXIDE	109,644

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Toxic Air Pollutants Released, 1987 (Sorted in Order of Pounds Released)

CHEMICAL NAME	POUNDS RELEASED
CADMIUM	101,969
ANTIMONY COMPOUNDS	91,124
2,4-DINITROTOLUENE	88,091
ARSENIC	88,089
P-CRESOL	86,466
PHOSGENE	80,519
DIAMINOTOLUENE (MIXED ISOMERS)	79,359
1,2-BUTYLENE OXIDE	79,264
DICHLOROBENZENE (MIXED ISOMERS)	71,708
ALLYL CHLORIDE	68,217
BARIUM	67,828
BENZOYL CHLORIDE	65,803
1,2-DIBROMOETHANE	63,888
DIBENZOFURAN	61,729
O-CRESOL	55,855
COBALT COMPOUNDS	50,035
1,3-DICHLOROBENZENE	48,893
NITROGLYCERIN	48,746
ASBESTOS (FRIABLE)	48,717
N-DIOCTYL PHTHALATE	47,970
COBALT	42,671
BENZYL CHLORIDE	40,485
ACROLEIN	40,399
METHYLENE BROMIDE	38,955
ANTIMONY	36,722
MANEB	35,930
1,3-DICHLOROPROPYLENE	33,570
HYDRAZINE	33,345
2-NITROPHENOL	33,149
2,4-DINITROPHENOL	32,100
HYDROQUINONE	31,023
CHLOROACETIC ACID	29,893
DECABROMODIPHENYL OXIDE	27,191
CAPTAN	26,615

Toxic Air Pollutants Released, 1987 (Sorted in Order of Pounds Released)

CHEMICAL NAME	POUNDS RELEASED
QUINOLINE	26,481
METHYL IODIDE	26,151
BENZOIC TRICHLORIDE	24,010
O-TOLUIDINE	23,204
PENTACHLOROPHENOL	23,109
2,6-DINITROTOLUENE	22,222
CHLOROTHALONIL	21,081
M-CRESOL	20,568
4,4'-METHYLENEBIS(N,N-DIMETHYL)	18,173
DIETHYL SULFATE	15,698
DICHLOROBROMOMETHANE	14,850
SELENIUM COMPOUNDS	14,061
CALCIUM CYANAMIDE	12,750
SILVER COMPOUNDS	11,503
SILVER	11,362
PHOSPHORUS (YELLOW OR WHITE)	11,306
DIMETHYL SULFATE	10,817
ACRYLAMIDE	10,789
ETHYL CHLOROFORMATE	10,634
TRICHLORFON	9,718
BENZIDINE	9,300
PERACETIC ACID	8,752
VANADIUM (FUME OR DUST)	8,635
HEPTACHLOR	7,286
BIS(2-CHLOROETHYL) ETHER	6,877
CARBARYL	6,443
THIOUREA	6,270
BENZOYL PEROXIDE	5,850
HEXACHLOROETHANE	5,459
SELENIUM	5,022
4-NITROPHENOL	4,952
BENZAL CHLORIDE	4,890
BERYLLIUM	4,447
METHOXYCHLOR	3,852

VVV 000010137

CHEMICAL NAME	POUNDS RELEASED
O-ANISIDINE	3,603
HEXACHLORO-1,3-BUTADIENE	3,580
(invalid no. should be 117817)	3,171
HEXACHLOROCYCLOPENTADIENE	3,071
TRIFLURALIN	2,849
2,4-DIAMINOTOLUENE	2,667
CHLORDANE	2,614
P-CRESIDINE	2,528
2-PHENYLPHENOL	2,501
MERCURY COMPOUNDS	2,368
2,4-DICHLOROPHENOL	2,321
FLUOMETURON	2,111
ACETAMIDE	1,992
HEXACHLOROBENZENE	1,804
NITRILOTRIACETIC ACID	1,752
C.I. ACID BLUE 9, DISODIUM SALT	1,541
2,4-DIMETHYLPHENOL	1,432
THORIUM DIOXIDE	1,330
STYRENE OXIDE	1,083
CHLOROMETHYL METHYL ETHER	1,069
4,6-DINITRO-O-CRESOL	1,066
QUINONE	1,053
3,3'-DICHLOROBENZIDINE	1,007
1,1-DIMETHYL HYDRAZINE	1,000
CHLOROPHENOLS	933
CUPFERRON	920
ALPHA-NAPHTHYLAMINE	890
PARATHION	858
SACCHARIN (MANUFACTURING)	750
PICRIC ACID	750
DICHLORVOS	741
LINDANE	561
4,4'-DIAMINODIPHENYL ETHER	560
METHYL HYDRAZINE	523

Toxic Air Pollutants Released, 1987 (Sorted in Order of Pounds Released)

CHEMICAL NAME	POUNDS RELEASED
POLYCHLORINATED BIPHENYLS (PCBs)	514
BERYLLIUM COMPOUNDS	502
PROPYLENEIMINE	500
SAFROLE	500
2,4,5-TRICHLOROPHENOL	500
CHLORAMBEN	500
2,4-DIAMINOANISOLE SULFATE	500
MICHLER'S KETONE	400
4,4'-METHYLENEBIS(2-CHLORO ANILINE)	300
CHLOROBENZILATE	269
QUINTOZENE	253
P-NITROSODIPHENYLAMINE	250
2-CHLOROACETOPHENONE	250
THALLIUM COMPOUNDS	250
PROPOXUR	48
C.I. SOLVENT YELLOW 14	4
C.I. BASIC GREEN 4	2
4-AMINOBIPHENYL	1
BIS(CHLOROMETHYL) ETHER	1
NITROGEN MUSTARD	0
4-AMINOAZOBENZENE	0
N-NITROSODIPHENYLAMINE	0
2,6-XYLIDINE	0
2,4,6-TRICHLOROPHENOL	0
ETHYLENE THIOUREA	0
C.I. SOLVENT YELLOW 3	0
5-NITRO-O-ANISIDINE	0
P-ANISIDINE	0
DICOFOL	0
ETHYLENEIMINE	0
2,4-DIAMINOANISOLE	0
TETRACHLORVINPHOS	0
PROPANE SULTONE	0
HEXACHLORONAPHTHALENE	0

VVV 000010139

CHEMICAL NAME	POUNDS RELEASED
OCTACHLORONAPHTHALENE	0
C.I. ACID BLUE 9, DIAMMONIUM SALT	0
THALLIUM	0
HYDRAZINE SULFATE	0
ZINEB	0
POLY BROMINATED BIPHENYLS	0
TOTALS	2,396,915,248

Table 3:

Toxic Air Pollutants, 1987
sorted alphabetically
(EPA, Toxic Release Inventory Data, 1989)

Toxic Air Pollutants Released, 1987 (Sorted in Alphabetical Order)

CHEMICAL NAME	TOTAL
2,4-D (ACETIC ACID)	130,216
ACETALDEHYDE	5,205,755
ACETAMIDE	1,992
ACETONE	186,153,611
ACETONITRILE	2,721,212
ACROLEIN	40,399
ACRYLAMIDE	10,789
ACRYLIC ACID	832,211
ACRYLONITRILE	4,035,384
ALLYL CHLORIDE	68,217
ALPHA-NAPHTHYLAMINE	890
ALUMINUM (FUME OR DUST)	6,045,198
ALUMINUM OXIDE	73,132,776
AMINOAZOBENZENE	0
AMINOBIPHENYL	1
AMMONIA	233,435,468
AMMONIUM NITRATE (SOLUTION)	8,321,561
AMMONIUM SULFATE (SOLUTION)	579,686
ANILINE	627,170
ANTHRACENE	218,011
ANTIMONY	36,722
ANTIMONY COMPOUNDS	91,124
ARSENIC	88,089
ARSENIC COMPOUNDS	130,742
ASBESTOS (FRIABLE)	48,717
BARIUM	67,828
BARIUM COMPOUNDS	964,486
BENZAL CHLORIDE	4,890
BENZENE	24,895,833
BENZIDINE	9,300
BENZOIC TRICHLORIDE	24,010
BENZOYL CHLORIDE	65,803
BENZOYL PEROXIDE	5,850
BENZYL CHLORIDE	40,485
BERYLLIUM	4,447
BERYLLIUM COMPOUNDS	502

Toxic Air Pollutants Released, 1987 (Sorted in Alphabetical Order)

CHEMICAL NAME	TOTAL
BIPHENYL	1,523,883
BIS(2-CHLOROETHYL) ETHER	6,877
BIS(2-ETHYLHEXYL) ADIPATE	111,602
BIS(CHLOROMETHYL) ETHER	1
BROMOMETHANE	683,998
BUTADIENE	9,872,710
BUTYL ACRYLATE	636,506
BUTYL BENZYL PHTHALATE	213,701
BUTYLENE OXIDE	79,264
BUTYRALDEHYDE	1,671,714
C.I. ACID BLUE 9, DIAMMONIUM SALT	0
C.I. ACID BLUE 9, DISODIUM SALT	1,541
C.I. BASIC GREEN 4	2
C.I. SOLVENT YELLOW 14	4
C.I. SOLVENT YELLOW 3	0
CADMIUM	101,969
CADMIUM COMPOUNDS	137,428
CALCIUM CYANAMIDE	12,750
CAPTAN	26,615
CARBARYL	6,443
CARBON DISULFIDE	137,239,693
CARBON TETRACHLORIDE	4,259,720
CARBONYL SULFIDE	19,775,085
CATECHOL	272,241
CHLORAMBEN-	500
CHLORDANE	2,614
CHLORINE	103,423,754
CHLORINE DIOXIDE	12,086,233
CHLOROACETIC ACID	29,893
CHLOROACETOPHENONE	250
CHLOROBENZENE	3,875,644
CHLOROBENZILATE	269
CHLOROETHANE	4,400,509
CHLOROFORM	23,728,300
CHLOROMETHANE	20,858,189
CHLOROMETHYL METHYL ETHER	1,069

VVV 000010143

CHEMICAL NAME	TOTAL
CHLOROPHENOLS	933
CHLOROPRENE	1,136,385
CHLOROTHALONIL	21,081
CHROMIUM	480,332
CHROMIUM COMPOUNDS	691,292
COBALT	42,671
COBALT COMPOUNDS	50,035
COPPER	2,397,474
COPPER COMPOUNDS	2,662,047
CRESOL (MIXED ISOMERS)	818,206
CUMENE	3,501,738
CUMENE HYDROPEROXIDE	182,527
CUPFERRON	920
CYANIDE COMPOUNDS	1,094,278
CYCLOHEXANE	10,621,381
DECABROMODIPHENYL OXIDE	27,191
DI-(2-ETHYLHEXYL) PHTHALATE	1,597,832
DIAMINOANISOLE	0
DIAMINOANISOLE SULFATE	500
DIAMINODIPHENYL ETHER	560
DIAMINOTOLUENE	2,667
DIAMINOTOLUENE (MIXED ISOMERS)	79,359
DIBENZOFURAN	61,729
DIBROMOETHANE	63,888
DIBUTYL PHTHALATE	328,315
DICHLOROBENZENE	574,666
DICHLOROBENZENE	48,893
DICHLOROBENZENE	341,189
DICHLOROBENZENE (MIXED ISOMERS)	71,708
DICHLOROBENZIDINE	1,007
DICHLOROBROMOMETHANE	14,850
DICHLOROETHANE	5,712,143
DICHLOROETHYLENE	132,392
DICHLOROMETHANE	112,252,293
DICHLOROPHENOL	2,321
DICHLOROPROPANE	1,026,307

VVV 000010144

Toxic Air Pollutants Released, 1987 (Sorted in Alphabetical Order)

CHEMICAL NAME	TOTAL
DICHLOROPROPYLENE	33,570
DICHLORVOS	741
DICOFOL	0
DIETHANOLAMINE	480,065
DIETHYL PHTHALATE	163,001
DIETHYL SULFATE	15,698
DIMETHYL HYDRAZINE	1,000
DIMETHYL PHTHALATE	2,113,257
DIMETHYL SULFATE	10,817
DIMETHYLPHENOL	1,432
DINITRO-O-CRESOL	1,066
DINITROPHENOL	32,100
DINITROTOLUENE	88,091
DINITROTOLUENE	22,222
DIOXANE	337,514
EPICHLOROHYDRIN	310,580
ETHOXYETHANOL	2,581,257
ETHYL ACRYLATE	239,466
ETHYL CHLOROFORMATE	10,634
ETHYLBENZENE	5,008,405
ETHYLENE	54,199,221
ETHYLENE GLYCOL	13,337,401
ETHYLENE OXIDE	4,950,571
ETHYLENE THIOUREA	0
ETHYLENEIMINE	0
FLUOMETURON	2,111
FORMALDEHYDE	15,026,270
FREON 113	49,061,620
GLYCOL ETHERS	32,865,927
HEPTACHLOR	7,286
HEXACHLORO-1,3-BUTADIENE	3,580
HEXACHLOROBENZENE	1,804
HEXACHLOROCYCLOPENTADIENE	3,071
HEXACHLOROETHANE	5,459
HEXACHLORONAPHTHALENE	0
HYDRAZINE	33,345

VVV 000010145

CHEMICAL NAME	TOTAL
HYDRAZINE SULFATE	0
HYDROCHLORIC ACID	50,474,094
HYDROGEN CYANIDE	534,942
HYDROGEN FLUORIDE	11,793,228
HYDROQUINONE	31,023
invalid no. should be 117817	3,171
ISOBUTYRALDEHYDE	1,380,605
ISOPROPYL ALCOHOL (MANUFACTURING)	14,363,700
ISOPROPYLIDENEDIPHENOL	216,087
LEAD	1,154,909
LEAD COMPOUNDS	953,057
LINDANE	561
M-CRESOL	20,568
M-XYLENE	2,495,507
MALEIC ANHYDRIDE	470,922
MANEB	35,930
MANGANESE	597,018
MANGANESE COMPOUNDS	1,649,650
MELAMINE	248,484
MERCURY	130,579
MERCURY COMPOUNDS	2,368
METHANOL	182,521,041
METHOXYCHLOR	3,852
METHOXYETHANOL	8,113,631
METHYENEDIANILINE	217,500
METHYL ACRYLATE	673,021
METHYL ETHYL KETONE	124,626,050
METHYL HYDRAZINE	523
METHYL IODIDE	26,151
METHYL ISOBUTYL KETONE	25,284,541
METHYL ISOCYANATE	148,181
METHYL METHACRYLATE	3,275,442
METHYL TERT-BUTYL ETHER	2,067,002
METHYLENE BROMIDE	38,955
METHYLENEBIS(2-CHLORO ANILINE)	300
METHYLENEBIS(N,N-DIMETHYL)	18,173

VVV 000010146

Toxic Air Pollutants Released, 1987 (Sorted in Alphabetical Order)

CHEMICAL NAME	TOTAL
METHYLENEBIS(PHENYLISOCYANATE)	990,902
MICHLER'S KETONE	400
MOLYBDENUM TRIOXIDE	109,644
N,N-DIMETHYLANILINE	129,799
N-BUTYL ALCOHOL	27,144,279
N-DIOCTYL PHTHALATE	47,970
N-NITROSODIPHENYLAMINE	0
NAPHTHALENE	3,142,805
NICKEL	489,132
NICKEL COMPOUNDS	265,436
NITRIC ACID	6,660,433
NITRILOTRIACETIC ACID	1,752
NITRO-O-ANISIDINE	0
NITROBENZENE	128,419
NITROGEN MUSTARD	0
NITROGLYCERIN	48,746
NITROPHENOL	33,149
NITROPHENOL	4,952
NITROPROPANE	287,740
O-ANISIDINE	3,603
O-CRESOL	55,855
O-TOLUIDINE	23,204
O-XYLENE	2,880,900
OCTACHLORONAPHTHALENE	0
P-ANISIDINE	0
P-CRESIDINE	2,528
P-CRESOL	86,466
P-NITROSODIPHENYLAMINE	250
P-PHENYLENEDIAMINE	117,230
P-XYLENE	7,094,911
PARATHION	858
PENTACHLOROPHENOL	23,109
PERACETIC ACID	8,752
PHENOL	8,513,582
PHENYLPHENOL	2,501
PHOSGENE	80,519

CHEMICAL NAME	TOTAL
PHOSPHORIC ACID	1,468,915
PHOSPHORUS (YELLOW OR WHITE)	11,306
PHTHALIC ANHYDRIDE	419,751
PICRIC ACID	750
POLY BROMINATED BIPHENYLS	0
POLYCHLORINATED BIPHENYLS (PCBs)	514
PROPANE SULTONE	0
PROPIONALDEHYDE	1,053,740
PROPOXUR	48
PROPYLENE	37,832,734
PROPYLENE OXIDE	3,660,826
PROPYLENEIMINE	500
PYRIDINE	297,938
QUINOLINE	26,481
QUINONE	1,053
QUINTOZENE	253
SACCHARIN (MANUFACTURING)	750
SAFROLE	500
SEC-BUTYL ALCOHOL	770,297
SELENIUM	5,022
SELENIUM COMPOUNDS	14,061
SILVER	11,362
SILVER COMPOUNDS	11,503
SODIUM HYDROXIDE (SOLUTION)	5,484,290
SODIUM SULFATE (SOLUTION)	4,435,245
STYRENE	24,694,164
STYRENE OXIDE	1,083
SULFURIC ACID	15,422,225
TEREPHTHALIC ACID	443,325
TERT-BUTYL ALCOHOL	911,353
TETRACHLOROETHANE	126,289
TETRACHLOROETHYLENE	28,093,496
TETRACHLORVINPHOS	0
THALLIUM	0
THALLIUM COMPOUNDS	250
THIOUREA	6,270

Toxic Air Pollutants Released, 1987 (Sorted in Alphabetical Order)

CHEMICAL NAME	TOTAL
THORIUM DIOXIDE	1,330
TITANIUM TETRACHLORIDE	162,968
TOLUENE	235,686,684
TOLUENE-2,4-DIISOCYANATE	492,666
TOLUENE-2,6-DIISOCYANATE	126,471
TOTAL FOR MIXTURES	4,357,364
TRICHLORFON	9,718
TRICHLOROBENZENE	1,370,307
TRICHLOROETHANE	130,932,398
TRICHLOROETHANE	1,690,764
TRICHLOROETHYLENE	47,509,637
TRICHLOROPHENOL	500
TRICHLOROPHENOL	0
TRIFLURALIN	2,849
TRIMETHYLBENZENE	2,276,124
URETHANE	374,600
VANADIUM (FUME OR DUST)	8,635
VINYL ACETATE	5,954,126
VINYL BROMIDE	162,900
VINYL CHLORIDE	1,511,157
VINYLIDENE CHLORIDE	836,371
XYLENE (MIXED ISOMERS)	120,120,266
XYLIDINE	0
ZINC (FUME OR DUST)	2,938,830
ZINC COMPOUNDS	3,161,659
ZINEB	0
TOTAL	2,396,915,248

VVV 000010149

Table 4:

State Summaries of Toxic Release Inventory Data, 1987
ranked in order of pounds released
(EPA, Toxic Release Inventory Data, 1989)

Summary of Toxic Release Inventory Data for Air, 1987

STATE	POUNDS OF AIR TOXICS RELEASED	POUNDS RELEASED PER PERSON	POUNDS RELEASED PER SQ. MILE
Texas	229,910,640	13.8	877.5
Louisiana	134,524,442	29.9	3,021.6
Tennessee	132,461,157	27.6	3,218.6
Virginia	131,359,106	22.7	3,308.5
Ohio	122,464,629	11.4	2,986.7
Michigan	106,236,445	11.6	1,865.3
Indiana	103,479,027	18.8	2,879.9
Illinois	103,093,458	8.9	1,852.7
Georgia	94,296,297	15.4	1,624.2
North Carolina	92,328,287	14.6	1,890.3
Alabama	90,455,130	22.3	1,781.8
New York	85,207,180	4.8	1,798.5
Utah	76,369,383	45.9	930.5
California	72,947,456	2.7	466.7
Pennsylvania	71,664,910	6.0	1,596.5
South Carolina	61,186,447	18.1	2,025.8
Wisconsin	46,491,970	9.7	854.2
Kentucky	43,279,655	11.6	1,091.0
Missouri	43,151,138	8.5	625.9
Arkansas	42,832,699	18.1	822.5
Washington	39,893,330	8.9	599.8
New Jersey	38,631,572	5.1	5,172.9
Iowa	36,208,159	12.7	647.0
Florida	35,354,199	3.0	652.9
Alaska	31,707,083	59.4	55.5
West Virginia	31,582,771	16.5	1,309.5
Minnesota	29,031,436	6.9	365.0
Massachusetts	27,791,549	4.8	3,552.1
Kansas	24,340,188	9.9	297.6
Connecticut	23,789,981	7.5	4,883.0
Oklahoma	20,030,795	6.1	291.8
Oregon	19,750,059	7.3	205.3
Mississippi	18,686,813	7.1	395.6
Maryland	18,655,969	4.2	1,896.5

VVV 000010151

Summary of Toxic Release Inventory Data for Air, 1987

STATE	POUNDS OF AIR TOXICS RELEASED	POUNDS RELEASED PER PERSON	POUNDS RELEASED PER SQ. MILE
Rhode Island	17,170,133	17.6	16,275.0
Arizona	15,031,406	4.5	132.4
Nebraska	13,698,725	8.6	178.7
New Hampshire	13,086,835	12.7	1,455.2
Puerto Rico	12,012,782	3.7	3,472.9
Maine	11,624,580	9.9	375.0
Colorado	8,911,711	2.7	86.0
Montana	5,032,798	6.1	34.6
Idaho	4,066,590	4.1	49.3
Delaware	3,181,998	5.0	1,647.0
Wyoming	2,835,391	5.6	29.2
New Mexico	2,501,865	1.7	20.6
South Dakota	1,908,236	2.7	25.1
North Dakota	1,333,903	2.0	19.2
Vermont	1,320,175	2.4	142.4
Nevada	1,226,820	1.3	11.2
Hawaii	957,778	0.9	149.1
Virgin Islands	924,081	8.4	7,000.6
American Samoa	896,081	24.2	11,637.4
TOTAL	2,396,915,248	9.8	676.5

Appendix A:

EPA Form R
An Annotated Guide to
The Toxic Release Inventory Reporting Form

The annotated Form R is designed to help individuals decipher TRI information, and develop a good picture of what is happening with toxic chemicals at local industrial facilities. Manufacturing facilities handling TRI chemicals must report their annual emissions to U.S. EPA and their designated state agency. This valuable information is available to the public, and communities and individuals can use it to watchdog the activities of local facilities.

Some important issues raised by this information include:

* The accuracy of the data -- Are monitoring systems being used to calculate the emissions estimates? If not, why not?

* The consequences of emissions -- What are the health effects of the toxic chemicals being used at local plants?

* The action being taken -- What types of treatment do the emissions undergo? Are these the best controls available? What steps are being taken to reduce emissions and minimize waste?

For more information and assistance contact:

the EPA Hotline 1-800-535-0202
in Washington D.C. or Alaska (202) 479-2449

Written requests for specific TRI reports can be addressed to:

EPA Title III Reporting Center (202) 488-1501
Attention: TRI Public Inquiry
470 L'Enfant Plaza East
Suite 7103
Washington, D.C. 20024

VVV 000010153

(Important: Type or print; read instructions before completing form.)

Page 2 of 5

EPA FORM R
PART II. OFF-SITE LOCATIONS TO WHICH TOXIC CHEMICALS ARE TRANSFERRED IN WASTES

Municipal sewage treatment plants.

1. PUBLICLY OWNED TREATMENT WORKS (POTW)

Facility Name

Street Address

City | County

State | Zip

2. OTHER OFF-SITE LOCATIONS - Number these locations sequentially on this and any additional page of this form you use

☐ Other off-site location

EPA Identification Number (RCRA ID. No.)

Facility Name

Street Address

City | County

State | Zip

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ Other off-site location

EPA Identification Number (RCRA ID. No.)

Facility Name

Street Address

City | County

State | Zip

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ Other off-site location

EPA Identification Number (RCRA ID. No.)

Facility Name

Street Address

City | County

State | Zip

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ Check if additional pages of Part II are attached.

VVV 000010154

Range Code	Weight Range in Pounds From...	To...
01	0	99
02	100	999
03	1,000	9,999
04	10,000	99,999
05	100,000	999,999
06	1,000,000	9,999,999
07	10,000,000	49,999,999
08	50,000,000	99,999,999
09	100,000,000	499,999,999
10	500,000,000	999,999,999
11	1 billion	more than 1 billion

EPA FORM R

PART III. CHEMICAL SPECIFIC INFORMATION

Chemical category and Health and Environmental effects information must be provided if chemical identity is claimed as trade secret.

To gain other environmental and health information on chemical search sources by using the Chemical Abstract number (CAS #)

1. CHEMICAL IDENTITY

1.1 ☐ Trade Secret (Provide a generic name in 1.4 below. Attach substantiation form to this submission.)

1.2 CAS # [| | | | | | |] - [| |] - [ ] (Use leading zeros if CAS number does not fill space provided.)

1.3 Chemical or Chemical Category Name

1.4 Generic Chemical Name (Complete only if 1.1 is checked.)

2. MIXTURE COMPONENT IDENTITY (Do not complete this section if you have completed Section 1.)

Generic Chemical Name Provided by Supplier

3. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY (Check all that apply.)

3.1 Manufacture: a. ☐ Produce b. ☐ Import c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity

3.2 Process: a. ☐ As a reactant b. ☐ As a formulation component c. ☐ As an article component d. ☐ Repackaging only

3.3 Otherwise Used: a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid c. ☐ Ancillary or other use

4. MAXIMUM AMOUNT OF THE CHEMICAL ON SITE AT ANY TIME DURING THE CALENDAR YEAR

[|] (enter code)

5. RELEASES OF THE CHEMICAL TO THE ENVIRONMENT

Total releases must include accidental and routine releases.

Releases not through stacks or confined air streams, but rather leaks through valves and building ventilation.

You may report releases of less than 1,000 lbs. by checking ranges under A.1.		A. Total Release (lbs/yr) A.1 Reporting Ranges (0 / 1-499 / 500-999)	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	5.1a			5.1b ☐	
5.2 Stack or point air emissions	5.2a			5.2b ☐	
5.3 Discharges to water (Enter codes also in Part II Section 3.10 for wastewater.) 5.3.1 ☐	5.3.1a			5.3.1b ☐	5.3.1c
5.3.2 ☐	5.3.2a			5.3.2b ☐	5.3.2c
5.3.3 ☐	5.3.3a			5.3.3b ☐	5.3.3c
5.4 Underground injection	5.4a			5.4b ☐	
5.5 Releases to land 5.5.1 [ ] (enter code)	5.5.1a			5.5.1b ☐	
5.5.2 [ ] (enter code)	5.5.2a				
5.5.3 [ ] (enter code)	5.5.3a				

☐ (Check if additional information is provided on Part IV-Supplemental Information.)

EPA Form 9350-1(11-48)

Monitoring data must be used when available.

M - Based on monitoring data or measurements for the toxic chemical as released to the environment and/or off-site facility.

C - Based on mass balance calculations, such as calculations of the amount of the toxic chemical in streams entering and leaving process equipment.

E - Based on published emission factors, such as those relating release quantity to throughput or equipment type (e.g., air emissions factors).

O - Based on other approaches such as engineering calculations (e.g., estimating volatilization or solubility using published mathematical formulas) or best engineering judgment. This would include applying an estimated removal efficiency to a wastestream even if the composition of stream before treatment was fully characterized by monitoring data.

Disposal Codes

D02 Landfill
D03 Land Treatment/Application/Farming
D05 Surface Impoundment (to be closed as a Landfill)
D99 Other Disposal

VVV 000010155

M - Based on monitoring data or measurements for the toxic chemical as released to the environment and/or off-site facility.

C - Based on mass balance calculations, such as calculation of the amount of the toxic chemical in streams entering and leaving process equipment.

E - Based on published emission factors, such as those relating release quantity to throughput or equipment type (e.g., air emissions factors)

O - Based on other approaches such as engineering calculations (e.g., estimating volatilization or solubility using published mathematical formulas) or best engineering judgment. This would include applying an estimated removal efficiency to a wastestream even if the composition of stream before treatment was fully characterized by monitoring data.

M10 Storage Only
M20 Reuse as Fuel/Fuel Blending
M40 Solidification/Stabilization
M50 Incineration/Thermal Treatment
M61 Wastewater Treatment (Excluding POTW)
M69 Other Treatment
M71 Underground Injection
M72 Landfill/Disposal Surface Impoundment
M73 Land Treatment
M79 Other Land Disposal
M90 Other Off-Site Management
M91 Transfer to Waste Broker
M99 Unknown

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 lbs. by checking ranges under A.1		A. Total Transfers (lbs/yr) A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/Disposal (enter code)
6.1 Discharge to POTW						6.1b	6.1c
6.2 Other off-site location (Enter block number from Part I, Section 2.)	☐					6.2b	6.2c
6.3 Other off-site location (Enter block number from Part I, Section 2.)	☐					6.3b	6.3c
6.4 Other off-site location (Enter block number from Part I, Section 2.)	☐					6.4b	

☐ (Check if additional information is provided on Part IV-Supplemental Information)

1 = Greater than 1 percent
2 = 100 parts per million (0.01 percent) to 1 percent (10,000 parts per million).
3 = 1 part per million to 100 parts per million
4 = 1 part per billion to 1 part per million
5 = Less than 1 part per billion

See attached Table I.

7. WASTE TREATMENT METHODS AND EFFICIENCY

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.1a	7.1b	7.1c	7.1d	7.1e %	7.1f	
7.2a	7.2b	7.2c	7.2d	7.2e %	7.2f	
[illegible]	7.3b	7.3c	7.3d			
[illegible]	7.4b	7.4c	7.4d			
[illegible]	7.5b	7.5c	7.5d			
7.6a	7.6b	7.6c	7.6d			
7.7a	7.7b	7.7c	7.7d	7.7e %	7.7f	
7.8a	7.8b	7.8c	7.8d	7.8e %	7.8f	
7.9a	7.9b	7.9c	7.9d	7.9e %	7.9f	
7.10a	7.10b	7.10c	7.10d	7.10e %	7.10f	
7.11a	7.11b	7.11c	7.11d	7.11e %	7.11f	
7.12a	7.12b	7.12c	7.12d	7.12e %	7.12f	
7.13a	7.13b	7.13c	7.13d	7.13e %	7.13f	
7.14a	7.14b	7.14c	7.14d	7.14e %	7.14f	

☐ (Check if additional information is provided on Part IV-Supplemental Information)

A = Gaseous (including gases, vapors, airborne particulates)
W = Wastewater (aqueous waste)
L = Liquid waste (non-aqueous waste)
S = Solid waste (including sludges and slurries)

Percent removal must be calculated as follows:

$$\frac{(I - E)}{I} \times 100$$

where I = mass of the chemical in the influent wastestream and E = mass of the chemical in the effluent wastestream.

8. OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of modification (enter code)	B. Quantity of the chemical in the wastestream prior to treatment/disposal: Current reporting year (lbs/yr)	Prior year (lbs/yr)	Or percent change	C. Index	D. Reason for action (enter code)
			%		

Indicates whether waste reduction is due to change in production or change in pollution control measures. A number greater than 1.0 indicates production has increased. A number less than 1.0 indicates a drop in production.

M1 - Recycling/reuse on-site.
M2 - Recycling/reuse off-site.
M3 - Equipment/technology modifications.
M4 - Process procedure modifications.
M5 - Reformulation/redesign of product.
M6 - Substitution of raw materials.
M7 - Improved housekeeping training, inventory control.
M8 - Other waste minimization technique.

R1 - Regulatory requirement for the waste.
R2 - Reduction of treatment/disposal costs.
R3 - Other process cost reduction.
R4 - Self-initiated program.
R5 - Other (e.g., discontinuation of product, occupational safety, etc.).

TABLE 1
TREATMENT CODES

AIR EMISSIONS TREATMENT

A01 Flare
A02 Condenser
A03 Scrubber
A04 Absorber
A05 Electrostatic Precipitator
A06 Mechanical Separation
A07 Other Air Emission Treatment

BIOLOGICAL TREATMENT

B11 Biological Treatment — Aerobic
B21 Biological Treatment — Anaerobic
B31 Biological Treatment — Facultative
B99 Biological Treatment — Other

CHEMICAL TREATMENT

C01 Chemical Precipitation — Lime or Sodium Hydroxide
C02 Chemical Precipitation — Sulfide
C09 Chemical Precipitation — Other
C11 Neutralization
C21 Chromium Reduction
C32 Complexed Metals Treatment (other than pH Adjustment)
C41 Cyanide Oxidation — Alkaline Chlorination
C42 Cyanide Oxidation — Electrochemical
C43 Cyanide Oxidation — Other
C44 General Oxidation (including Disinfection) — Chlorination
C45 General Oxidation (including Disinfection) — Ozonation
C46 General Oxidation (including Disinfection) — Ozonation
C99 Other Chemical Treatment

INCINERATION/THERMAL TREATMENT

F01 Liquid Injection
F12 Rotary Kiln with Liquid Injection Unit
F19 Other Rotary Kiln
F31 Two Stage
F41 Fixed Hearth
F42 Multiple Hearth
F81 Fluidized Bed
F91 Infra-Red
F71 Fume/Vapor
F81 Pyrolytic Destructor
F82 Wet Air Oxidation
F83 Thermal Drying/Dewatering
F99 Other Incineration/Thermal Treatment

SOLIDIFICATION/STABILIZATION

G01 Cement Processes (including Silicates)
G09 Other Pozzolanic Processes (including Silicates)
G11 Asphaltic Processes
G21 Thermoplastic Techniques
G99 Other Solidification Processes

PHYSICAL TREATMENT

P01 Equalization
P09 Other Blending
P11 Settling/Clarification
P12 Filtration
P13 Sludge Dewatering (non-thermal)
P14 Air Flotation
P15 Oil Skimming
P16 Emulsion Breaking — Thermal
P17 Emulsion Breaking — Chemical
P18 Emulsion Breaking — Other
P19 Other Liquid Phase Separation
P21 Adsorption — Carbon
P22 Adsorption — Ion Exchange (other than for recovery/reuse)
P23 Adsorption — Resin
P29 Adsorption — Other
P31 Reverse Osmosis (other than for recovery/reuse)
P41 Stripping — Air
P42 Stripping — Steam
P49 Stripping — Other
P51 Acid Leaching (other than for recovery/reuse)
P61 Solvent Extraction (other than recovery/reuse)
P99 Other Physical Treatment

RECOVERY/REUSE

R01 Reuse as Fuel — Industrial Kiln
R02 Reuse as Fuel — Industrial Furnace
R03 Reuse as Fuel — Boiler
R04 Reuse as Fuel — Fuel Blending
R09 Reuse as Fuel — Other
R11 Solvents/Organics Recovery — Batch Still Distillation
R12 Solvents/Organics Recovery — Thin-Film Evaporation
R13 Solvents/Organics Recovery — Fractionation
R14 Solvents/Organics Recovery — Solvent Extraction
R19 Solvents/Organics Recovery — Other
R21 Metals Recovery — Electrolytic
R22 Metals Recovery — Ion Exchange
R23 Metals Recovery — Acid Leaching
R24 Metals Recovery — Reverse Osmosis
R26 Metals Recovery — Solvent Extraction
R29 Metals Recovery — Other
R99 Other Reuse or Recovery

Appendix B:

State and Federal Contacts for Toxic Release Inventory Data

Using information provided by the National Air Toxics Information Clearinghouse, EPA has compiled the following list of state contacts for TRI data.

For information and assistance at the federal level contact:

the EPA Hotline 1-800-535-0202
in Washington D.C. or Alaska (202) 479-2449

Written requests for specific TRI reports can be addressed to state agencies or:

U.S. EPA Title III Reporting Center (202) 488-1501
Attention: TRI Public Inquiry
470 L'Enfant Plaza East
Suite 7103
Washington, D.C. 20024

1. Alaska Dept. of Env. Conservation
   Pouch O
   Juneau, AK
   99811
   Phone: 907 465-2606

2. Alabama Department of Environmental Management
   State Capitol
   Montgomery, AL
   36130
   Phone: 205 271-7861

3. Arkansas Dept. of Pollution Control & Ecology, Air Division
   8001 National Drive
   Little Rock, AR
   72209
   Phone: 501 562-7444

4. Arizona Dept. of Health Services, Bur. of Air Quality Control
   2005 N. Central
   Phoenix, AZ
   85004
   Phone: 602 257-0022

5. Maricopa Co. Dept. of Health Ser., Bur. of Air Poll. Control
   1845 E. Roosevelet Street
   Phoenix, AZ
   85006
   Phone: 602 258-6381

6. Arizona Pinal-Gila Counties Air Quality Control District
   P.O. Box 1076
   Florence, AZ
   85232
   Phone: 602 868-5801

7. Arizona Pima County Air Quality Control District
   150 W. Congress Street
   Tucson, AZ
   85701
   Phone: 602 792-8686

8. California Air Resources Board
   Box 2815
   Sacramento, CA
   95812
   Phone: 916 322-2990

9. Kern County Air Pollution Control District
   1601 H Street, Suite 250
   Bakersfield, CA
   933015199
   Phone: 805 861-3682

10. Fresno County Air Pollution Control District
    1221 Fulton Mall
    Fresno, CA
    93721
    Phone: 209 445-3239

11. Stanislaus County Air Pollution Control District
    1716 Morgan Road
    Modesto, CA
    95351
    Phone: 209 571-6908

12. Amador County Air Pollution Control District
    108 Court Street
    Jackson, CA
    956422379
    Phone: 209 223-6406

13. Modoc County Air Pollution Control District
    202 West 4th Street
    Alturas, CA
    96134
    Phone: 916 233-3939

14. Bay Area Air Quality Management District
    939 Ellis Street
    San Francisco, CA
    94109
    Phone: 415 771-6000

15. South Coast Air Quality Management District
    9150 Flair Drive
    El Monte, CA
    91731
    Phone: 818 572-6200

16. Sacramento Co. Air Pollution Control District
    9323 Tech Center, Suite 800
    Sacramento, CA
    95826
    Phone: 916 366-2107

17. Monterey Bay Unified Air Pollution Control District
    1164 Monroe Street, #10
    Salinas, CA
    93906
    Phone: 408 443-1135

18. Santa Barbara Co. Air Pollution Control District
    5540 Edwill Suite B
    Santa Barbara, CA
    93111
    Phone: 805 964-8111

19. San Diego Co. Air Pollution Control District
    9150 Chesapeake Drive
    San Diego, CA
    92123
    Phone: 619 565-3947

20. Butte Co. Air Pollution Control District
    316 Nelson Ave., P.O. Box 1229
    Oroville, CA
    95965
    Phone: 916 538-7383

21. Siskiyou County Air Pollution Control District
    525 South Foothill Drive
    Yreka, CA
    96097
    Phone: 916 842-3906

22. Colorado Department of Health
    4210 E. 11th Avenue
    Denver, CO
    80220
    Phone: 303 331-8500

23. Environmental Health Department, City of Aspen
    130 South Galena
    Aspen, CO
    81611
    Phone: 303 925-2020

24. El Paso County Health Department
    501 N. Foote
    Colorado Springs, CO
    80909
    Phone: 303 578-3137

25. Connecticut Dept. of Environmental Protection, Air Compliance Unit
    165 Capitol Avenue, Rm.146
    Hartford, CT
    06106
    Phone: 203 566-2690

26. Milford Health Department
    2051 Bridgeport Avenue
    Milford, CT
    06460
    Phone: 203 783-3287

27. D.C. Department of Consumer and Regulatory Affairs
    5010 Overlook Avenue, S.W.
    Washington, DC
    200325396
    Phone: 202 767-7370

28. Delaware Div. of Environmental Control, Air Resources Section
    89 Kings Highway, Box 1401
    Dover, DE
    19903
    Phone: 302 736-4791

29. Florida Department of Env. Reg., Bur. of Air Quality Management
    2600 Blair Stone Road
    Tallahassee, FL
    323992400
    Phone: 904 488-1344

30. Bio-Environmental Services Div., City of Jacksonville
    515 W. 6th Street
    Jacksonville, FL
    32206
    Phone: 904 630-3210

31. Hillsborough County Environmental Protection Commission
    1900 9th Avenue
    Tampa, FL
    32206
    Phone: 813 272-5960

32. Broward County Environmental Quality Control Board
    621 S. Andrews Avenue
    Ft. Lauderdale, FL
    33315
    Phone: 305 765-4436

33. Palm Beach County Health Department
    901 Evernia Street
    West Palm Beach, FL
    33402
    Phone: 305 820-3070

34. Georgia Dept. of Natural Resources, Air Protection Branch
    270 Washington Street, S.W.
    Atlanta, GA
    30334
    Phone: 404 656-4867

35. Hawaii Dept. of Health, Environmental Permits Branch
    645 Halekauwila St., 3rd Fl.
    Honolulu, HI
    96813
    Phone: 808 548-6410

36. Iowa Department of Natural Resources
900 E. Grand Ave., Wallace Building
Des Moines, IA
50309
Phone: 515 281-8690

37. Linn County Health Department Air Pollution Division
751 Center Pt. Road, N.E.
Cedar Rapids, IA
52402
Phone: 319 398-3551

38. Idaho Division of Env., Air Quality Bureau
450 W. State Street
Boise, ID
83720
Phone: 208 334-5362

39. Illinois Env. Protection Agency, Div. of Air Pollution Control
2200 Churchill Road, Box 19276
Springfield, IL
62794
Phone: 217 782-2113

40. Dept. of Inspections & Permits, City of Evanston
2100 Ridge Avenue
Evanston, IL
60204
Phone: 312 866-2952

41. Bedford Park Environmental Quality Control Board
P.O. Box 128
Argo, IL
605010128
Phone: 312 458-2975

42. Indiana Department of Environmental Management
105 South Meridian Street
Indeanapolis, IN
46225
Phone: 317 232-8325

43. Hammond Air Pollution Control
5925 Calumet Avenue
Hammond, IN
46320
Phone: 219 853-6306

44. Indianapolis Air Pollution Control Division
2700 South Belmont Avenue
Indianapolis, IN
46221
Phone: 317 633-5496

45. Vigo County Air Pollution Control
201 Cherry Street
Terre Haute, IN
47807
Phone: 812 238-8433

46. Kansas Department of Health and Env., Bur. of Air Qual. & Rad. Cntrl
Bldg. 321, Forbes Field
Topeka, KS
66620
Phone: 913 862-9360

47. Topeka-Shawnee County Health Department
P.O. Box 118, 1615 West 8th
Topeka, KS
66601
Phone: 913 233-8961

48. Kansas City-Wyandotte Co. Dept. of Health; Air Pollution Control
619 Ann Avenue
Kansas City, KS
66101
Phone: 913 321-4803

49. Kentucky Ntrl. Resource & Env. Prot. Cabinet, Div. for Air Quality
18 Reilly Road
Frankfort, KY
40601
Phone: 502 564-3382

50. Louisiana Dept. of Environmental Quality, Air Quality Division
Box 44096
Baton Rouge, LA
70804
Phone: 504 342-1201

51. Massachusetts Dept. of Env. Qual. Eng., Div. of Air Quality Control
One Winter Street, 8th Floor
Boston, MA
02108
Phone: 617 292-5630

52. Maryland Dept. of Health & Mental Hygiene, Air Management Admin.
201 W. Preston Street
Baltimore, MD
21201
Phone: 301 383-2779

53. Baltimore County Division of Air Pollution Control
Maryland Avenue & Hellen Road
Towson, MD
21204
Phone: 301 494-3775

54. Maine Dept. of Env. Protection, Bur. of Air Quality Control
Statehouse Station 17
Augusta, ME
04333
Phone: 207 289-2437

55. Michigan Department of Natural Resources, Air Quality Division
Box 30028
Lansing, MI
48909
Phone: 517 373-7023

56. Air Pollution Control Division, Wayne Co. Health Department
2211 E. Jefferson Street
Detroit, MI
48207
Phone: 313 567-4100

57. Minnesota Pollution Control Agency, Division of Air Quality
520 Lafayette Road, N.
St. Paul, MN
55155
Phone: 612 296-7373

58. Missouri Dept. of Natural Resources, Air Pollution Control Program
Box 176
Jefferson City, MO
65102
Phone: 314 751-4817

59. St. Louis County Air Pollution Control
801 South Brentwood Blvd.
Clayton, MO
63105
Phone: 314 854-6921

60. Springfield-Greene County Air Pollution Control Authority
227 East Chestnut Expressway
Springfield, MO
65802
Phone: 417 864-1662

61. Mississippi Dept. of Natural Resources, Bureau of Pollution Control
2380 Highway 80 West
Jackson, MS
39209
Phone: 601 961-5171

62. Montana Dept. of Health and Env. Sciences, Air Quality Bureau
Cogswell Building
Helena, MT
59620
Phone: 406 444-3454

63. Missoula Co. Health Dept.
301 W. Alder
Missoula, MT
59802
Phone: 406 721-5700

64. North Carolina Div. of Env. Mgmt., Air Quality Section
Box 27687
Raleigh, NC
27611
Phone: 919 733-3340

65. Forsyth County Environmental Affairs Department
537 N. Spruce Street
Winston-Salem, NC
27101
Phone: 919 727-8060

66. W.N.C. Regional Air Pollution Control Agency
P.O. Box 7215
Asheville, NC
28807
Phone: 704 255-5655

67. North Dakota Dept. of Health, Division of Environmental Engineering
1200 Missouri Ave., Bx. 5520, R304
Bismarck, ND
58502-5520
Phone: 701 224-2348

68. Nebraska Dept. of Env. Control, Air Pollution Div.
Box 94877
Lincoln, NE
68509
Phone: 402 471-2186

69. New Hampshire Dept. of Env. Services, Air Resources Div.
64 N. Main Street, Box 2033
Concord, NH
03302
Phone: 603 271-1370

70. New Jersey Dept. of Env. Prot., Bur. of Air Pollution Control
CN 027, 401 E. State Street
Trenton, NJ
08625
Phone: 609 292-6704

71. Hudson Regional Health Commission
313 Harrison Avenue
Harrison, NJ
07029
Phone: 201 485-7002

72. New Mexico Env. Improvement Div., Air Quality Bureau
Box 968
Santa Fe, NM
87504
Phone: 505 827-0070

73. Nevada Division of Environmental Protection, Air Quality Control
201 S. Fall Street
Carson City, NV
89710
Phone: 702 885-5065

74. Air Pollution Control Div., Dist. Health Dept. of Clark Co.
625 Shadow Lane
Las Vegas, NV
89106
Phone: 702 383-1276

75. New York Dept. of Env. Conservation, Div. of Air Quality
50 Wolf Road
Albany, NY
12233
Phone: 518 457-7688

76. Nassau Co. Dept. of Health, Bur. of Air Pollution Control
240 Old Country Road
Mineola, NY
11501
Phone: 516 535-3671

77. Ohio EPA, Division of Air Pollution Control
P.O. Box 1049, 1800 Watermark
Columbus, OH
43266
Phone: 614 481-4310

78. Cleveland Div. of Air Pol. Control, Dept. of Public Health
2735 Broadway Avenue
Cleveland, OH
44115
Phone: 216 664-3591

79. Montgomery Co. Regional Air Pollution Control Agency
Box 972, 451 W. Third Street
Dayton, OH
45422
Phone: 513 225-4435

80. Toledo Environmental Services Agency
26 Main Street
Toledo, OH
43605
Phone: 419 693-0350

81. Lake County General Health District
P.O. Box 490, 105 Main Street
Painesville, OH
44077
Phone: 216 357-2543

82. Southwest Ohio Air Pollution Control Agency
2400 Beekman Street
Cincinnati, OH
45214
Phone: 513 251-8777

83. North Ohio Valley Air Authority
814 Adams Street
Steubenville, OH
43952
Phone: 614 282-3303

84. Oklahoma Dept. of Health, Air Quality Service
Box 53551, 1000 NE 10th Street
Oklahoma City, OK
73152
Phone: 405 271-5220

85. Tulsa City-County Health Dept., Air Quality Control
4616 East 15th
Tulsa, OK
74112
Phone: 918 744-1000

86. Oregon Dept. of Env. Quality, Air Quality Control Division
811 SW 6th Avenue
Portland, OR
97204
Phone: 503 229-6411

87. Lane Regional Air Pollution Authority
225 North 5th, Suite 501
Springfield, OR
97477
Phone: 503 726-2514

88. Pennsylvania Dept. of Env. Resources, Bur. of Air Quality Control
200 N. Third Street
Harrisburg, PA
17120
Phone: 717 787-9702

89. Philadelphia Dept. of Public Health, Air Management Services
500 S. Broad Street, 2nd Floor
Philadelphia, PA
19146
Phone: 215 686-7842

90. Allegheny Co. Bureau of Air Pollution Control
301 39th Street
Pittsburgh, PA
15201
Phone: 412 578-8111

91. Puerto Rico Environmental Quality Board
Box 11488
Santurce, PR
00910
Phone: 809 722-0077

92. Rhode Island Dept. of Env. Mgmt., Div. of Air & Haz. Materials
75 Davis Street, 204 Cannon Bldg.
Providence, RI
02908
Phone: 401 277-2808

93. South Carolina Dept. of Health & Env. Cntrl, Bur. of Air Qual. Cntrl
2600 Bull Street
Columbia, SC
29201
Phone: 803 758-5406

94. South Dakota Dept. of Water & Nat. Res., Office of Air Quality
Foss Building, Room 217
Pierre, SD
57501
Phone: 605 773-3153

95. Tennessee Dept. of Public Health, Div. of Air Pollution Control
150 9th Ave. N., Terra Bldg.
Nashville, TN
37203
Phone: 615 741-3651

96. Chattanooga-Hamilton Co. Air Pollution Control Bureau
3511 Rossville Blvd.
Chattanooga, TN
37407
Phone: 615 867-4321

97. Knox County Dept. of Air Pollution Control
400 Main Avenue, City-Co. Bldg.
Knoxville, TN
37902
Phone: 615 521-2488

98. Memphis-Shelby Co. Dept. of Health
814 Jefferson Ave.
Memphis, TN
38105
Phone: 901 576-7775

99. Metro Health Dept., Pollution Control Division
311 23rd Avenue, North
Nashville, TN
37203
Phone: 615 327-9313

100. Texas Air Control Board
6330 Highway 290 East
Austin, TX
78723
Phone: 512 451-5711

101. Utah Dept. of Health, Bureau of Air Quality
Box 2500
Salt Lake City, UT
84110
Phone: 801 533-6108

102. Virginia Air Pollution Control Board
9th St. Office Bldg., Rm.801
Richmond, VA
23219
Phone: 804 786-4867

103. Dept. of Conserv. & Cultural Affairs, U.S. Virgin Islands
P.O. Box 4340
Charlotte Amalie, VI
00801
Phone: 809 725-5140

104. Vermont Dept. of Env. Conservation, Air Pollution Control Division
103 S. Main Street, Bldg. 3 South
Waterbury, VT
05676
Phone: 802 244-8731

105. Washington Dept. of Ecology, Office of Haz. Sub. & Air Quality Cntrl
Row Six, P.B. -11
Olympia, WA
98504
Phone: 206 459-6711

106. Grant County Clean Air Authority
P.O. Box 37
Ephrata, WA
98823
Phone: 509 754-2011

107. Olympia Air Pollution Control Authority
120 E. State Ave.
Olympia, WA
98501
Phone: 206 352-4881

108. Puget Sound Air Pollution Control Agency
200 W. Mercer Street #205
Seattle, WA
981193958
Phone: 206 344-7335

109. South West Air Pollution Control Authority
1308 N.E. 134th Street, Suite D
Vancouver, WA
98685
Phone: 206 574-3058

110. Wisconsin Dept. of Nat. Res., Bur. of Air Management
Box 7921
Madison, WI
53707
Phone: 608 266-7718

111. West Virginia Air Pollution Control Commission
1558 Washington Street, East
Charleston, WV
25311
Phone: 304 348-3286

112. Wyoming Dept. of Env. Quality, Air Quality Division
122 West 25th Street
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Source: National Air Toxics Information Clearinghouse (NATICH)

Appendix C:

Known Health and Environmental Effects of TRI Chemicals

EPA did a preliminary search of existing scientific information and put together a matrix of chemicals and their known effects, included here as Appendix C.

An X on the matrix indicates that a chemical had an effect. However, no information is given regarding the severity of the effect, the appropriateness of the study method, or the presence of conflicting test results. Absence of an X may indicate either that there is no concern, that effects were not reported, or that the chemical has not been tested. It is likely that as more tests are completed, more Xs will appear on this matrix.

The categories, and what they mean:

Carcinogenicity - can cause cancer in humans and/or laboratory animals, e.g. benzene which can cause leukemia.

Heritable Genetic and Chromosomal Mutation - can change genes and chromosomes so that these mutations will be passed to the next generation, e.g. hydrogen fluoride.

Developmental Toxicity - can cause birth defects or miscarriage, e.g. 1,3-butadiene.

Reproductive Toxicity - can damage the ability of men and women to reproduce, e.g. lead.

Acute Toxicity - can cause death from even short exposures, either through the lungs, the mouth or the skin, e.g. phosgene or mustard gas.

Chronic Toxicity - can cause long-term damage other than cancer, like liver, kidney or lung damage, e.g. carbon tetrachloride.

Neurotoxicity - can harm the nervous system by affecting the brain, spinal cord, or nerves, e.g. mercury.

Environmental Toxicity - can harm wildlife and vegetation when released to water or soil, e.g. cadmium or aluminum.

Bioaccumulation - can enter the bodies of plants and animals and is not easily expelled, thus accumulating over time and repeated exposure, e.g. the pesticide chlordane.

Persistence - does not break down easily, thus persisting and accumulating in the environment, soil, and groundwater, e.g. 1,1,1-trichloroethane.

CAS NUMBER	CHEMICAL NAME	Carcinogenicity	NTP Bioassay Results	NTP Classification	IARC Classification	EPA Classification	Genetox Evaluation	Heritable Genetic and Chromosomal Mutation	Developmental Toxicity	Reproductive Toxicity	Acute Toxicity	Chronic Toxicity	Neurotoxicity	Environmental Toxicity (LC50 < or = 10 ppm)	Environmental Toxicity (LC50 < or = 100 ppm)	Bioaccumulation	Persistence
		TEST	CLASS														
75070	Acetaldehyde	X			2B						X RTECS				X AQ2		
60355	Acetamide	X			2B	B2	SP										X EV
67641	Acetone											X HEA		X AQ2	X AQ2		X HEA
75058	Acetonitrile							X HEEP	X NSDB	X HEEP		X HEEP					X HEEP
53963	2-Acetylaminofluorene	X		CS		B2	SP										
107028	Acrolein									X HAD		X HAD	X HAD	X HAD	X HAD	X HAD	
79061	Acrylamide	X			2B			X G		X HEEP	X HEEP	X HEEP	X HEEP	X AQ2	X AQ2		
79107	Acrylic acid										X HEEP	X NSDB			X HEEP		
107131	Acrylonitrile	X		CS	2A	B1	SP	X HAD	X NSDB	X HAD	X HAD	X HAD		X HAD	X HAD		X HAD
309002	Aldrin	X	P		3	B2	LP	X ATSDR	X ATSDR	X ATSDR	X ATSDR	X ATSDR	X HEEP	X HEEP	X HEEP	X LogP	
107051	Allyl Chloride	X				B2		X HEEP		X RTECS	X HEEP	X HEEP	X HEEP	X HEEP	X HEEP		
1344281	Aluminum oxide											X NSDB*					
7429905	Aluminum (fume or dust)	X			1*												
117793	2-Aminoanthraquinone	X	P		3							X NSDB					
60093	4-Aminoazobenzene	X			2B		LP										
92671	4-Aminobiphenyl	X		CA	1		SP										
82280	1-Amino-2-methylanthraquinone	X	P	CS	3												
7664417	Ammonia										X RTECS	X NSDB		X AQ2	X AQ2		
6484522	Ammonium nitrate (solution)											X NSDB*					
7783202	Ammonium sulfate (solution)													X AQ1	X AQ1		
62533	Aniline	X			3		LP				X HEEP	X HEEP		X HEEP	X HEEP		X HEA
90040	o-Anisidine	X		CS	2B							X NSDB	X NSDB				
104949	p-Anisidine																
134292	o-Anisidine hydrochloride	X	P	CS	AP							X NSDB	X NSDB				
120127	Anthracene											X NSDB		X HEEP	X HEEP	X HEEP	X HEEP
7440360	Antimony									X HEEP		X HEEP				X HEEP	
7440382	Arsenic	X		CA	1	A		X ATSDR			X ATSDR	X ATSDR	X ATSDR	X HEEP	X HEEP	X HEA	
	Arsenic acid (7778394)	X				A						X HEA					
	Arsenic disulfide (12044790)	X				A											
	Arsenic pentoxide (1303282)	X				A											
	Arsenic trichloride (7784352)	X				A											
	Arsenic trioxide (1327533)	X				A					X ATSDR						
	Arsenic trisulfide (1303339)	X				A											
	Calcium arsenate (7778441)	X				A											
	Calcium arsenite (27152574)	X				A											
	Cupric acetoarsenite (13002038)	X				A											
	Lead arsenate (7784409)	X				A						X HEA					
	Potassium arsenate (7784410)	X				A											

CAS NUMBER	CHEMICAL NAME	Carcinogenicity TEST	Carcinogenicity CLASS	NTP Ames/Salmonella Results	NTP Classification	IARC Classification	EPA Classification	Genetox Evaluation	Heritable Genetic and Chromosomal Mutation	Developmental Toxicity	Reproductive Toxicity	Acute Toxicity	Chronic Toxicity	Neurotoxicity	Environmental Toxicity (LC50 < or = 10 ppm)	Environmental Toxicity (LC50 < or = 100 ppm)	Bioaccumulation	Persistence
	Potassium arsenite (10124502)	X					A											
	Sodium arsenate (7778430)	X					A		X ATSDR				X HEA					
	Sodium arsenite (7784465)	X					A		X ATSDR				X HEA					
1332214	Asbestos	X	CA		1	A	SP						X HAD					
492808	Auramine	X	CA*		2B, 1*	B2												
7440393	Barium								X HEA				X HEA					
	Barium carbonate dust (513779)								X HEA				X HEA					
	Barium chloride (10361372)												X HEA					
98873	Benzal chloride	X			3*						X RTECS							
55210	Benzamide																	
71432	Benzene	X	CA	P	1	A	SP		X ATSDR	X ATSDR			X ATSDR		X AQ2	X AQ2		X HEA
92875	Benzidine	X	CA		1	A	SP				X HEEP		X HEEP		X HEEP	X HEEP		
98077	Benzoic trichloride	X	CS		2B*	B2	SP		X HEEP				X HEEP					
98884	Benzoyl chloride								X HEEP		X HEEP		X HEEP		X HEEP	X HEEP		
94360	Benzoyl peroxide																	
100447	Benzyl chloride	X			3*	C	LP		X HEEP		X HEEP		X HEEP	X HSDB*	X HEEP	X HEEP		
7440417	Beryllium	X	CS		2A	B1					X ATSDR		X ATSDR					
	Beryllium chloride (7787475)	X				B2					X ATSDR							
	Beryllium fluoride (7787497)	X				B2					X ATSDR							
	Beryllium hydroxide (13327327)																	
	Beryllium nitrate (7787555)	X				B2												
	Beryllium oxide (1304569)	X			2A													
	Beryllium phosphate (13598157)										X ATSDR							
	Beryllium sulfate (13510491)	X			2A	B2					X ATSDR		X ATSDR					
	Zinc beryllium silicate (39413473)	X			2A													
92524	Biphenyl								X HSDB				X HEEP		X HEEP	X HEEP		
75252	Bromoform												X HSDB*	X HSDB*		X HEEP		
74839	Bromomethane	X			3						X HEEP		X HEEP	X HEEP		X HEEP		X HEEP
106990	1,3-Butadiene	X		P	2B	B2			X HEEP	X HEEP			X HEEP	X HEEP		X HEEP		
112345	2(B-Butoxy-ethoxy)ethanol																	
141322	Butyl acrylate														X AQ3	X AQ3		
71363	n-Butyl alcohol												X HSDB					
78922	sec-Butyl alcohol																	
75650	tert-Butyl alcohol																	
85687	Butyl benzylphthalate												X HSDB		X AQ2	X AQ2		
106887	1,2-Butylene oxide																	

VVV 00001017

CAS NUMBER	CHEMICAL NAME	Carcinogenicity TEST	Carcinogenicity CLASS	NTP Bioassay Results	NTP Classification	IARC Classification	EPA Classification	Genetox Evaluation	Heritable Genetic and Chromosomal Mutation	Developmental Toxicity	Reproductive Toxicity	Acute Toxicity	Chronic Toxicity	Neurotoxicity	Environmental Toxicity (LC50 < or = 10 ppm)	Environmental Toxicity (LC50 < or = 100 ppm)	Bioaccumulation	Persistence
510156	Chlorobenzilate	X	P		3						X HEEP		X HEEP		X HEEP	X HEEP		X HEEP
75003	Chloroethane	X				C												
111444	bis(2-Chloroethyl)ether	X			3	B2						X RTECS	X HSDB					X HEEP
67663	Chloroform	X		CS	2B	B2	SP		X ATSDR		X ATSDR	X RTECS	X ATSDR			X AQ1		X HEA
74873	Chloromethane	X				C			X HSDB		X HSDB		X HSDB					X EV
542881	bis(Chloromethyl)ether	X		CA	1	A						X RTECS						
107302	Chloromethyl methyl ether	X		CA	1	A	LP					X RTECS						
108601	bis(2-Chloro-1-methylethyl)ether	X	P		3							X RTECS	X HSDB					
126998	Chloroprene							X G	X HEEP		X HEEP	X HEEP	X HEEP	X HSDB*				
1897456	Chlorothalonil	X	P		3		LP						X HEEP	X HEEP	X HEEP	X HEEP		X HEEP
7440473	Chromium (VI) (Chromic acid)	X		CA	1	A						X ATSDR	X ATSDR		X AQ2	X AQ2		
	Ammonium bichromate (7789095)	X				A						X ATSDR						
	Ammonium chromate (7788989)	X				A												
	Calcium chromate (13765190)	X			1	A							X ATSDR					
	Lithium chromate (14307358)	X				A												
	Potassium bichromate (7778509)	X				A						X ATSDR						
	Potassium chromate (7789006)	X				A												
	Sintered calcium chromate	X			1													
	Sodium bichromate (10588019)	X				A						X ATSDR						
	Sodium chromate (775113)	X				A						X ATSDR						
	Strontium chromate (7789062)	X			1	A							X ATSDR					
	Zinc chromate (13530659)	X			1													
7440484	Cobalt												X HSDB					
7440508	Copper								X HEA	X HSDB					X AQ1	X AQ1	X HEA	
120718	p-Cresidine	X	P	CS	2B													
108394	m-Cresol											X RTECS			X HEEP	X HEEP		
95487	o-Cresol											X RTECS	X HEEP	X HEEP	X HEEP	X HEEP		
106445	p-Cresol											X RTECS			X HEEP	X HEEP		
1319773	Cresol (mixed isomers)											X RTECS	X HEEP		X HEEP	X HEEP		
98828	Cumene												X HEED	X HSDB*	X HEED	X HEED		
80159	Cumene hydroperoxide											X RTECS				X AQ2		
135206	Cupferron	X	P	CS			SP											
57125	Cyanide compounds								X ATSDR			X ATSDR	X ATSDR	X ATSDR	X ATSDR	X ATSDR		
110827	Cyclohexane															X AQ2		
94757	2,4-D acid								X DWCD	X HSDB	X DWCD		X DWCD		X AQ2	X AQ2		
1163195	Decabromodiphenyl oxide	X	P						X HEEP				X HEEP				X HEEP	X HEEP
2303164	Diallate	X			3	B2				X HSDB					X HEEP	X HEEP		X HEEP

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CAS NUMBER	CHEMICAL NAME	Carcinogenicity TEST	Carcinogenicity CLASS	NTP Bioassay Results	NTP Classification	IARC Classification	EPA Classification	Genetox Evaluation	Heritable Genetic and Chromosomal Mutation	Developmental Toxicity	Reproductive Toxicity	Acute Toxicity	Chronic Toxicity	Neurotoxicity	Environmental Toxicity (LC50 / [illegible] ppm)	Environmental Toxicity ([illegible]LC50 / [illegible] ppm)	Bioaccumulation	Persistence
123728	Butyraldehyde														X AQ2			
2650182	C.I. Acid Blue 9, diammonium salt																	
3844459	C.I. Acid Blue 9, disodium salt	X			AP													
4680788	C.I. Acid Green 3	X			AP													
569642	C.I. Basic Green 4										X RTECS			X AQ2	X AQ2			
989388	C.I. Basic Red 1	X			AP													
2832408	C.I. Disperse Yellow 3	X	P															
81889	C.I. Food Red 15	X			AP							X NSDB						
3761533	C.I. Food Red 5	X			AP		SP											
3118976	C.I. Solvent Orange 7																	
842079	C.I. Solvent Yellow 14	X	P		AP													
97563	C.I. Solvent Yellow 3	X			AP		SP									X Logp		
128665	C.I. Vat Yellow 4	X	P															
7440439	Cadmium	X		CS	2A	B1	LP			X ATSDR	X ATSDR	X ATSDR	X HEA		X AQ2	X AQ2	X ATSDR	
	Cadmium acetate (543908)	X				B1							X ATSDR					
	Cadmium bromide (7789426)	X				B1												
	Cadmium chloride (10108642)	X			2B	B1				X ATSDR	X ATSDR	X HEEP	X ATSDR					
	Cadmium chromate	X			AP													
	Cadmium oxide (1306190)	X			2B	B1						X ATSDR						
	Cadmium sulphate (10124364)	X			2B													
	Cadmium sulphide (1306236)	X			2B													
156627	Calcium cyanamide											X RTECS	X NSDB*					X EV
133062	Captan	X	P		3		LP	X	G	X HEEP	X HEEP	X HEEP	X HEEP		X AQ2	X AQ2		X EV
63252	Carbaryl									X HEEP	X HEEP	X HEEP	X HEEP	X NSDB	X HEEP	X HEEP	X EV	X HEEP
75150	Carbon disulfide									X HEEP	X HEEP		X HEEP	X HEEP		X HEEP		X HEEP
56235	Carbon tetrachloride	X		CS	2B	B2	SP			X HAD		X HAD	X HAD	S HAD		X HAD		X HAD
463581	Carbonyl sulfide												X NSDB					
120809	Catechol											X RTECS			X AQ2	X AQ2		
133904	Chloramben	X	P															
57749	Chlordane	X			3	B2	LP			X DWCD	X NSDB	X DWCD	X HEA	X HEA			X HEA	X HEA
76131	Chlorinated fluorocarbon												X NSDB*					
7782505	Chlorine									X NSDB	X NSDB	X RTECS	X NSDB		X AQ1	X AQ1		
10049044	Chlorine dioxide																	
79118	Chloroacetic acid											X RTECS						
532274	2-Chloroacetophenone											X RTECS						
108907	Chlorobenzene										X HAD		X HAD		X HAD	X HAD		

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		TEST	CLASS																									
615054	2,4-Diaminoanisole	X			2B																							
39156417	2,4-Diaminoanisole sulfate	X	P	CS	2B		SP																					
101804	4,4'-Diaminodiphenyl ether	X			2B												X	HSDB*									
95807	2,4-Diaminotoluene	X	P	CS	2B		SP	X	G																			
25376458	Diaminotoluene (mixed isomers)	X	P		AP	B2	SP	X	G								X	HSDB*									
334883	Diazomethane	X			3		LP																					
132649	Dibenzofuran																											
96128	1,2-Dibromo-3-chloropropane	X	P	CS	2B	B2	SP			X	DWCD	X	DWCD	X	DWCD	X	DWCD					X	AQ3			X	DWCD	
106934	1,2-Dibromoethane	X	P	CS	2A	B2	SP	X	G	X	HEEP	X	HEEP	X	RTECS	X	HEEP					X	HEEP			X	HEEP	
126727	tris(2,3-Dibromopropyl)phosphate	X	P	CS	2B	B2	SP	X	G	X	HSDB	X	HSDB															
84742	Dibutyl phthalate									X	HSDB	X	HSDB				X	HSDB			X	HEEP	X	HEEP	X	HEEP		
95501	1,2-Dichlorobenzene													X	HAD		X	HAD			X	HAD	X	HAD	X	HAD		
541731	1,3-Dichlorobenzene																				X	HAD	X	HAD				
106467	1,4-Dichlorobenzene	X	P		2B												X	ATSDR			X	AQ3	X	AQ2	X	HAD	X	HAD
25321226	Dichlorobenzene (mixed isomers)	X	P														X	HAD			X	HAD	X	HAD	X	HAD		
91941	3,3'-Dichlorobenzidine	X		CS	2B	B2	SP																				X	EV
75274	Dichlorobromomethane																										X	HEEP
107062	1,2-Dichloroethane	X	P	CS	2B	B2	SP	X	G	X	HEEP	X	HEEP				X	HEEP									X	HEEP
540590	1,2-Dichloroethylene																											
75092	Dichloromethane	X	P		2B	B2											X	ATSDR									X	HEA
120832	2,4-Dichlorophenol																				X	HEEP	X	HEEP				
78875	1,2-Dichloropropane	X	P		3																		X	AQ2				
542756	1,3-Dichloropropylene	X	P		2B	B2								X	HEEP	X	HEEP				X	HEEP	X	HEEP			X	HEEP
62737	Dichlorvos									X	HSDB	X	HSDB	X	RTECS						X	AQ2	X	AQ2			X	EV
115322	Dicofol	X	P		3									X	RTECS						X	AQ2	X	AQ2				
1464535	Diepoxybutane	X		CS	2B	B2	SP	X	G					X	RTECS													
111422	Diethanolamine																						X	AQ2				
64675	Diethyl sulfate	X		CS	2A		SP	X	G																			
117817	Di(2-ethylhexyl)phthalate	X	P	CS	2B	B2	SP	X	G	X	ATSDR	X	ATSDR	X	ATSDR	X	ATSDR				X	AQ2	X	AQ1	X	EV		
84662	Diethylphthalate																				X	HEEP	X	HEEP				
119904	3,3'-Dimethoxybenzidine	X		CS	2B	B2	SP									X	HEEP											
57147	1,1-Dimethyl hydrazine	X		CS	2B	B2	SP							X	HEEP	X	HEEP	X	HEEP			HEEP	X	HEEP				
131113	Dimethyl phthalate													X	RTECS								X	HEEP				
77781	Dimethyl sulfate	X		CS	2A	B2	SP	X	G					X	HEEP	X	HEEP	X	HEEP		X	HEEP	X	HEEP			X	HEEP
60117	4-Dimethylaminoazobenzene	X		CS	2B	B2	SP							X	RTECS	X									X	LogP		
121697	N,N-Dimethylaniline															X	HSDB	X	HSDB									

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119937	3,3'-Dimethylbenzidine	X	CS		AP	B2	SP											
79447	Dimethylcarbamyl chloride	X	CS		2A	B2	SP					X RTECS						
105679	2,4-Dimethylphenol														X HEEP	X HEEP		
534521	4,6-Dinitro-o-cresol											X HEEP	X HEEP		X HEEP	X HEEP		X HEEP
51285	Dinitrophenol									X NSDB	X NSDB	X RTECS	X HSDB		X AQ2	X AQ2		
121142	2,4-Dinitrotoluene	X	P			B2					X HEEP		X HEEP	X HEEP	X HEEP	X HEEP		
606202	2,6-Dinitrotoluene	X				C						X HEEP	X HEEP	X HEEP		X HEEP		
117840	n-Dioctyl phthalate											X RTECS	X HSDB*				X LogP	
123911	1,4-Dioxane	X	P	CS	2B	B2	SP											
122667	1,2-Diphenylhydrazine	X	P			B1							X HEA		X HEEP	X HEEP		
1937377	Direct Black 38	X	CS		2A		SP						X HEEP					
2602462	Direct Blue 6	X	P	CS	2A					X NSDB			X HEEP					
16071866	Direct Brown 95	X	P		2A								X HEEP					
106898	Epichlorohydrin	X	CS		2A	B2	SP	X	G		X HAD	X HAD	X HAD	X HAD		X HAD		X HAD
111900	2(B-Ethoxy-ethoxy)ethanol																	
140885	Ethyl acrylate	X	P		2B					X NSDB			X HEEP		X HEEP	X HEEP		X HEEP
541413	Ethyl chloroformate											X RTECS						
100414	Ethylbenzene									X HEA	X NSDB		X HEA		X AQ2	X AQ2		X HEA
74851	Ethylene												X HSDB					
107211	Ethylene glycol												X HSDB					
75218	Ethylene oxide	X	CS		2A	B1		X	G	X HAD	X HAD	X HAD	X HAD	X HAD		X HAD		X HAD
96457	Ethylene thiourea	X	CS		2B	B2	SP	X	G	X HEEP	X HEEP		X HEEP					X HEEP
151564	Ethyleneimine	X			AP		SP	X	G		X NSDB	X RTECS	X HSDB*		X AQ3	X AQ2		X EV
103231	bis(2-Ethylhexyl)adipate	X	P		3			X	G									
2164172	Fluometuron	X	P										X HSDB			X AQ2		
50000	Formaldehyde	X	CS		2A	B1	SP	X	G		X HEEP	X HEEP	X HEEP		X HEEP	X HEEP		
	Glycol ethers																	
	2-Butoxyethanol (111762)									X HEA			X HEA					
	Diethylene glycol methyl ether(111773)										X HEA		X HEA					
	2-Ethoxyethanol (110805)									X HEEP	X HEEP		X HEEP					
	2-Methoxyethanol (109864)									X HEEP	X HEEP		X HEEP					
	2-Methoxypropanol (107892)												X HEA					
76448	Heptachlor	X	P		3	B2	LP				X ATSDR	X ATSDR	X ATSDR	X ATSDR	X AQ2	X AQ2	X LogP	X ATSDR
118741	Hexachlorobenzene	X	CS		2B	B2	SP			X NAD	X HAD	X RTECS	X HAD	X HAD	X HAD	X HAD	X HAD	X HAD
87683	Hexachloro-1,3-butadiene	X			3	C				X NSDB	X NSDB	X RTECS	X HEA		X AQ2	X AQ2	X HEA	X HEA
77474	Hexachlorocyclopentadiene									X NSDB	X NSDB	X RTECS	X HEEP	X HSDB*	X AQ1	X AQ1	X HEEP	X HEEP

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CAS NUMBER	CHEMICAL NAME	Carcinogenicity TEST	Carcinogenicity CLASS	NTP Bioassay Results	NTP Classification	IARC Classification	EPA Classification	Genetox Evaluation	Heritable Genetic and Chromosomal Mutation	Developmental Toxicity	Reproductive Toxicity	Acute Toxicity	Chronic Toxicity	Neurotoxicity	Environmental Toxicity (LC50 < or = 10 ppm)	Environmental Toxicity (LC50 < or = 100 ppm)	Bioaccumulation	Persistence
67721	Hexachloroethane	X	P		3	C	LP			X HSDB	X HSDB		X HSDB		X HEEP	X HEEP		
1335871	Hexachloronaphthalene																	
680319	Hexamethylphosphoramide	X		CS	2B		SP	X	G				X HSDB					
302012	Hydrazine	X		CS	2B	B2	SP					X RTECS	X HEEP		X HEEP	X HEEP		
10034932	Hydrazine sulfate	X		CS	AP		SP					X RTECS			X HEEP	X HEEP		
7647010	Hydrochloric acid											X RTECS	X HSDB					
74908	Hydrogen cyanide											X ATSDR	X ATSDR		X AQ2	X AQ2		
7664393	Hydrogen fluoride							X	G	X HSDB	X HSDB	X RTECS	X HSDB					
123319	Hydroquinone											X HEEP	X HEEP		X HEEP	X HEEP		
78842	Isobutyraldehyde												X HSDB					
67630	Isopropyl alcohol	X		CA*	1*								X HSDB	X HSDB				
80057	4,4'-Isopropylidenediphenol																	
7439921	Lead	X			2B					X ATSDR	X ATSDR		X ATSDR	X ATSDR	X HEEP	X HEEP	X HEA	X HEA
	Lead acetate (301042)	X		CS	3	B2				X ATSDR			X ATSDR	X ATSDR				
	Lead chloride (7758954)									X ATSDR								
	Lead chromate (7758976)	X			3													
	Lead nitrate (10099748)									X ATSDR			X HEA					
	Lead phosphate (7446277)	X		CS	3	B2												
	Lead subacetate (1335326)	X			3	B2												
58899	Lindane	X		CS	3	C				X HEA	X HEA	X RTECS	X HEA		X AQ1	X AQ1	X LogP	X HEA
108316	Maleic anhydride											X HEEP	X HEEP			X HEEP		
12427382	Maneb									X HEEP	X HEEP		X HEEP	X HEEP	X HEEP	X HEEP		X HEEP
7439965	Manganese										X HEA	X NAD	X HEA	X NAD				X HEA
	Manganese chloride (773015)													X HEA				
	Manganese dioxide (MnO2) (1313139)												X HEA	X HEA				
	Manganese tetroxide (1317357)										X HEA							
108781	Melamine	X	P								X HSDB							
7439976	Mercury									X HEA	X HEA	X DWCD	X DWCD	X DWCD	X AWCD	X AWCD	X AWCD	X MHEU
	Mercury acetate (1600277)												X HEA					
67561	Methanol													X HSDB*				
72435	Methoxychlor									X HEEP	X HEEP		X HEEP	X HEEP	X HEEP	X HEEP	X HEEP	X HEEP
111773	2(2-Methoxy)ethanol																	
96333	Methyl acrylate											X HEEP	X HEEP		X HEEP	X HEEP		
1634044	Methyl tert-butyl ether									X HEEP	X HEEP		X HEEP	X HEA				X HEEP
78933	Methyl ethyl ketone											X HEEP	X HEEP		X HEEP	X HEEP		X HEA
60344	Methyl hydrazine	X					LP											

CAS NUMBER	CHEMICAL NAME	Carcinogenicity TESI	NTP Bioassay Results CLASS	NTP Classification	IARC Classification	EPA Classification	Cancer Evaluation	Heritable Genetic and Chromosomal Mutation	Developmental Toxicity	Reproductive Toxicity	Acute Toxicity	Chronic Toxicity	Neurotoxicity	Environmental Toxicity (LC50 < or = 10 ppm)	Environmental Toxicity (LC50 < or = 100 ppm)	Bioaccumulation	Persistence
74884	Methyl iodide	X	CS	3	C	SP							X HSDB*				X EV
108101	Methyl isobutyl ketone											X HSDB	X HSDB				
624839	Methyl isocyanate							X HEEP	X HEEP	X MEEP							X HEEP
80626	Methyl methacrylate							X HEEP	X HEEP			X HEEP					
74953	Methylene bromide												X HSDB				
101144	4,4'-Methylene bis(2-chloroaniline)	X	CS	2A	B2	SP											
101611	4,4'-Methylenebis(N,N-dimethyl)-benzenamine	X	P CS	3		SP						X HEEP					
101688	Methylene bis(phenylisocyanate)																
101779	4,4'-Methylenedianiline	X	CS	2B								X HSDB					
90948	Michler's ketone	X	P CS			SP											
1313275	Molybdenum trioxide										X RTECS	X HSDB	X HSDB				
505602	Mustard gas	X	CA	1		LP	X G				X RTECS						
134327	alpha-Naphthylamine	X		NS	C												
91598	beta-Naphthylamine	X	CA	1	A	SP											
91203	Naphthalene							X HEEP				X HEEP		X MEEP	X MEEP	X MEEP	
7440020	Nickel	X	CA*,CS**	1	A			X ATSDR	X ATSDR	X ATSDR	X ATSDR	X ATSDR			X AQ2		
	Nickel ammonium sulfate (15699180)																
	Nickel carbonyl (13463393)	X			B2			X HEA									
	Nickel chloride (7718549)							X ATSDR	X ATSDR			X ATSDR					
	Nickel cyanide (557197)																
	Nickel dust (7440020)											X HEA					
	Nickel hydroxide (12054487)	X			C												
	Nickel nitrate (13138459)																
	Nickel oxide (1313991)											X HEA					
	Nickel refinery dust	X	CA		A							X ATSDR					
	Nickel subsulfate																
	Nickel subsulphide (12035722)	X		AP	A												
	Nickel sulfate (7786814)	X			C							X ATSDR					
	Nickel sulfide dust (12035722)											X HEA					
7697372	Nitric acid										X RTECS						
139139	Nitrilotriacetic acid	X	P CS			SP						X HSDB*					
99592	5-Nitro-o-anisidine	X	P CS	3		SP											
98953	Nitrobenzene									X HEEP	X RTECS	X HEEP		X MEEP	X MEEP		
92933	4-Nitrobiphenyl	X		AP		LP											
1836755	Nitrofen	X	P CS	2B		SP		X HSDB	X HSDB			X HSDB*	X HSDB*	X AQ2	X AQ2		
51752	Nitrogen mustard	X	CS	2A		SP	X G	X HSDB	X HSDB	X RTECS							

VVV 0000101083

CAS NUMBER	CHEMICAL NAME	Carcinogenicity		NTP Bioassay Results	NTP Classification	IARC Classification	EPA Classification	Genetox Evaluation	Heritable Genetic and Chromosomal Mutation		Developmental Toxicity		Reproductive Toxicity		Acute Toxicity		Chronic Toxicity		Neurotoxicity		Environmental Toxicity (LC50 < or = 10 ppm)		Environmental Toxicity (LC50 < or = 100 ppm)		Bioaccumulation		Persistence	
		TEST	CLASS																									
55630	Nitroglycerin																X	AQ2					X	AQ2				
88755	2-Nitrophenol																X	HSDB*	X	HSDB			X	HEEP				
554847	3-Nitrophenol																						X	HEEP				
100027	4-Nitrophenol														X	RTECS	X	HSDB*	X	HSDB*	X	HEEP	X	HEEP				
79469	2-Nitropropane	X		CS	2B	B2	SP			X	HSDB	X	HSDB		X	HEEP	X	HEEP										
924163	N-Nitrosodi-n-butylamine	X		CS	2B	B2	SP																					
55185	N-Nitrosodiethylamine	X		CS	2A	B2	SP	X	G	X	HSDB	X	HSDB		X	RTECS												
62759	N-Nitrosodimethylamine	X		CS	2A	B2	SP	X	G						X	RTECS												
86306	N-Nitrosodiphenylamine	X	P		3	B2	LP										X	ATSDR			X	HEEP	X	HEEP				
156105	p-Nitrosodiphenylamine	X	P	CS																								
621647	N-Nitrosodi-n-propylamine	X		CS	2B	B2	SP																				X	HEEP
759739	N-Nitroso-N-ethylurea	X		CS	2B	B2	SP	X	G	X	HSDB	X	HSDB															
684935	N-Nitroso-N-methylurea	X		CS	2B	B2	SP	X	G	X	HSDB				X	RTECS												
4549400	N-Nitrosomethylvinylamine	X		CS	2B	B2	SP	X	G						X	RTECS												
59892	N-Nitrosomorpholine	X		CS	2B		SP	X	G	X	HSDB						X	HSDB										
16543558	N-Nitrosonornicotine	X		CS	2B																							
100754	N-Nitrosopiperidine	X		CS	2B	B2	SP	X	G						X	RTECS	X	HSDB*			X	AQ3	X	AQ3				
2234131	Octachloronapthalene											X	HSDB*															
20816120	Osmium tetroxide														X	RTECS												
56382	Parathion									X	HSDB	X	HSDB		X	RTECS	X	HSDB			X	AQ2	X	AQ2				
87865	Pentachlorophenol									X	HEA	X	HEEP		X	HEEP	X	HEA			X	HEEP	X	HEEP	X	HEEP	X	HEA
79210	Peracetic acid														X	RTECS	X	HSDB										
108952	Phenol									X	HEEP				X	HEEP	X	HEEP			X	HEEP	X	HEEP	X	EV	X	HEEP
122996	2-Phenoxyethanol																											
106503	p-Phenylenediamine							X	G						X	HEEP	X	HEEP			X	HEEP	X	HEEP				
90437	2-Phenylphenol									X	HEEP	X	HEEP				X	HEEP										
75445	Phosgene														X	HAD											X	EV
7664382	Phosphoric acid																											
7723140	Phosphorous (yellow or white)											X	HSDB		X	RTECS	X	HSDB			X	AQ2	X	AQ2				
85449	Phthalic anhydride																X	HEEP	X	HSDB			X	HEEP				
88891	Picric acid																						X	AQ2				
1336363	Polychlorinated biphenyls (PCB's)	X		CS	2A	B2				X	ATSDR	X	ATSDR		X	ATSDR	X	ATSDR										
1120714	Propane sultone	X		CS	2B	B2	SP																					
57578	beta-Propiolactone	X		CS	2B		SP	X	G						X	RTECS												
123386	Propionaldehyde																X	HSDB*					X	AQ2				
114261	Propoxur																X	HSDB										

CAS NUMBER	CHEMICAL NAME	Carcinogenicity	NTP Bioassay Results	NTP Classification	IARC Classification	EPA Classification	Genetox Evaluation	Heritable Genetic and Chromosomal Mutation	Developmental Toxicity	Reproductive Toxicity	Acute Toxicity	Chronic Toxicity	Neurotoxicity	Environmental Toxicity (LC50 < or = 10 ppm)	Environmental Toxicity (LC50 < or = 100 ppm)	Bioaccumulation	Persistence
		TEST	CLASS														
115071	Propylene																
75569	Propylene oxide	X	P		2A		LP	X G	X HEEP	X HEEP	X HEEP	X HEEP	X NSDB		X HEEP		X HEEP
75558	Propyleneimine	X		CS	AP	B2	SP				X RTECS						
110861	Pyridine											X HEEP			X HEEP		X HEEP
91225	Quinoline										X HEEP	X HEEP		X HEEP	X HEEP		X HEEP
106514	Quinone										X HEEP			X HEEP	X HEEP		
82688	Quintozene	X			AP		LP		X HSDB	X HSDB				X AQ4	X AQ4	X EV	
81072	Saccharin	X		CS	2B	C	SP	X G	X HSDB	X HSDB							
94597	Safrole	X		CS	2B	B2	SP			X HSDB		X HSDB					
7782492	Selenium								X HEA	X HEA		X HEA		X AQ2	X AQ2		
	Sodium selenate (13410010)								X HEA	X HEA							
	Sodium selenite (10102188)											X HEA					
7440224	Silver											X DWCD					
1310732	Sodium hydroxide (solution)														X AQ2		
100425	Styrene	X			2B		LP	X G	X HEEP			X HEEP		X HEEP	X HEEP		
96093	Styrene oxide	X			2A		LP		X HSDB	X HSDB							
7664939	Sulfuric acid										X RTECS	X HEA			X AQ2		
100210	Terephthalic acid												X HSDB[a]				X HEEP
79345	1,1,2,2-Tetrachloroethane	X	P		3	C	LP		X HSDB			X HEA	X HEA	X AQ2	X AQ2		X HEA
127184	Tetrachloroethylene	X	P		2B	B2	LP		X ATSDR	X ATSDR		X ATSDR	X ATSDR		X HEEP		X HEA
961115	Tetrachlorvinphos	X			3							X HEEP		X HEEP	X HEEP		X HEEP
7440280	Thallium																
62555	Thioacetamide	X		CS	2B	B2	SP	X G				X HSDB					
139651	4,4'-Thiodianiline	X	P		2B					X HSDB							
62566	Thiourea	X		CS	2B	B2	SP		X HSDB	X HSDB	X RTECS						
1314201	Thorium dioxide	X		CA													
7550450	Titanium chloride										X RTECS						
108883	Toluene								X HAD	X HAD				X HAD	X HAD		
584849	Toluene-2,4-diisocyanate	X		CS	2B						X HEEP	X HEEP		X HEEP	X HEEP		
91087	Toluene-2,6-diisocyanate										X RTECS	X HSDB					
95534	o-Toluidine	X		CS	2B	B2	SP					X HEEP			X HEEP		
636215	o-Toluidine hydrochloride	X	P	CS	NS,AP	B2	SP										
8001352	Toxaphene	X	P	CS	2B	B2			X HEA	X HSDB	X RTECS	X HEA	X HEA	X AQ2	X AQ2	X HEA	X HEA
68768	Triaziquone	X			3		SP	X G		X HSDB							
52686	Trichlorfon								X HSDB	X HSDB	X RTECS	X HSDB		X AQ2	X AQ2		X EV
120821	1,2,4-Trichlorobenzene								X HAD			X HAD		X HAD	X HAD	X HAD	X HAD

VVV 0000101085

VVV 000010186

CAS NUMBER	CHEMICAL NAME	Carcinogenicity TEST	Carcinogenicity CLASS	NTP Bioassay Results	NTP Classification	IARC Classification	EPA Classification	Genetox Evaluation	Heritable Genetic and Chromosomal Mutation	Developmental Toxicity	Reproductive Toxicity	Acute Toxicity	Chronic Toxicity	Neurotoxicity	Environmental Toxicity (LC50 < or = 10 ppm)	Environmental Toxicity (LC50 < or = 100 ppm)	Bioaccumulation	Persistence
71556	1,1,1-Trichloroethane	X	P		3	C				X HSDB	X HSDB		X HAD			X AQ2		X HAD
79005	1,1,2-Trichloroethane	X	P		3	C							X HEA			X AQ2		X HEA
79016	Trichloroethylene	X	P		3	B2	LP			X ATSDR	X ATSDR		X ATSDR	X ATSDR				X HEA
95954	2,4,5-Trichlorophenol												X HEA		X AQ2	X AQ2		
88062	2,4,6-Trichlorophenol	X	P	CS	2B	B2	SP								X AQ2	X AQ2		X HEA
1582098	Trifluralin	X	P				LP			X HEEP	X HSDB		X HEEP		X HEEP	X HEEP	X HEEP	
95636	1,2,4-Trimethylbenzene														X AQ2	X AQ2		
51796	Urethane	X		CS	2B	B2	SP	X G										
7440622	Vanadium (fume or dust)																	
108054	Vinyl acetate												X HSDB		X AQ2	X AQ2		
593602	Vinyl bromide	X			2A								X HEEP					
75014	Vinyl chloride	X		CA	1	A	SP	X ATSDR		X ATSDR	X ATSDR	X ATSDR	X ATSDR					X HEA
75354	Vinylidene chloride	X			3	C	LP			X HAD	X HAD	X HAD	X HAD			X HAD		
108383	m-Xylene									X HSDB		X HEEP	X HSDB		X HEEP	X HEEP		X HEA
95476	o-Xylene									X HEEP	X HSDB		X HEEP		X HEEP	X HEEP		X HEA
106423	p-Xylene									X HEEP	X HEEP				X HEEP	X HEEP		X HEA
1330207	Xylene (mixed isomers)									X HEEP	X HSDB		X HEEP		X AQ2	X AQ2		
87627	2,6-Xylidine	X		CS									X HSDB					
7440666	Zinc (fume or dust)									X HEA	X HEA		X HEA		X AQ2	X AQ2	X HEA	
	Zinc oxide (1314132)												X HEA					
	Zinc sulfate (7733020)												X HEA					
12122677	Zineb										X HEEP		X HEEP		X HEEP	X HEEP		X HEEP

* In the NTP/IARC categories, listing is based on manufacture or refining of this chemical.
** In the NTP/IARC categories, listing is for all other compounds of this chemical.

FOOTNOTES TO REVISED TOXICITY MATRIX

1	IARC classification. Sufficient evidence to establish a causal relationship between the agent and human cancer; sufficient human evidence and/or no data, inadequate data, or limited data of carcinogenicity in animals.
2A	IARC classification. Probable evidence of carcinogenicity to humans; at least limited evidence of carcinogenicity in humans.
2B	IARC classification. Probable evidence of carcinogenicity to humans; sufficient evidence in animals and inadequate data in humans.
3	IARC classification. Chemical could not be classified as to its carcinogenicity in humans: chemicals were listed for carcinogenicity if there was limited evidence of carcinogenicity in animals.
A	EPA classification--Human Carcinogen. Sufficient evidence from epidemiologic studies to support a causal association between exposure and cancer.
AP	Animal, positive.
AQ1	AQUIRE database (Version 1.6/3.0 April 1985, Chemical Information System). Reliability 1 - reliable study.
AQ2	AQUIRE database (Version 1.6/3.0 April 1985, Chemical Information System). Reliability 2 - generally satisfactory study.
AQ3	AQUIRE database (Version 1.6/3.0 April 1985, Chemical Information System). Reliability 3 - not reliable study.
AQ4	AQUIRE database (Version 1.6/3.0 April 1985, Chemical Information System). Reliability 4 - abstract of a study or summary of a foreign paper.
AS	Animal, suspected.
ATSDR	Agency for Toxic Substances Draft Toxicological Profile.
AWQC	EPA Ambient Water Quality Criteria Document.
B1	EPA classification--Probable Human Carcinogen. Limited evidence of carcinogenicity in humans from epidemiologic studies.
B2	EPA classification--Probable Human Carcinogen. Sufficient evidence of carcinogenicity in animals, inadequate evidence of carcinogenicity in humans.
C	EPA classification--Possible Human Carcinogen. Limited evidence of carcinogenicity in animals.

CA	Chemical considered by NTP to be a known carcinogen.
CS	Chemical considered by NTP to be a suspect carcinogen, i.e., may reasonably be anticipated to be a carcinogen.
DWCD	EPA Drinking Water Criteria Document.
EV	ENVIROFATE (Version 1.3/2.0 April 1984, Chemical Information System).
G	GENETOX (Version 1.3/2.0 August 1984, Chemical Information System).
HAD	EPA Health Effects Assessment Document.
HEA	EPA Health Effects Assessment Document.
HEED	EPA Health and Environmental Effects Document.
HEEP	EPA Health and Environmental Effects Profile.
HP	Human, positive.
HS	Human, suspected.
HSDB	Hazardous Substances Databank (Available through TOXNET of the National Library of Medicine).
HSDB*	Hazardous Substances Databank (Available through TOXNET of the National Library of Medicine). Effective dose not specified.
LP	Limited positive; indicates results obtained in Gene-Tox carcinogenicity panel tests show indication of tumor induction but that tests were too limited to be conclusive.
logP	log P Data base (Available through Pomona College and Technical Database Service Inc. 1983, 1985).
P	Indicates a positive response in at least one animal species in an NTP or NCI bioassay.
RTECS	RTECS data base (Version 6.5/14.2, Chemical Information System).
SP	Sufficient positive; indicates results obtained in Gene-Tox carcinogenicity panel tests show indication of tumor induction and that sufficient tests have been performed to be conclusive.

Appendix D:

Profiles of the 25 Chemicals Emitted in Largest Quantities

The profiles include the total amount released, the three states with the most significant emissions, and brief toxicological summaries for each of the 25 chemicals emitted in largest quantities according to the EPA Toxic Release Inventory report.

The toxicological summaries are derived from several sources including: the Hazardous Substance Data Bank maintained at the National Library of Medicine, EPA's TRI Fact Sheets, the Agency for Toxic Substances and Disease Registry's Toxicological Profiles, the Installation Restoration Program's Toxicology Guide, and Casarett and Doull's Toxicology.

TOLUENE

Over 235 million pounds of toluene were emitted into the air by industries in 1987. Toluene ranked #1 for air emissions in 1987, according to the EPA's Toxic Release Inventory data. The three states releasing the most toluene were North Carolina (22.39 million), Michigan (15.74 million), and Illinois (13.70 million pounds).

Toluene is a flammable, colorless liquid. It is used as a solvent in the manufacture of perfumes, medicines, dyes, explosives, detergents, aviation gasoline, and other chemicals. Toluene can cause mutations in living cells and damage developing fetuses. It can also damage the liver, kidney, brain, and bone marrow (resulting in low blood cell count). Acute exposures can irritate the nose, throat, and eyes, cause confusion, headache, slowed reflexes, loss of consciousness, and death.

AMMONIA

Over 233 million pounds of ammonia were emitted into the air by industries in 1987. Ammonia was released into the air in quantities second only to toluene, according to the TRI report. The three states releasing the most ammonia were Louisiana (70.23 million), Alaska (30.18 million), and Arkansas (17.57 million pounds).

Ammonia is used in the manufacture of fertilizers, explosives, and other chemicals. Chronic exposure damages the lungs, possibly causing bronchitis. Acute ammonia exposure irritates the skin, burns the eyes causing temporary or permanent blindness, and causes pulmonary or laryngeal edema, which may lead to death.

ACETONE

Over 186 million pounds of acetone were emitted into the air by industries in 1987. Acetone ranked 3rd in the TRI report. The three states releasing the most acetone were Tennessee (40.11 million), Texas (17.76 million), and Virginia (14.79 million pounds).

Acetone is a flammable, colorless liquid. It is found in paints, varnishes, and lacquers, and is used as a solvent for cements in the leather and rubber industry. Chronic acetone exposure can damage the skin, liver, and kidneys. Acute exposure can irritate the skin, eyes, nose, and throat, and may cause dizziness, lightheadedness, and loss of consciousness.

METHANOL

Over 182 million pounds of methanol were emitted into the air by industries in 1987. Methanol ranked 4th in the TRI report. The three states releasing the most methanol were Georgia (33.29 million), South Carolina (17.25 million), and Virginia (15.44 million pounds).

Methanol is a flammable, colorless liquid used as a solvent and cleaner. Chronic methanol exposure can damage the liver. Expulsion from the body is relatively slow, such that repeated exposures can cause a build up of methanol in the blood and tissue. Acute exposure can irritate the eyes, nose, mouth, and throat, and at high concentrations can cause headaches, nausea, vomiting, dizziness, and death. Breathing the vapor or absorbing the liquid through the skin may cause permanent blindness.

CARBON DISULFIDE

Over 137 million pounds of carbon disulfide were emitted into the air by industries in 1987. Carbon disulfide ranked 5th on the TRI report. The three states releasing the most carbon disulfide were Virginia (49.48 million), Alabama (43.73 million), and Tennessee (22.35 million pounds).

Carbon disulfide is a flammable liquid used in the manufacture of viscose rayon, cellophane, carbon tetrachloride, and flotation agents. Chronic exposure can damage developing fetuses, and may cause sperm abnormalities in men and spontaneous abortions in women. Carbon disulfide can cause severe changes in the brain and nervous system, tingling, pain, weakness in the legs, coordination and balance disorders, stomach trouble, and very severe mood, personality, and thought changes including nightmares and poor concentration. Carbon disulfide may also cause increased cholesterol, atherosclerosis, high blood pressure, and heart disease. Acute exposure irritates the eyes, skin, and nose, and causes headaches, nausea, lightheadedness, dizziness, unconsciousness, and death. Mental changes may occur and last for months or years.

1,1,1 TRICHLOROETHANE

Over 130 million pounds of 1,1,1 trichloroethane (methyl chloroform) were emitted into the air by industries in 1987. It ranked 6th on the TRI report. The three states releasing the most 1,1,1 trichloroethane were California (15.42 million), Connecticut (9.58 million), and Ohio (9.25 million pounds).

1,1,1 trichloroethane is a colorless liquid used as a cleaning solvent. It can cause mutations in living cells, and may damage the liver, kidneys, and skin. Acute exposures may irritate the skin and eyes, and may cause dizziness, lightheadedness, unconsciousness, irregular heartbeat, and death.

METHYL ETHYL KETONE

Over 124 million pounds of methyl ethyl ketone were emitted into the air by industries in 1987. It ranked 7th on the TRI report. The three states releasing the most methyl ethyl ketone were Michigan (12.41 million), Ohio (11.46 million), and Virginia (7.04 million pounds).

Methyl ethyl ketone is a flammable, colorless liquid used as a solvent and in making plastics, textiles, and paints. Methyl ethyl ketone is a teratogen (an agent which causes birth defects) in animals, and is a suspected teratogen in humans. Repeated exposure, in conjunction with other solvents, can damage the nervous system, causing weakness and numbness in the hands and feet. Acute exposures can burn the skin and eyes, leading to permanent damage. The vapors also can irritate the nose, mouth, and throat, and cause dizziness, lightheadedness, headache, nausea, blurred vision, and loss of consciousness.

XYLENE (MIXED ISOMERS)

Over 120 million pounds of xylene were emitted into the air by industries in 1987. Xylenes ranked 8th on the TRI report. The three states releasing the most xylene isomers were Michigan (16.92 million), Ohio (11.25 million), and Illinois (7.53 million pounds).

Xylenes are flammable liquids used as solvents and in making drugs, dyes, insecticides, and gasoline. Chronic xylene exposure may damage the liver, kidneys, skin, eyes, and bone marrow, as well as developing fetuses. Acute exposures can irritate the eyes, nose, and throat, and may cause headache, nausea, vomiting, tiredness, stomach upset, dizziness, lightheadedness, loss of consciousness, and death.

DICHLOROMETHANE

Over 112 million pounds of dichloromethane were emitted into the air by industries in 1987. It ranked 9th on the TRI report. The three states releasing the most dichloromethane were New York (13.24 million), Illinois (10.57 million), and Indiana (10.24 million pounds).

Dichloromethane is a clear liquid used as an industrial solvent and a paint stripper. It is also used in certain aerosol and pesticide products and in the manufacture of photographic film. Chronic effects of exposure in animals include changes in the liver and kidney, and cancer. Memory loss was also noted as a chronic exposure effect. Acute dichloromethane exposure results in respiratory tract irritation, sluggishness, intoxication, lightheadedness, nausea, headache, tingling in limbs, unconsciousness, and death.

CHLORINE

Over 103 million pounds of chlorine were emitted into the air by industries in 1987. It ranked 10th on the TRI report. The three states releasing the most chlorine were Utah (68.34 million), Georgia (4.61 million), and Michigan (3.92 million pounds).

Chlorine is a greenish-yellow gas used in making many solvents, disinfectants, cleaners, and other chemicals. Chronic exposure can damage the teeth and irritate the lungs, causing bronchitis, coughing, and shortness of breath. Acute exposure to chlorine can severely burn the eyes and skin causing permanent damage, and may cause throat irritation, tearing, coughing, nose bleeds, and chest pain, pulmonary edema and death.

ALUMINUM OXIDE

Over 73 million pounds of aluminum oxide were emitted into the air by industries in 1987. It ranked 11th on the TRI report. The three states releasing the most aluminum oxide were Texas (14.32 million), Washington (10.95 million), and Kentucky (6.90 million pounds).

Aluminum oxide is used in chemical reactions and in the manufacture of alloys and cements; it is also found in paints, varnishes, and ceramics. Aluminum oxide appears to irritate and damage the respiratory system. Some researchers believe that it plays a role in a type of brain disease, although aerosols besides those of aluminum oxide may be responsible for documented cases.

ETHYLENE

Over 54 million pounds of ethylene were emitted into the air by industries in 1987. Ethylene ranked 12th in the TRI report. The three states releasing the most ethylene were Texas (41.89 million), Louisiana (6.37 million), and Iowa (1.56 million pounds).

Ethylene is a flammable, explosive gas (or liquid at lower temperatures) which is used as a refrigerant and in welding and cutting metals. Exposure to ethylene can cause dizziness, lightheadedness, and loss of consciousness. Contact with liquid ethylene can cause frostbite. Little evidence is available about the chronic effects of ethylene exposure. Ethylene can contribute to low-level ozone pollution.

HYDROCHLORIC ACID

Over 50 million pounds of hydrochloric acid were emitted into the air by industries in 1987. It ranked 13th on the TRI report. The three states releasing the most hydrochloric acid were Georgia (10.91 million), New York (6.35 million), and Ohio (4.03 million pounds).

Hydrochloric acid is a colorless, corrosive liquid used in metal processing, chemical synthesis, and analytical chemistry. Chronic exposure irritates and damages the skin, teeth, and possibly the lungs. Acute exposure can cause severe burns of the skin and eyes, leading to permanent damage with loss of sight. The inhalation of hydrochloric acid vapor irritates the mouth, nose, throat, and lungs, causing coughing, shortness of breath, pulmonary edema, and death.

FREON 113

Over 49 million pounds of Freon 113 were emitted in 1987. It ranked 14th on the TRI report. The three states releasing the most Freon 113 were California (5.72 million), New York (3.39 million), and Massachusetts (2.70 million pounds).

Exposure to Freon 113 irritates the eyes, nose, and throat. Breathing Freon 113 vapors causes sleepiness, confusion, irregular heartbeat, and possibly death. Freon 113 also destroys the ozone layer which serves to shield the Earth from the Sun's harmful ultraviolet radiation. As the ozone layer is depleted, malignant melanomas and other skin cancers are expected to increase as a result of increasing intensity of ultraviolet radiation. Freon 113 is also a major contributor to the greenhouse effect.

TRICHLOROETHYLENE

Over 47 million pounds of trichloroethylene were emitted into the air by industries in 1987. Trichloroethylene ranked 15th in the TRI report. The three states releasing the most trichloroethylene were Indiana (5.94 million), Illinois (5.91 million), and New York (3.32 million pounds).

Trichloroethylene is a colorless liquid used as a solvent for metal degreasing (roughly 80% of US production) and dry cleaning. The chemical is also used in printing inks, paints, lacquers, varnishes, and adhesives. Trichloroethylene is a suspected human carcinogen and teratogen (agent which causes birth defects). Chronic exposure can damage the skin, liver, kidneys, and facial nerves, and cause memory loss, headache, alcohol intolerance, depression, and weakness in the arms and legs. Acute exposure can irritate and damage the skin, eyes, nose, throat, and lungs, and at high levels may cause lightheadedness, dizziness, visual disturbances, nausea, vomiting, irregular heartbeat, unconsciousness, pulmonary edema, and death.

PROPYLENE

Over 37 million pounds of propylene were emitted into the air by industries in 1987. It ranked 16th on the TRI report. The three states releasing the most propylene were Texas (24.41 million), Louisiana (4.20 million), and Ohio (3.55 million pounds).

Propylene is a highly flammable, colorless gas used in the production of many organic chemicals including resins, plastics, synthetic rubber, and gasoline. Chronic propylene exposure may damage the liver. Acute exposure causes dizziness, loss of consciousness and death. Propylene can contribute to low-level ozone pollution.

GLYCOL ETHERS

Over 32 million pounds of glycol ethers were emitted into the air by industries in 1987. It ranked 17th on the TRI report. The three states releasing the most glycol ethers were Michigan (5.24 million), Ohio (4.42 million), and Montana (2.92 million pounds).

Glycol ethers are used in industry as solvents in the manufacture of lacquers, varnishes, resins, printing inks, textile dyes, brake fluid anti-icing additives, and as gasoline additives. They are also found in latex paints and cleaners. Glycol ethers are reproductive toxicants and teratogens in animals, causing infertility and birth defects. Some animal studies suggest they are carcinogens. Acute glycol ether exposure can irritate upper respiratory passages, and the eyes, and may cause drowsiness, vertigo, headache, anorexia, stomach pain, nausea, vomiting, coma, and death.

TETRACHLOROETHYLENE

Over 28 million pounds of tetrachloroethylene were emitted into the air by industries in 1987. It ranked 18th on the TRI report. The three states releasing the most tetrachloroethylene were California (5.85 million), Connecticut (2.88 million), and Iowa (2.74 million pounds).

Tetrachloroethylene is a clear liquid used in dry cleaning (roughly 70%), metal degreasing, and chemical synthesis. Tetrachloroethylene causes liver cancer in animals, and is a suspected human carcinogen. Chronic exposure may damage developing fetuses. Acute exposure to tetrachloroethylene irritates the skin, eyes, nose, mouth, and throat, damages the liver, kidneys, and lungs, and may cause dizziness, headache, sleepiness, confusion, nausea, difficulty in speaking and walking, irregular heartbeat, unconsciousness, pulmonary edema, and death.

N-BUTYL ALCOHOL

Over 27 million pounds of n-butyl alcohol were emitted into the air by industries in 1987. It ranked 19th on the TRI list. The three states releasing the most n-butyl alcohol were Texas (4.11 million), Michigan (2.57 million), and Ohio (2.33 million pounds).

N-butyl alcohol is a flammable, colorless liquid used as a solvent for fats, waxes, shellac, resins, gums, and varnish. Chronic exposure to n-butyl alcohol can damage the liver, skin, hearing and sense of balance. Acute exposure can irritate the nose, throat, eyes, and skin, and may cause headaches, dizziness, lightheadedness, and loss of consciousness.

METHYL ISOBUTYL KETONE

Over 25 million pounds of methyl isobutyl ketone were emitted into the air by industries in 1987. It ranked 20th on the TRI report. The three states releasing the most aluminum oxide were Georgia (2.55 million), Alabama (2.19 million), and New York (1.81 million pounds).

Methyl isobutyl ketone is used in chemical synthesis and dry cleaning preparations, and as a solvent for lacquers, paints, varnishes, and coatings. Exposure to methyl isobutyl ketone can irritate the eyes, nose, and throat, and may cause weakness, headache, nausea, vomiting, dizziness, loss of coordination, stomach pain, insomnia, and liver damage.

BENZENE

Over 24 million pounds of benzene were emitted into the air by industries in 1987. Benzene ranked 21st on the EPA's Toxic Release Inventory report. The three states releasing the most benzene were Texas (6.06 million), Ohio (2.23 million), and Illinois (1.93 million pounds).

Benzene is a flammable, colorless liquid used as an industrial solvent, and found in small amounts in gasoline.
Benzene is a carcinogen and chronic exposure can cause leukemia. Benzene may also cause birth defects. Long-term or chronic benzene exposure can cause death by damaging the blood-forming organs (aplastic anemia). Acute or severe exposure causes irritation of the eyes, nose, and throat, lightheadedness, headache, vomiting, convulsions, coma, and death.

STYRENE

Over 24 million pounds of styrene were emitted into the air by industries in 1987. It ranked 22nd on the TRI report. The three states releasing the most styrene were Texas (4.01 million), Ohio (1.72 million), and Washington (1.72 million pounds).

Styrene is a colorless, oily liquid used in making polystyrene plastics, protective coatings, polyesters, resins, and other chemicals. Chronic exposure to styrene can cause genetic mutations, headaches, numbness, upset stomach, memory and concentration difficulty, trouble with learning, slowed reflexes, and balance disorders, and may damage developing fetuses, and decrease fertility in women. Styrene may also cause lung cancer in animals, and is a possible carcinogen for humans. Acute exposure irritates the eyes, nose, throat, and skin, and can cause dizziness, lightheadedness, loss of consciousness, brain damage, liver damage, and death.

CHLOROFORM

Over 23 million pounds of chloroform were emitted into the air by industries in 1987. It ranked 23rd on the TRI report. The three states releasing the most chloroform were North Carolina (3.53 million), Virginia (3.09 million), and Alabama (1.97 million pounds).

Chloroform is a colorless liquid used as a solvent and in making dyes, drugs, and pesticides. Chloroform is a probable carcinogen in humans, and has been shown to cause liver, kidney, and thyroid cancer in animals. There is evidence that chloroform is a teratogen in animals. Chronic chloroform exposure can also damage the skin, liver, kidneys, and nervous system. Acute exposure can irritate and burn the skin, eyes, nose, and throat, and causes dizziness, lightheadedness, headache, confusion, and irregular heartbeat which may lead to death.

CHLOROMETHANE

Over 20 million pounds of chloromethane were emitted into the air by industries in 1987. It ranked 24th on the TRI report. The three states releasing the most chloromethane were Illinois (6.66 million), Indiana (6.66 million), and Texas (1.15 million pounds).

Chloromethane is a flammable, colorless gas used as a refrigerant and in the manufacture of other chemicals. Evidence suggests that chloromethane causes cancer in animals. In humans, chloromethane may affect the testes causing decreased production of male hormones and sperm. Chronic chloromethane exposure also can irritate the lungs, damage the liver, kidneys, and blood-forming organs, and interfere with brain function, causing clumsiness, headache, dizziness, poor judgement and memory, slurred

speech, sleep disturbances, and personality changes such as depression and irritability. Acute exposure may damage the liver, kidneys, and eyes, and can cause blurred vision, intoxication, dizziness, nausea, vomiting, diarrhea, drowsiness, unconsciousness, convulsions, pulmonary edema, and death.

CARBONYL SULFIDE

Over 19 million pounds of carbonyl sulfide were emitted into the air by industries in 1987. It ranked 25th on the TRI report. The three states releasing the most carbonyl sulfide were Tennessee (10.00 million), Mississippi (6.00 million), and Louisiana (2.11 million pounds).

Carbonyl sulfide is used as an intermediate in the synthesis of a variety of organic compounds. Exposure to carbonyl sulfide can irritate the eyes and skin, and can cause nausea, vomiting, diarrhea, giddiness, headache, vertigo, amnesia, confusion, sweating, irregular heartbeat, and unconsciousness. Respiratory paralysis may occur, causing death.

Appendix E:

Summary of Toxic Chemical Releases by State and Chemical

Toxic Release Inventory Data for Air, 1987

CHEMICAL NAME	AK	AL	AR	AS	AZ	CA	CO	CT	DE	FL
1,1,1-TRICHLOROETHANE	18,000	1,751,759	1,124,273	0	2,113,696	15,427,734	1,131,444	9,589,974	151,100	1,576,955
1,1,2,2-TETRACHLOROETHANE	0	0	33,000	0	0	22,377	0	0	0	0
1,1,2-TRICHLOROETHANE	0	5	0	0	0	7,321	0	0	0	0
1,1-DIMETHYL HYDRAZINE	0	0	0	0	0	1,000	0	0	0	0
1,2,4-TRICHLOROBENZENE	0	2,616	0	0	28,000	500	0	0	17,357	18,900
1,2,4-TRIMETHYLBENZENE	4,204	34,958	0	0	0	70,588	31,118	0	20,270	3,360
1,2-BUTYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
1,2-DIBROMOETHANE	0	0	18,100	0	0	1,918	0	0	0	0
1,2-DICHLOROBENZENE	0	0	690	0	12,000	8,903	0	0	10,864	0
1,2-DICHLOROETHANE	0	528	500	0	0	1,852	12,000	15,200	0	0
1,2-DICHLOROETHYLENE	0	0	0	0	0	250	0	0	0	0
1,2-DICHLOROPROPANE	0	0	0	0	0	0	0	0	0	0
1,3-BUTADIENE	0	3,400	280	0	0	7,560	1,050	41,300	102,336	0
1,3-DICHLOROBENZENE	0	0	0	0	0	0	0	0	9,593	0
1,3-DICHLOROPROPYLENE	0	0	0	0	0	0	0	0	0	0
1,4-DICHLOROBENZENE	0	0	0	0	0	0	0	0	15,160	0
1,4-DIOXANE	0	18,608	0	0	0	27,451	0	500	0	0
2,4,5-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4,6-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-D (ACETIC ACID)	0	0	0	0	0	125,046	0	0	0	0
2,4-DIAMINOANISOLE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOANISOLE SULFATE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOTOLUENE	0	0	0	0	0	0	0	0	0	0
2,4-DICHLOROPHENOL	0	0	250	0	0	0	0	0	0	0
2,4-DIMETHYLPHENOL	0	56	0	0	0	0	0	0	0	0
2,4-DINITROPHENOL	0	15,589	0	0	0	0	0	0	0	0
2,4-DINITROTOLUENE	0	0	0	0	0	0	0	0	0	15
2,6-DINITROTOLUENE	0	0	0	0	0	0	0	0	0	0
2,6-XYLIDINE										
2-CHLOROACETOPHENONE	0	0	0	0	0	0	0	0	0	0
2-ETHOXYETHANOL	0	6,140	19,395	0	0	26,990	0	0	0	0
2-METHOXYETHANOL	0	127	0	0	120,800	194,374	3,150	0	1,388	723
2-NITROPHENOL	0	0	0	0	0	0	0	0	0	0
2-NITROPROPANE	0	0	0	0	0	2	0	0	0	0
2-PHENYLPHENOL	0	0	0	0	0	1	0	0	0	0
3,3'-DICHLOROBENZIDINE	0	0	0	0	0	0	0	0	0	0
4,4'-DIAMINODIPHENYL ETHER	0	0	0	0	0	0	0	0	0	0

VVV 00001020

CHEMICAL NAME	AK	AL	AR	AS	AZ	CA	CO	CT	DE	FL
4,4'-ISOPROPYLIDENEDIPHENOL	0	2,450	0	0	0	440	0	0	2,600	84
4,4'-METHYENEDIANILINE	0	0	750	0	0	3	0	500	0	0
4,4'-METHYLENEBIS(2-CHLORO ANILINE)	0	0	0	0	0	0	0	0	0	0
4,4'-METHYLENEBIS(N,N-DIMETHYL)	0	0	0	0	0	0	0	0	0	0
4,6-DINITRO-O-CRESOL	0	0	0	0	0	33	0	0	0	0
4-AMINOAZOBENZENE	0	0	0	0	0	0	0	0	0	0
4-AMINOBIPHENYL	0	0	0	0	0	0	0	0	0	0
4-NITROPHENOL	0	500	0	0	0	0	0	0	0	0
5-NITRO-O-ANISIDINE	0	0	0	0	0	0	0	0	0	0
ACETALDEHYDE	0	62	0	0	0	0	0	1,780	0	0
ACETAMIDE	0	0	0	0	0	0	0	0	0	0
ACETONE	0	827,966	1,935,697	0	2,349,983	4,446,971	633,609	560,963	94,120	2,820,037
ACETONITRILE	0	400	15,900	0	0	250	0	398	0	0
ACROLEIN	0	275	0	0	0	0	0	0	0	0
ACRYLAMIDE	0	504	0	0	0	1,537	0	500	0	5
ACRYLIC ACID	0	2,583	0	0	0	1,297	0	3,625	1,085	26,007
ACRYLONITRILE	0	257,000	0	0	0	1,698	0	8,206	40,556	107,891
ALLYL CHLORIDE	0	0	250	0	0	0	0	0	0	0
ALPHA-NAPHTHYLAMINE	0	0	0	0	0	0	0	0	0	0
ALUMINUM (FUME OR DUST)	0	1,001	665	0	250	108,089	869,000	1,000	0	0
ALUMINUM OXIDE	0	258,292	171,047	0	607	1,313,785	171,380	15,288	240,000	173,983
AMMONIA	30,182,121	2,076,730	17,568,892	582,500	552,500	7,247,211	62,889	357,832	169,544	15,460,050
AMMONIUM NITRATE (SOLUTION)	0	577,500	0	0	0	6,750	529,200	0	0	188,000
AMMONIUM SULFATE (SOLUTION)	0	7,004	0	0	0	22,976	250	250	0	0
ANILINE	0	8,050	700	0	0	0	0	12,250	500	0
ANTHRACENE	0	9,411	970	0	0	76	180	0	0	42
ANTIMONY	0	278	25	0	250	1,761	500	0	3	250
ANTIMONY COMPOUNDS	0	100	0	0	14,240	1,162	0	502	0	130
ARSENIC	0	505	123	0	8,770	585	0	0	0	1
ARSENIC COMPOUNDS	0	2,250	750	0	41,000	7,452	0	0	0	750
ASBESTOS (FRIABLE)	0	0	500	0	0	2,380	0	550	0	250
BARIUM	0	0	250	0	250	8,181	0	250	0	0
BARIUM COMPOUNDS	0	3,153	250	0	0	7,816	250	1,342	500	250
BENZAL CHLORIDE	0	0	0	0	0	0	0	0	0	0
BENZENE	26,647	528,409	13,297	0	0	139,172	49,965	23,300	41,519	415
BENZIDINE	0	0	0	0	0	0	0	0	0	0
BENZOIC TRICHLORIDE	0	0	0	0	0	0	0	0	0	0

CHEMICAL NAME	AK	AL	AR	AS	AZ	CA	CO	CT	DE	FL
BENZOYL CHLORIDE	0	0	0	0	0	12	0	0	0	0
BENZOYL PEROXIDE	0	0	0	0	0	0	0	0	0	0
BENZYL CHLORIDE	0	0	0	0	0	0	0	0	0	0
BERYLLIUM	0	0	0	0	0	500	0	0	0	0
BERYLLIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
BIPHENYL	0	76,232	0	0	0	0	500	0	16,700	32,052
BIS(2-CHLOROETHYL) ETHER	0	0	0	0	0	0	0	0	0	0
BIS(2-ETHYLHEXYL) ADIPATE	0	4,400	0	0	0	17,113	0	0	0	0
BIS(CHLOROMETHYL) ETHER	0	0	0	0	0	0	0	0	0	0
BROMOMETHANE	0	131,000	103,000	0	0	0	0	0	0	1,850
BUTYL ACRYLATE	0	4,699	0	0	0	21,737	0	1,000	1,999	101,395
BUTYL BENZYL PHTHALATE	0	0	0	0	0	9,700	0	0	0	0
BUTYRALDEHYDE	0	5,100	0	0	0	0	0	0	0	0
C.I. ACID BLUE 9, DIAMMONIUM SALT	0	0	0	0	0	0	0	0	0	0
C.I. ACID BLUE 9, DISODIUM SALT	0	0	0	0	0	0	0	0	0	0
C.I. BASIC GREEN 4	0	0	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 14	0	0	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 3	0	0	0	0	0	0	0	0	0	0
CADMIUM	0	96	80,501	0	250	501	898	0	0	0
CADMIUM COMPOUNDS	0	0	0	0	0	0	0	323	0	250
CALCIUM CYANAMIDE	0	0	0	0	0	0	0	0	0	0
CAPTAN	0	0	0	0	0	57	0	0	0	80
CARBARYL	0	0	0	0	0	6	0	0	0	465
CARBON DISULFIDE	0	43,737,000	1,836,891	0	28,472	86,461	0	212,890	33,000	32
CARBON TETRACHLORIDE	0	526,374	0	0	0	54,555	500	263	157,800	0
CARBONYL SULFIDE	0	0	121,729	0	0	26,735	0	0	320,000	0
CATECHOL	0	0	0	0	0	0	0	0	0	0
CHLORAMBEN	0	0	0	0	0	0	0	0	0	0
CHLORDANE	0	0	0	0	0	0	0	0	0	0
CHLORINE	490,502	2,755,049	460,419	1,861	1,861	714,060	48,634	2,765	59,570	461,041
CHLORINE DIOXIDE	0	1,799,100	539,150	0	0	394,250	0	0	0	347,938
CHLOROACETIC ACID	0	284	0	0	0	250	0	0	0	0
CHLOROBENZENE	0	9,851	22,700	0	0	490	0	1,000	16,140	2
CHLOROBENZILATE	0	250	0	0	0	0	0	0	0	0
CHLOROETHANE	0	2,226	204,500	0	0	128,000	0	563,148	0	0
CHLOROFORM	150,000	1,976,646	725,734	0	0	573,864	0	0	0	178,500
CHLOROMETHANE	0	4,889	287,000	0	0	451,000	6,200	344,000	0	0

CHEMICAL NAME	AK	AL	AR	AS	AZ	CA	CO	CT	DE	FL
CHLOROMETHYL METHYL ETHER	0	0	0	0	0	0	0	0	0	0
CHLOROPHENOLS	0	0	0	0	0	0	0	0	0	0
CHLOROPRENE	0	0	0	0	0	0	0	0	0	500
CHLOROTHALONIL	0	0	500	0	0	0	0	0	0	0
CHROMIUM	0	4,075	6,474	0	3,060	11,069	402	1,501	0	1,000
CHROMIUM COMPOUNDS	0	4,253	3,280	0	250	39,619	250	4,920	0	2,250
COBALT	0	0	2,918	0	0	1,250	0	613	0	0
COBALT COMPOUNDS	0	1,235	0	0	0	500	0	84	0	0
COPPER	0	14,033	12,376	0	657,290	31,755	798	6,518	0	4,485
COPPER COMPOUNDS	0	22,409	1,502	0	1,960,450	18,462	1,000	16,321	0	2,123
CRESOL (MIXED ISOMERS)	0	2,228	0	0	0	500	0	0	0	3,600
CUMENE	10	64,208	18,000	0	0	18,416	500	0	0	0
CUMENE HYDROPEROXIDE	0	0	0	0	0	77	0	0	0	0
CUPFERRON	0	0	0	0	0	0	0	0	0	0
CYANIDE COMPOUNDS	0	640	750	0	813	3,575	0	5,391	0	0
CYCLOHEXANE	17,976	46,622	2,484	0	0	446,020	5,910	0	2,460	1,026,520
DECABROMODIPHENYL OXIDE	0	0	15,750	0	0	1,000	0	0	0	250
DI-(2-ETHYLHEXYL) PHTHALATE	0	0	0	0	16,954	36,810	0	1,700	250	250
DIAMINOTOLUENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
DIBENZOFURAN	0	5,416	920	0	0	111	200	0	0	0
DIBUTYL PHTHALATE	0	0	500	0	0	832	2,000	0	7	2,807
DICHLOROBENZENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
DICHLOROBROMOMETHANE	0	0	0	0	0	3,650	0	0	0	0
DICHLOROMETHANE	0	1,821,087	1,843,251	0	623,770	4,789,582	412,841	2,003,848	77,021	1,058,775
DICHLORVOS	0	0	0	0	0	0	0	0	0	0
DICOFOL	0	0	0	0	0	0	0	0	0	0
DIETHANOLAMINE	0	2,100	250	0	0	3,618	250	0	0	37
DIETHYL PHTHALATE	0	1	0	0	0	4	0	17,000	0	0
DIETHYL SULFATE	0	250	0	0	0	0	0	0	0	0
DIMETHYL PHTHALATE	0	2	18,100	0	125,190	12	0	0	0	338,234
DIMETHYL SULFATE	0	0	0	0	0	1,433	0	0	0	0
EPICHLOROHYDRIN	0	13,780	1,110	0	0	350	0	0	8,300	0
ETHYL ACRYLATE	0	2,690	0	0	0	1,735	0	1,500	3,062	0
ETHYL CHLOROFORMATE	0	0	0	0	0	0	0	0	0	0
ETHYLBENZENE	13,366	163,598	26,988	0	0	94,563	2,936	5,110	5,100	37,634
ETHYLENE	0	60,206	179,000	0	0	155,514	49,330	0	0	0
ETHYLENE GLYCOL	0	1,362,332	6,152	0	148,280	118,049	29,725	102,906	750	41,252

CHEMICAL NAME	AK	AL	AR	AS	AZ	CA	CO	CT	DE	FL
ETHYLENE OXIDE	0	0	129,070	0	19,901	158,799	763	57,998	69,000	27,915
ETHYLENE THIOUREA	0	0	0	0	0	0	0	0	0	0
ETHYLENEIMINE	0	0	0	0	0	0	0	0	0	0
FLUOMETURON	0	0	0	0	0	0	0	0	0	0
FORMALDEHYDE	5,150	584,618	199,717	0	83,800	466,601	160,607	80,905	5,103	6,800
FREON 113	0	680,431	2,608,163	0	1,988,914	5,723,839	934,194	1,382,502	0	2,607,349
GLYCOL ETHERS	0	303,472	46,600	0	31,500	1,093,676	524,488	71,551	196,750	160,226
HEPTACHLOR	0	0	0	0	0	0	0	0	0	0
HEXACHLORO-1,3-BUTADIENE	0	0	0	0	0	0	0	0	0	0
HEXACHLOROBENZENE	0	0	0	0	0	4	0	0	0	0
HEXACHLOROCYCLOPENTADIENE	0	0	0	0	0	0	0	0	0	0
HEXACHLOROETHANE	0	0	0	0	0	76	0	0	0	250
HEXACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
HYDRAZINE	0	325	0	0	0	500	0	600	0	1,095
HYDRAZINE SULFATE	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID	730,000	2,358,703	39,951	0	62,516	1,073,383	26,528	58,156	31,098	45,155
HYDROGEN CYANIDE	0	11,513	0	0	0	0	0	0	0	0
HYDROGEN FLUORIDE	0	48,510	0	0	4,080	59,034	361	7,593	2,940	35,176
HYDROQUINONE	0	0	0	0	0	0	0	0	0	500
Invalid no. should be 117817	0	0	250	0	0	2,921	0	0	0	0
ISOBUTYRALDEHYDE	0	303,200	0	0	0	0	0	0	0	5,300
ISOPROPYL ALCOHOL (MANUFACTURING)	0	15,238	132,755	0	142,239	798,264	257,320	252,935	0	60,293
LEAD	0	40,239	3,065	0	43,350	68,466	3,294	2,840	0	3,606
LEAD COMPOUNDS	0	2,522	1,550	0	163,003	23,739	1,385	3,001	2,868	8,419
LINDANE	0	0	0	0	0	250	0	0	0	0
M-CRESOL	0	0	0	0	0	3,240	0	0	0	0
M-XYLENE	0	192,787	3,602	0	0	75,380	1,258	0	0	22,494
MALEIC ANHYDRIDE	0	750	504	0	0	112,402	0	2,000	0	16,280
MANEB	0	0	0	0	0	0	0	0	0	90
MANGANESE	0	14,875	980	0	0	2,375	8,275	2,773	0	2,039
MANGANESE COMPOUNDS	0	3,204	3,000	0	0	2,783	527	19,750	2,500	6,990
MELAMINE	0	0	0	0	0	7,186	0	6,201	0	0
MERCURY	0	2,411	0	0	0	0	0	0	750	0
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0
METHANOL	0	3,571,108	3,494,079	0	334,100	1,524,264	682,922	972,490	75,375	1,904,633
METHOXYCHLOR	0	0	0	0	0	0	0	0	0	0
METHYL ACRYLATE	0	12,200	3,350	0	0	0	0	3,078	0	0

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CHEMICAL NAME	AK	AL	AR	AS	AZ	CA	CO	CT	DE	FL
METHYL ETHYL KETONE	0	5,656,712	2,508,546	0	593,516	4,246,644	528,685	722,496	182,377	485,822
METHYL HYDRAZINE	0	0	0	0	0	523	0	0	0	0
METHYL IODIDE	0	0	0	0	0	0	0	0	0	0
METHYL ISOBUTYL KETONE	0	2,190,965	346,090	0	23,483	491,757	69,236	173,074	212,000	38,854
METHYL ISOCYANATE	0	0	0	0	0	0	0	0	0	0
METHYL METHACRYLATE	0	39,292	17,100	0	0	161,398	0	158,804	4,425	5,364
METHYL TERT-BUTYL ETHER	0	10,463	0	0	0	10,034	4,370	0	0	0
METHYLENE BROMIDE	0	0	0	0	0	250	0	0	0	0
METHYLENEBIS(PHENYLISOCYANATE)	0	6,182	517	0	250	960	1,250	13	0	0
MICHLER'S KETONE	0	0	0	0	0	0	0	0	0	0
MOLYBDENUM TRIOXIDE	0	500	0	0	0	750	250	0	0	0
N,N-DIMETHYLANILINE	0	56,900	0	0	0	0	0	1,722	0	0
N-BUTYL ALCOHOL	0	212,484	64,563	0	105,318	1,303,314	260,259	177,205	0	417,375
N-DIOCTYL PHTHALATE	0	0	250	0	0	250	250	0	0	0
N-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	55	112,501	9,551	0	0	164,206	5,020	2,000	76,000	900
NICKEL	0	2,428	3,912	0	0	11,052	776	5,899	5,350	250
NICKEL COMPOUNDS	0	1,919	0	0	2,250	6,807	0	36,615	0	751
NITRIC ACID	2	20,285	2,250	0	13,503	613,795	52,667	79,119	1	12,303
NITRILOTRIACETIC ACID	0	500	0	0	0	250	0	0	0	0
NITROBENZENE	0	0	0	0	0	0	0	1,000	0	0
NITROGEN MUSTARD										
NITROGLYCERIN	0	0	0	0	0	0	3,540	0	0	0
O-ANISIDINE	0	0	0	0	0	0	0	0	0	0
O-CRESOL	0	0	0	0	0	310	0	0	220	0
O-TOLUIDINE	0	0	0	0	0	0	0	0	0	0
O-XYLENE	0	91,896	0	0	0	69,537	623	0	0	0
OCTACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
P-ANISIDINE	0	0	0	0	0	0	0	0	0	0
P-CRESIDINE	0	0	0	0	0	0	0	0	0	0
P-CRESOL	0	500	0	0	0	47,250	0	3,915	0	0
P-NITROSODIPHENYLAMINE	0	250	0	0	0	0	0	0	0	0
P-PHENYLENEDIAMINE	0	0	0	0	0	0	0	0	0	0
P-XYLENE	0	2,130,926	0	0	0	59,149	742	0	0	0
PARATHION	0	0	0	0	0	106	0	0	0	0
PENTACHLOROPHENOL	0	1,753	0	0	0	1,918	0	0	0	192
PERACETIC ACID	0	0	0	0	0	0	0	0	0	0

CHEMICAL NAME	AK	AL	AR	AS	AZ	CA	CO	CT	DE	FL
PHENOL	0	40,671	64,400	0	288,320	399,020	0	41,970	12,213	48,144
PHOSGENE	0	559	0	0	0	0	0	250	0	0
PHOSPHORIC ACID	0	35,018	5,300	0	6,351	70,856	3,998	5,803	0	7,199
PHOSPHORUS (YELLOW OR WHITE)	0	500	1,000	0	0	0	0	0	0	0
PHTHALIC ANHYDRIDE	0	56	250	0	0	14,075	0	500	0	10,461
PICRIC ACID	0	0	0	0	0	0	0	0	0	0
POLY BROMINATED BIPHENYLS	0	0	0	0	0	0	0	0	0	0
POLYCHLORINATED BIPHENYLS (PCBs)	0	0	0	0	0	0	0	0	0	0
PROPANE SULTONE	0	0	0	0	0	0	0	0	0	0
PROPIONALDEHYDE	0	0	0	0	0	0	0	0	0	0
PROPOXUR	0	0	0	0	0	0	0	0	0	0
PROPYLENE	0	1,450	36,531	0	0	456,617	107,000	0	2,700	500
PROPYLENE OXIDE	0	2,750	0	0	0	689,770	0	58,092	4,680	250
PROPYLENEIMINE	0	0	0	0	0	0	0	0	0	0
PYRIDINE	0	0	4,400	0	0	0	0	0	0	0
QUINOLINE	0	1,274	0	0	0	116	0	0	0	0
QUINONE	0	0	0	0	0	0	0	0	0	0
QUINTOZENE	0	0	0	0	0	0	0	0	0	0
SACCHARIN (MANUFACTURING)	0	0	0	0	0	0	0	0	0	0
SAFROLE	0	0	0	0	0	0	0	0	0	0
SEC-BUTYL ALCOHOL	0	11,448	0	0	0	126,711	0	0	0	10,520
SELENIUM	0	0	0	0	500	0	0	0	0	0
SELENIUM COMPOUNDS	0	0	0	0	0	9,159	0	0	0	0
SILVER	0	0	0	0	250	250	0	0	0	0
SILVER COMPOUNDS	0	500	0	0	0	0	0	47	0	0
SODIUM HYDROXIDE (SOLUTION)	750	189,648	111,866	311,720	311,720	733,314	4,411	36,735	2,801	31,987
SODIUM SULFATE (SOLUTION)	0	891,610	500	0	0	23,873	513	250	0	0
STYRENE	0	105,516	75,893	0	695,238	1,476,340	6,982	29,477	70,035	1,541,751
STYRENE OXIDE	0	0	0	0	0	0	0	0	0	0
SULFURIC ACID	13,000	1,401,919	204,071	0	238,325	347,001	4,073	84,557	24,245	927,454
TEREPHTHALIC ACID	0	41,750	0	0	0	250	0	500	0	0
TERT-BUTYL ALCOHOL	0	2	0	0	0	10	0	0	0	0
TETRACHLOROETHYLENE	0	35,931	136,533	0	301,735	5,852,650	398,500	2,885,829	113,180	26,198
TETRACHLORVINPHOS	0	0	0	0	0	0	0	0	0	0
THALLIUM	0	0	0	0	0	0	0	0	0	0
THALLIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
THIOUREA	0	500	0	0	0	1,020	0	0	0	0

CHEMICAL NAME	AK	AL	AR	AS	AZ	CA	CO	CT	DE	FL
THORIUM DIOXIDE	*0*	*0*	*0*	*0*	*0*	0	0	0	0	0
TITANIUM TETRACHLORIDE	0	0	0	0	0	10,100	0	0	11,800	0
TOLUENE	27,929	3,420,284	2,036,591	0	353,961	3,790,808	508,211	1,609,997	154,804	1,529,298
TOLUENE-2,4-DIISOCYANATE	0	810	1,000	0	0	102,032	500	500	1	909
TOLUENE-2,6-DIISOCYANATE	0	515	0	0	0	2,526	500	0	0	540
TOTAL FOR MIXTURES	0	1,570	5,976	0	750	327,654	67,200	5,500	0	13,001
TRICHLORFON	0	0	0	0	0	0	0	0	0	0
TRICHLOROETHYLENE	0	1,781,192	549,937	0	72,000	35,059	7,361	391,897	1,180	549,007
TRIFLURALIN	0	0	500	0	0	0	0	0	0	0
URETHANE	0	0	0	0	0	250	0	0	0	0
VANADIUM (FUME OR DUST)	0	0	365	0	0	300	0	0	0	0
VINYL ACETATE	0	39,645	0	0	0	93,607	0	500	8,278	0
VINYL BROMIDE	0	47,000	6,700	0	0	0	0	0	0	0
VINYL CHLORIDE	0	0	0	0	0	932	0	0	68,603	6,000
VINYLIDENE CHLORIDE	0	121,250	443,000	0	0	850	0	0	0	0
XYLENE (MIXED ISOMERS)	27,371	2,488,047	2,066,420	0	206,297	2,447,652	188,859	386,520	219,867	898,841
ZINC (FUME OR DUST)	0	75,894	7,428	0	250	18,986	24,430	12,476	0	7,887
ZINC COMPOUNDS	0	12,467	6,110	0	135,000	24,937	724	10,035	0	48,411
ZINEB	0	0	0	0	0	0	0	0	0	0
TOTALS	31,707,083	90,455,130	42,832,699	896,081	15,031,406	72,947,456	8,911,711	23,789,981	3,181,998	35,354,199

CHEMICAL NAME	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA
1,1,1-TRICHLOROETHANE	1,774,080	38,120	2,722,532	90,020	7,557,741	7,557,491	494,574	2,425,619	530,933	3,048,674
1,1,2,2-TETRACHLOROETHANE	0	0	0	0	0	0	0	355	32,271	0
1,1,2-TRICHLOROETHANE	9,800	0	144,200	0	7,491	1,000	0	5,393	141,892	845,657
1,1-DIMETHYL HYDRAZINE	0	0	0	0	0	0	0	0	0	0
1,2,4-TRICHLOROBENZENE	74,677	0	0	0	0	0	0	10	256	0
1,2,4-TRIMETHYLBENZENE	19,000	27,900	0	0	63,750	81,650	180,500	21,800	330,411	0
1,2-BUTYLENE OXIDE	0	0	0	0	0	2,750	0	0	13,720	0
1,2-DIBROMOETHANE	0	500	0	0	250	250	0	0	7,030	0
1,2-DICHLOROBENZENE	0	0	0	0	290,250	250	0	0	17,756	11,350
1,2-DICHLOROETHANE	3,440	500	0	0	179,500	179,500	3,776	344,692	2,261,856	65,950
1,2-DICHLOROETHYLENE	0	0	0	0	0	0	9,628	1,037	84,173	0
1,2-DICHLOROPROPANE	0	0	0	0	0	0	0	0	266,900	0
1,3-BUTADIENE	636,453	500	175,000	0	47,129	42,110	200	311,514	452,238	0
1,3-DICHLOROBENZENE	0	0	0	0	2,000	0	0	0	750	0
1,3-DICHLOROPROPYLENE	0	1,000	0	0	0	0	0	0	6,270	0
1,4-DICHLOROBENZENE	94	0	0	0	750	250	4,550	0	750	0
1,4-DIOXANE	0	0	0	0	11,450	0	0	0	26,475	750
2,4,5-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4,6-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-D (ACETIC ACID)	548	0	281	0	4	0	250	0	0	0
2,4-DIAMINOANISOLE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOANISOLE SULFATE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOTOLUENE	0	0	0	0	0	0	0	0	0	0
2,4-DICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-DIMETHYLPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-DINITROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-DINITROTOLUENE	0	0	0	0	0	250	0	0	69,948	0
2,6-DINITROTOLUENE	0	0	0	0	0	0	0	0	17,862	0
2,6-XYLIDINE										
2-CHLOROACETOPHENONE	0	0	0	0	0	0	0	0	0	0
2-ETHOXYETHANOL	8,525	0	0	0	151,000	150,750	0	15,628	0	9,432
2-METHOXYETHANOL	0	0	0	0	1,848	0	0	250	5,527	1,157,414
2-NITROPHENOL	0	0	0	0	27,000	0	0	0	0	0
2-NITROPROPANE	0	0	250	0	894	0	0	190,800	69,000	0
2-PHENYLPHENOL	0	0	0	0	500	0	0	0	0	0
3,3'-DICHLOROBENZIDINE	0	0	0	0	0	0	0	0	0	0
4,4'-DIAMINODIPHENYL ETHER	0	0	0	0	250	0	0	0	0	0

CHEMICAL NAME	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA
4,4'-ISOPROPYLIDENEDIPHENOL	1,000	0	0	0	500	0	0	1,008	500	730
4,4'-METHYENEDIANILINE	0	0	0	0	0	0	10,945	0	112	0
4,4'-METHYLENEBIS(2-CHLORO ANILINE)	0	0	0	0	0	0	0	0	0	0
4,4'-METHYLENEBIS(N,N-DIMETHYL)	0	0	0	0	18,173	0	0	0	0	0
4,6-DINITRO-O-CRESOL	0	0	0	0	0	0	0	0	3	0
4-AMINOAZOBENZENE	0	0	0	0	0	0	0	0	0	0
4-AMINOBIPHENYL	0	0	0	0	0	0	0	0	1	0
4-NITROPHENOL	0	0	0	0	2,200	0	0	0	2,250	0
5-NITRO-O-ANISIDINE	0	0	0	0	0	0	0	0	0	0
ACETALDEHYDE	0	0	0	0	0	34,006	500	0	458,237	26,000
ACETAMIDE	0	0	0	250	0	0	0	0	0	0
ACETONE	6,403,740	0	1,598,640	56,145	9,751,130	9,994,912	1,017,285	1,929,742	890,835	1,827,944
ACETONITRILE	0	0	0	0	862,925	862,925	0	35	90,750	32,134
ACROLEIN	0	0	0	0	0	0	0	0	27,258	0
ACRYLAMIDE	570	0	0	0	83	0	0	250	2,943	0
ACRYLIC ACID	3,603	0	16,000	0	250	0	14	2,068	5,860	606
ACRYLONITRILE	19	0	0	0	500	0	4,850	121,382	232,000	592
ALLYL CHLORIDE	48,829	0	0	0	0	0	2,150	423	806	250
ALPHA-NAPHTHYLAMINE	0	0	0	0	0	0	0	0	0	0
ALUMINUM (FUME OR DUST)	50,104	0	1,530	0	1,205,613	1,192,667	2,216	251,431	120	500
ALUMINUM OXIDE	64,486	150,250	48,860	0	3,478,563	3,478,813	1,140,700	6,907,546	3,476,825	668,310
AMMONIA	2,916,354	246,250	6,357,195	913,638	2,434,110	2,434,110	4,076,530	757,456	70,230,633	392,606
AMMONIUM NITRATE (SOLUTION)	206,072	0	38,970	0	0	0	1,000	0	130,000	0
AMMONIUM SULFATE (SOLUTION)	265,810	0	0	0	0	0	0	0	0	44
ANILINE	0	0	0	0	27,708	0	7,950	0	25,635	0
ANTHRACENE	1,523	0	0	0	16,452	13,580	0	1,509	1,512	0
ANTIMONY	352	0	0	0	256	881	250	256	751	0
ANTIMONY COMPOUNDS	750	0	0	1,000	1,000	2,378	0	1,916	251	1,000
ARSENIC	250	145	0	0	0	190	0	8	253	7,056
ARSENIC COMPOUNDS	2,500	0	0	0	1,250	250	0	750	250	0
ASBESTOS (FRIABLE)	0	0	0	0	1,077	250	0	1,000	110	750
BARIUM	510	0	0	0	2	0	0	2,994	0	750
BARIUM COMPOUNDS	9,703	0	250	500	2,064	8,908	250	4,502	52,160	1,002
BENZAL CHLORIDE	0	0	0	0	0	0	0	0	0	0
BENZENE	867,851	40,100	57,000	0	1,935,538	1,935,288	421,885	952,131	1,109,353	0
BENZIDINE	0	0	0	0	0	0	0	0	0	0
BENZOIC TRICHLORIDE	0	0	0	0	0	0	0	0	0	0

CHEMICAL NAME	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA
BENZOYL CHLORIDE	250	0	0	0	0	0	500	0	0	0
BENZOYL PEROXIDE	0	0	0	0	0	0	500	0	500	500
BENZYL CHLORIDE	443	0	0	0	511	11	0	0	0	0
BERYLLIUM	0	0	0	0	0	0	0	0	0	0
BERYLLIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
BIPHENYL	353,506	0	0	0	560	250	500	1,106	36,428	0
BIS(2-CHLOROETHYL) ETHER	0	0	0	0	0	0	0	0	450	0
BIS(2-ETHYLHEXYL) ADIPATE	500	0	0	0	250	0	0	0	0	1,818
BIS(CHLOROMETHYL) ETHER	0	0	0	0	0	0	0	0	0	0
BROMOMETHANE	72,900	0	0	0	0	0	0	0	0	18,200
BUTYL ACRYLATE	8,498	0	500	0	7,389	72	1,990	97,157	22,377	3,820
BUTYL BENZYL PHTHALATE	7,617	0	0	0	4	0	17,396	4,868	0	58,999
BUTYRALDEHYDE	0	0	0	0	0	0	0	0	0	224,000
C.I. ACID BLUE 9, DIAMMONIUM SALT	0	0	0	0	0	0	0	0	0	0
C.I. ACID BLUE 9, DISODIUM SALT	0	0	0	0	0	0	0	0	0	0
C.I. BASIC GREEN 4	0	0	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 14	0	0	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 3	0	0	0	0	0	0	0	0	0	0
CADMIUM	500	0	0	0	250	0	0	0	0	750
CADMIUM COMPOUNDS	0	0	0	100,250	1,700	0	250	6,650	1	0
CALCIUM CYANAMIDE	0	0	0	0	0	0	12,750	0	0	0
CAPTAN	750	0	0	250	750	0	0	0	0	0
CARBARYL	250	0	0	0	0	0	0	0	0	0
CARBON DISULFIDE	3,870	0	0	0	3,564,075	3,564,075	1,561,509	403	4,485,591	0
CARBON TETRACHLORIDE	11,500	0	0	0	250	250	404,488	55,721	549,143	0
CARBONYL SULFIDE	0	0	0	0	0	0	132,055	0	2,113,656	0
CATECHOL	0	0	0	0	0	0	0	0	0	0
CHLORAMBEN	0	0	0	0	500	0	0	0	0	0
CHLORDANE	0	0	0	0	884	0	0	0	0	0
CHLORINE	4,616,095	500	478,740	93,255	809,437	609,192	41,340	266,499	1,458,273	2,001
CHLORINE DIOXIDE	1,814,668	0	0	590,700	0	0	0	228,084	172,500	0
CHLDROACETIC ACID	0	0	0	0	10	0	0	0	260	0
CHLOROBENZENE	0	0	0	0	74,000	0	0	1,546	424,928	6,900
CHLOROBENZILATE	19	0	0	0	0	0	0	0	0	0
CHLOROETHANE	0	0	0	0	560,000	0	8,142	2,311	219,706	250
CHLOROFORM	1,543,082	0	0	710,000	15,500	15,500	103,452	402,598	647,038	0
CHLOROMETHANE	39,160	0	0	0	6,669,500	6,669,250	510,687	581,100	793,954	250

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CHEMICAL NAME	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA
CHLOROMETHYL METHYL ETHER	0	0	0	0	0	0	0	0	0	0
CHLOROPHENOLS	0	0	0	0	0	0	0	0	0	0
CHLOROPRENE	0	0	35,000	0	0	0	0	625,088	227,753	0
CHLOROTHALONIL	39	0	0	0	0	0	0	0	0	0
CHROMIUM	1,500	29	8,151	0	15,075	15,075	600	3,726	70,965	15,912
CHROMIUM COMPOUNDS	4,420	0	1,850	7,500	30,164	18,040	12,026	7,021	39,973	3,505
COBALT	500	0	0	0	905	905	0	4	250	0
COBALT COMPOUNDS	500	0	0	0	590	500	23	294	500	1,000
COPPER	10,029	864	2,799	0	34,726	34,726	607	4,720	25	8,185
COPPER COMPOUNDS	7,750	0	33,004	3,500	6,657	146,320	501	2,762	1,001	3,600
CRESOL (MIXED ISOMERS)	8,636	0	0	0	215,751	199,751	1,201	0	26,990	0
CUMENE	36,040	0	0	0	152,760	113,750	380,500	46,000	264,470	0
CUMENE HYDROPEROXIDE	0	0	0	0	500	0	38,400	2,088	60	0
CUPFERRON	0	0	0	0	0	0	0	0	0	0
CYANIDE COMPOUNDS	1,190	0	0	250	41,185	79,455	0	3,623	0	5,650
CYCLOHEXANE	27,700	32,900	0	0	139,144	139,144	251,400	21,030	170,915	0
DECABROMODIPHENYL OXIDE	0	0	0	0	0	0	0	0	0	2
DI-(2-ETHYLHEXYL) PHTHALATE	71,601	0	500	0	110,338	110,338	0	79,500	0	11,467
DIAMINOTOLUENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	1,161	0
DIBENZOFURAN	1,659	0	0	0	4,571	2,001	0	840	1,071	0
DIBUTYL PHTHALATE	1,360	0	66,000	0	1,000	114,338	14	1,750	5,700	250
DICHLOROBENZENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	1,007	0
DICHLOROBROMOMETHANE	0	0	0	0	0	3,600	0	0	0	0
DICHLOROMETHANE	4,640,973	0	942,081	0	10,573,510	10,245,216	345,382	1,042,690	342,356	2,796,577
DICHLORVOS	0	0	0	0	0	0	0	0	0	0
DICOFOL	0	0	0	0	0	0	0	0	0	0
DIETHANOLAMINE	1,694	0	500	0	96,650	96,400	9,600	500	22,902	3,700
DIETHYL PHTHALATE	0	0	0	0	0	16	0	0	0	47,000
DIETHYL SULFATE	0	0	0	0	0	0	0	0	0	655
DIMETHYL PHTHALATE	0	0	0	0	59	0	0	0	126,982	0
DIMETHYL SULFATE	0	0	0	0	750	0	0	0	0	0
EPICHLOROHYDRIN	17,378	0	0	0	2,172	0	460	1,315	34,237	44,209
ETHYL ACRYLATE	1,382	0	0	0	500	0	1,596	19,020	52,937	2,000
ETHYL CHLOROFORMATE	0	0	0	0	0	0	0	0	0	0
ETHYLBENZENE	61,029	16,200	0	0	76,690	111,292	343,640	184,733	316,150	16,000
ETHYLENE	0	3,050	1,560,000	0	134,700	133,950	308,065	1,296,946	6,372,413	0
ETHYLENE GLYCOL	40,120	0	57,640	1,039	40,108	39,873	4,763	85,619	1,455,416	127,066

CHEMICAL NAME	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA
ETHYLENE OXIDE	137,157	0	1,250	500	29,354	63,977	0	49,327	763,251	13,800
ETHYLENE THIOUREA	0	0	0	0	0	0	0	0	0	0
ETHYLENEIMINE	0	0	0	0	0	0	0	0	0	0
FLUOMETURON	500	0	0	0	0	0	0	0	0	0
FORMALDEHYDE	282,077	0	23,485	83,531	387,616	379,186	93,351	346,519	145,720	180,939
FREON 113	455,114	0	564,402	166,500	1,232,516	1,226,181	232,416	538,393	528,938	2,707,365
GLYCOL ETHERS	963,849	61,445	399,885	0	1,847,836	1,512,161	69,150	1,671,178	446,526	348,299
HEPTACHLOR	0	0	0	0	6,500	0	0	0	0	0
HEXACHLORO-1,3-BUTADIENE	0	0	0	0	0	0	176	0	1,270	0
HEXACHLOROBENZENE	0	0	0	0	0	0	106	0	367	0
HEXACHLOROCYCLOPENTADIENE	0	0	0	0	550	0	0	0	0	0
HEXACHLOROETHANE	0	0	0	0	0	250	421	0	912	0
HEXACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
HYDRAZINE	250	0	0	0	265	0	0	1	1,208	500
HYDRAZINE SULFATE	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID	10,912,617	250	56,189	2,010	793,354	793,104	174,854	1,852,538	990,672	96,672
HYDROGEN CYANIDE	0	0	0	0	29	29	0	640	16,028	0
HYDROGEN FLUORIDE	1,500	0	1,250	103,500	1,536,750	1,537,250	83,857	652,733	496,387	7,609
HYDROQUINONE	0	0	0	0	250	0	0	250	254	0
Invalid no. should be 117817	0	0	0	0	0	0	0	0	0	0
ISOBUTYRALDEHYDE	0	0	0	0	48,650	45,200	0	0	0	0
ISOPROPYL ALCOHOL (MANUFACTURING)	274,035	0	224,020	15,200	540,607	542,359	206,015	190,142	124,958	100,646
LEAD	46,371	500	2,609	250	54,033	53,326	2,897	13,695	38,209	636
LEAD COMPOUNDS	7,143	0	5,326	7,550	7,457	94,652	5,263	21,180	67,554	3,646
LINDANE	0	0	0	250	0	0	0	0	0	0
M-CRESOL	500	0	0	0	2,975	0	0	998	0	0
M-XYLENE	0	34,000	0	0	2,058	0	28,375	217,493	150,721	9,250
MALEIC ANHYDRIDE	1,265	0	0	0	12,130	11,630	0	154	23,675	500
MANEB	500	0	0	0	0	0	0	33,823	0	0
MANGANESE	5,500	0	11,001	0	5,726	9,549	250	11,376	5,131	250
MANGANESE COMPOUNDS	1,291	0	14,066	1,000	2,013	693,700	313	48,500	96	250
MELAMINE	0	0	0	0	250	0	0	1,219	121,000	91,800
MERCURY	1,054	0	0	0	250	2	0	1,649	1,250	0
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0
METHANOL	33,291,267	750	2,150,655	110,000	2,877,468	2,636,442	1,055,838	1,484,611	9,181,493	1,700,354
METHOXYCHLOR	251	0	0	0	0	0	0	0	0	0
METHYL ACRYLATE	1,267	0	0	0	500	0	0	15,432	4,860	1,500

CHEMICAL NAME	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA
METHYL ETHYL KETONE	2,598,250	0	2,857,156	1,545	6,934,477	6,930,997	1,712,531	921,760	2,954,850	2,591,042
METHYL HYDRAZINE	0	0	0	0	0	0	0	0	0	0
METHYL IODIDE	0	0	0	0	0	0	0	0	0	0
METHYL ISOBUTYL KETONE	2,551,739	0	250,033	0	1,328,239	1,327,936	14,952	117,260	329,522	105,180
METHYL ISOCYANATE	0	0	0	0	0	143,097	0	0	0	0
METHYL METHACRYLATE	3,319	0	406	0	1,473	0	3,067	220,851	164,046	6,793
METHYL TERT-BUTYL ETHER	0	4,200	0	0	18,550	26,000	7,700	0	211,104	0
METHYLENE BROMIDE	0	0	0	0	0	0	0	0	0	0
METHYLENEBIS(PHENYLISOCYANATE)	4,645	0	31,750	250	158,658	155,016	1,000	251	504	1,750
MICHLER'S KETONE	0	0	0	0	0	0	0	0	0	0
MOLYBDENUM TRIOXIDE	0	0	7,500	0	0	250	1,000	223	750	0
N,N-DIMETHYLANILINE	0	0	0	0	0	0	0	0	0	0
N-BUTYL ALCOHOL	604,684	60,325	323,400	0	1,050,758	1,049,889	37,647	942,648	233,436	80,463
N-DIOCTYL PHTHALATE	571	0	0	0	3,126	3,124	2,102	250	0	14,000
N-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	26,726	8,950	1,000	0	116,470	116,400	62,005	95,018	101,484	1,421
NICKEL	1,050	0	5,500	0	145,460	145,466	250	3,242	3,350	1,000
NICKEL COMPOUNDS	500	0	0	16,250	5,354	21,500	2,414	12,813	750	3,250
NITRIC ACID	221,550	0	56,910	500	76,639	76,639	4,830	84,396	182,803	31,255
NITRILOTRIACETIC ACID	251	0	0	0	0	0	0	0	0	0
NITROBENZENE	0	0	0	0	0	0	0	0	15,058	0
NITROGEN MUSTARD										
NITROGLYCERIN	0	0	0	0	0	250	0	0	0	0
O-ANISIDINE	0	0	0	0	0	0	0	0	0	0
O-CRESOL	5	0	0	0	8,966	0	0	1,001	162	0
O-TOLUIDINE	0	0	0	0	0	0	250	0	0	0
O-XYLENE	0	20,800	0	0	1,000	0	8,198	0	246,672	80,146
OCTACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
P-ANISIDINE	0	0	0	0	0	0	0	0	0	0
P-CRESIDINE	0	0	0	0	278	0	0	0	0	0
P-CRESOL	0	0	0	0	26,698	0	1,000	998	445	0
P-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
P-PHENYLENEDIAMINE	0	0	0	0	0	0	0	0	3	0
P-XYLENE	0	8,800	0	0	34,636	0	0	0	154,835	0
PARATHION	2	0	0	0	0	0	250	0	0	0
PENTACHLOROPHENOL	3,054	0	0	500	0	0	824	250	0	0
PERACETIC ACID	0	0	0	0	250	500	0	0	188	0

CHEMICAL NAME	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA
PHENOL	84,740	0	102,614	0	581,590	576,585	449,252	57,633	86,836	12,110
PHOSGENE	0	0	0	0	0	500	69,368	0	898	0
PHOSPHORIC ACID	45,430	0	9,930	163	105,061	105,132	101,664	166,560	16,527	10,213
PHOSPHORUS (YELLOW OR WHITE)	0	0	0	250	0	0	0	0	0	0
PHTHALIC ANHYDRIDE	2,250	0	135	0	5,240	2,040	0	29,998	23,700	1,350
PICRIC ACID	0	0	0	0	0	0	0	0	0	0
POLY BROMINATED BIPHENYLS	0	0	0	0	0	0	0	0	0	0
POLYCHLORINATED BIPHENYLS (PCBs)	0	0	0	0	0	0	0	0	0	13
PROPANE SULTONE	0	0	0	0	0	0	0	0	0	0
PROPIONALDEHYDE	0	0	0	0	27,183	9,383	0	998	35,890	0
PROPOXUR	0	0	0	0	0	0	0	0	0	0
PROPYLENE	102,550	34,000	284,190	0	128,230	126,990	418,920	147,609	4,209,745	0
PROPYLENE OXIDE	12,554	0	250	0	86,179	150,157	100	87,088	119,025	0
PROPYLENEIMINE	0	0	0	0	0	0	0	0	0	0
PYRIDINE	0	0	0	0	0	34,259	250	0	1,384	0
QUINOLINE	0	0	0	0	750	250	0	0	250	0
QUINONE	0	0	0	0	0	0	0	0	0	0
QUINTOZENE	3	0	0	0	0	0	0	0	0	0
SACCHARIN (MANUFACTURING)	0	0	0	0	0	0	0	0	0	0
SAFROLE	0	0	0	0	0	0	0	0	0	0
SEC-BUTYL ALCOHOL	10,069	0	0	0	1,500	1,000	0	33,140	307,260	800
SELENIUM	250	0	250	0	500	0	0	0	0	0
SELENIUM COMPOUNDS	0	0	0	0	0	0	0	500	0	0
SILVER	0	0	0	0	0	0	0	645	0	840
SILVER COMPOUNDS	1	0	0	0	500	0	0	0	0	500
SODIUM HYDROXIDE (SOLUTION)	167,593	250	57,007	50,000	43,095	43,095	1,266	117,059	239,267	85,727
SODIUM SULFATE (SOLUTION)	547,650	0	250	270,000	1,779	1,779	250	2,031	0	523
STYRENE	490,713	0	41,524	26,000	689,958	872,592	140,318	459,702	674,636	272,923
STYRENE OXIDE	60	0	0	0	0	0	0	0	523	0
SULFURIC ACID	634,946	14,750	77,067	206,588	255,465	255,465	12,419	106,377	1,154,516	81,888
TEREPHTHALIC ACID	500	0	0	0	250	0	0	0	0	1,039
TERT-BUTYL ALCOHOL	28,500	0	0	0	15,129	4,513	0	750	1,180	0
TETRACHLOROETHYLENE	276,490	0	2,745,320	71,956	2,527,187	2,508,285	191,510	603,384	425,349	148,660
TETRACHLORVINPHOS	0	0	0	0	0	0	0	0	0	0
THALLIUM	0	0	0	0	0	0	0	0	0	0
THALLIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
THIOUREA	0	0	0	0	4,000	0	0	0	0	0

CHEMICAL NAME	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA
THORIUM DIOXIDE	0	0	0	0	0	0	0	0	0	0
TITANIUM TETRACHLORIDE	7,000	0	0	0	0	500	0	0	100	0
TOLUENE	6,466,508	97,000	8,187,413	0	13,699,384	13,676,384	2,199,912	6,974,130	4,804,860	4,660,753
TOLUENE-2,4-DIISOCYANATE	31,306	4,700	0	0	4,237	3,737	750	1,750	634	695
TOLUENE-2,6-DIISOCYANATE	1,521	250	0	0	661	381	500	2,460	534	126
TOTAL FOR MIXTURES	20,554	0	5,000	0	394,395	841,706	0	4,744	60,389	209,982
TRICHLORFON	0	0	0	0	0	0	1	9,700	0	0
TRICHLOROETHYLENE	2,625,425	0	247,403	11,000	5,917,501	5,946,667	3,152,073	494,026	476,417	1,991,987
TRIFLURALIN	500	0	250	0	500	500	0	0	0	0
URETHANE	0	0	0	0	0	0	0	0	0	0
VANADIUM (FUME OR DUST)	0	0	0	0	250	250	1	1,566	0	0
VINYL ACETATE	12,671	0	36,000	0	4,934	866	14,398	90,700	217,030	73,100
VINYL BROMIDE	0	0	0	0	0	0	0	0	0	0
VINYL CHLORIDE	72,044	0	250	0	65,502	0	62	90,494	298,610	0
VINYLIDENE CHLORIDE	0	0	0	0	8,700	0	166	33,280	135,000	0
XYLENE (MIXED ISOMERS)	3,185,042	50,000	3,069,578	1,000	7,533,394	7,528,994	1,881,962	4,609,456	1,611,133	544,978
ZINC (FUME OR DUST)	57,607	0	6,497	0	2,776	2,776	2,000	49,119	373,409	3,512
ZINC COMPOUNDS	9,993	0	1,963	352,000	222,763	147,282	15,404	40,669	3,511	5,327
ZINEB	0	0	0	0	0	0	0	0	0	0
TOTALS	94,296,297	957,776	36,208,159	4,066,590	103,093,458	103,479,027	24,340,188	43,279,655	134,524,442	27,791,549

CHEMICAL NAME	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE
1,1,1-TRICHLOROETHANE	1,460,355	1,342,434	4,639,506	2,279,479	2,871,100	150,000	0	4,384,073	58,145	901,909
1,1,2,2-TETRACHLOROETHANE	0	0	250	30,016	0	0	0	0	0	0
1,1,2-TRICHLOROETHANE	21,000	0	196,552	26,000	0	0	0	0	0	62
1,1-DIMETHYL HYDRAZINE	0	0	0	0	0	0	0	0	0	0
1,2,4-TRICHLOROBENZENE	0	0	0	0	0	0	0	181,195	0	0
1,2,4-TRIMETHYLBENZENE	1,250	0	3,800	116,293	4,808	96,650	75,990	1,000	10,100	250
1,2-BUTYLENE OXIDE	0	0	49,804	72	0	0	0	0	0	0
1,2-DIBROMOETHANE	0	0	0	14	0	500	0	0	0	0
1,2-DICHLOROBENZENE	0	0	0	0	250	87	0	0	0	0
1,2-DICHLOROETHANE	25,427	0	239,550	6,132	114,700	500	0	17,331	0	0
1,2-DICHLOROETHYLENE	0	0	0	0	0	0	0	0	0	0
1,2-DICHLOROPROPANE	0	0	0	0	0	250	0	0	0	0
1,3-BUTADIENE	0	0	63,472	0	0	2,720	520	9,643	0	0
1,3-DICHLOROBENZENE	0	0	1,000	0	0	0	0	0	0	0
1,3-DICHLOROPROPYLENE	0	0	500	0	0	0	0	0	0	0
1,4-DICHLOROBENZENE	0	0	0	0	500	0	0	0	0	0
1,4-DIOXANE	250	0	33,915	18	19	14,880	0	29,502	0	0
2,4,5-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4,6-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-D (ACETIC ACID)	0	0	750	54	2,093	0	500	0	0	0
2,4-DIAMINOANISOLE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOANISOLE SULFATE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOTOLUENE	0	0	0	0	0	0	0	0	0	0
2,4-DICHLOROPHENOL	0	0	1,571	0	0	0	0	0	0	0
2,4-DIMETHYLPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-DINITROPHENOL	0	0	0	0	0	0	0	500	0	0
2,4-DINITROTOLUENE	0	0	0	0	0	0	0	0	0	0
2,6-DINITROTOLUENE	0	0	0	0	0	0	0	0	0	0
2,6-XYLIDINE										
2-CHLOROACETOPHENONE	0	0	250	0	0	0	0	0	0	0
2-ETHOXYETHANOL	11,199	92,000	264,378	620,099	54,614	2	0	0	0	3,255
2-METHOXYETHANOL	0	130,000	9,060	328	12,250	250	0	200	47	0
2-NITROPHENOL	6,149	0	0	0	0	0	0	0	0	0
2-NITROPROPANE	0	0	0	0	0	0	0	0	0	0
2-PHENYLPHENOL	0	0	1,000	0	0	0	0	0	0	0
3,3'-DICHLOROBENZIDINE	0	0	3	0	0	0	0	0	0	0
4,4'-DIAMINODIPHENYL ETHER	0	0	0	0	210	0	0	0	0	0

CHEMICAL NAME	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE
4,4'-ISOPROPYLIDENEDIPHENOL	7,902	0	500	0	0	0	0	0	0	0
4,4'-METHYENEDIANILINE	0	0	0	334	103,215	0	0	13,570	0	0
4,4'-METHYLENEBIS(2-CHLORO ANILINE)	0	0	0	0	0	0	0	0	0	0
4,4'-METHYLENEBIS(N,N-DIMETHYL)	0	0	0	0	0	0	0	0	0	0
4,6-DINITRO-O-CRESOL	0	0	0	0	0	0	0	0	0	0
4-AMINOAZOBENZENE	0	0	0	0	0	0	0	0	0	0
4-AMINOBIPHENYL	0	0	0	0	0	0	0	0	0	0
4-NITROPHENOL	0	0	0	0	0	0	0	0	0	0
5-NITRO-O-ANISIDINE	0	0	0	0	0	0	0	0	0	0
ACETALDEHYDE	0	250	0	0	37,000	0	0	993,880	0	0
ACETAMIDE	0	0	0	0	0	0	0	0	0	0
ACETONE	381,805	810,953	11,023,686	1,375,920	2,023,935	3,550	0	4,324,671	3,200	382,571
ACETONITRILE	2,867	0	37,993	0	18	0	0	200	0	0
ACROLEIN	0	0	0	0	0	0	0	0	0	0
ACRYLAMIDE	0	0	750	0	650	0	0	500	0	0
ACRYLIC ACID	254	0	4,548	92	6	500	0	7,086	0	0
ACRYLONITRILE	0	0	43,489	0	500	86,282	0	9,823	0	0
ALLYL CHLORIDE	0	0	2,034	0	0	0	0	0	0	0
ALPHA-NAPHTHYLAMINE	0	0	0	0	0	0	0	500	0	0
ALUMINUM (FUME OR DUST)	750	0	193,841	0	3,250	0	0	224,342	0	0
ALUMINUM OXIDE	1,746,578	4,950	1,573,670	707,166	364,974	2,862,610	2,949,860	1,916,274	160,000	3,020
AMMONIA	3,590,493	189,407	1,163,908	309,294	1,652,269	58,500	58,250	7,133,471	60,500	3,614,298
AMMONIUM NITRATE (SOLUTION)	0	0	500	0	994,929	0	10,000	1,750	0	390,000
AMMONIUM SULFATE (SOLUTION)	0	0	1	0	500	0	0	3,592	0	116,700
ANILINE	0	0	0	0	0	64,600	0	3,740	0	0
ANTHRACENE	500	0	4,350	120	735	250	0	1,004	0	0
ANTIMONY	7,079	0	500	250	250	0	0	28	0	0
ANTIMONY COMPOUNDS	500	0	750	27	269	0	2,900	500	0	30,900
ARSENIC	608	0	2,117	128	0	0	0	1,002	0	0
ARSENIC COMPOUNDS	250	0	250	250	540	500	51,000	1,002	0	2,680
ASBESTOS (FRIABLE)	0	0	1,251	0	0	0	250	926	0	250
BARIUM	500	0	13,661	19,640	250	0	0	261	0	250
BARIUM COMPOUNDS	7,105	0	8,247	0	16,985	31	0	11,302	0	250
BENZAL CHLORIDE	0	0	0	0	0	0	0	0	0	0
BENZENE	195,000	0	748,917	98,653	5,911	231,432	69,340	190,182	20,500	250
BENZIDINE	0	0	9,300	0	0	0	0	0	0	0
BENZOIC TRICHLORIDE	0	0	0	0	0	0	0	0	0	0

CHEMICAL NAME	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE
BENZOYL CHLORIDE	0	0	0	0	0	330	0	0	0	0
BENZOYL PEROXIDE	0	0	0	0	0	0	0	1,750	0	0
BENZYL CHLORIDE	0	0	4,950	0	250	0	0	755	0	0
BERYLLIUM	0	0	0	0	0	0	0	0	0	0
BERYLLIUM COMPOUNDS	0	0	0	0	250	0	0	0	0	0
BIPHENYL	500	15,920	1,000	1,080	0	1,250	500	418,750	0	0
BIS(2-CHLOROETHYL) ETHER	0	0	0	0	3,435	0	0	0	0	0
BIS(2-ETHYLHEXYL) ADIPATE	414	0	250	0	0	0	0	0	0	109
BIS(CHLOROMETHYL) ETHER	0	0	0	0	0	0	0	0	0	0
BROMOMETHANE	0	0	14,200	0	11,500	21,300	0	29	0	0
BUTYL ACRYLATE	27,298	0	1,412	0	11,500	500	0	7,294	0	0
BUTYL BENZYL PHTHALATE	0	0	15,301	0	2,355	0	0	6,871	0	0
BUTYRALDEHYDE	0	0	130,750	0	0	0	0	2,800	0	0
C.I. ACID BLUE 9, DIAMMONIUM SALT	0	0	0	0	0	0	0	0	0	0
C.I. ACID BLUE 9, DISODIUM SALT	0	0	0	0	1,000	0	0	0	0	0
C.I. BASIC GREEN 4	0	0	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 14	0	0	0	0	0	4	0	0	0	0
C.I. SOLVENT YELLOW 3	0	0	0	0	0	0	0	0	0	0
CADMIUM	500	0	250	0	970	0	0	0	0	0
CADMIUM COMPOUNDS	0	0	0	0	1,040	0	10,000	0	0	0
CALCIUM CYANAMIDE	0	0	0	0	0	0	0	0	0	0
CAPTAN	250	0	0	0	90	500	0	0	0	500
CARBARYL	250	0	0	0	750	500	0	0	0	0
CARBON DISULFIDE	0	0	1,850	7,100	1,475	0	0	0	0	0
CARBON TETRACHLORIDE	1,884	0	157,666	0	63	1,000	750	0	500	0
CARBONYL SULFIDE	0	0	0	0	0	6,000,000	0	0	0	0
CATECHOL	491	0	0	0	0	0	0	0	0	0
CHLORAMBEN	0	0	0	0	0	0	0	0	0	0
CHLORDANE	0	0	0	0	0	500	0	0	0	0
CHLORINE	1,108,174	2,263,323	3,920,946	171,771	93,492	20,318	318	421,807	15,980	23,776
CHLORINE DIOXIDE	650,250	1,613,954	166,000	18,250	0	33,964	0	352,736	0	0
CHLOROACETIC ACID	0	0	0	0	3,800	0	0	4	0	0
CHLOROBENZENE	0	0	118,213	0	5,561	0	0	1,004	0	0
CHLOROBENZILATE	0	0	0	0	0	0	0	0	0	0
CHLOROETHANE	0	0	154,550	0	1,070,000	0	0	0	0	0
CHLOROFORM	680,000	940,160	446,384	184,700	177,600	204,896	0	3,538,122	0	0
CHLOROMETHANE	0	0	433,182	0	533,633	0	0	0	0	0

WV 00010218

CHEMICAL NAME	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE
CHLOROMETHYL METHYL ETHER	0	0	250	0	0	0	0	0	0	0
CHLOROPHENOLS	0	0	0	0	0	0	0	500	0	0
CHLOROPRENE	0	0	0	0	0	0	0	0	0	0
CHLOROTHALONIL	1,792	0	0	0	0	0	0	0	0	0
CHROMIUM	61,106	24	14,126	7,457	4,993	0	0	4,928	0	500
CHROMIUM COMPOUNDS	83,269	662	4,872	2,076	4,801	254	0	98,251	250	10
COBALT	0	0	2,957	76	762	250	0	1,880	0	0
COBALT COMPOUNDS	1,562	0	250	630	500	0	0	500	0	0
COPPER	33,614	500	665,437	611	27,773	250	0	105,276	0	3,089
COPPER COMPOUNDS	10,800	500	3,055	1,010	16,905	500	21,900	3,251	0	1,500
CRESOL (MIXED ISOMERS)	0	0	1	0	8,956	8,180	0	195,157	0	0
CUMENE	500	0	500	85	1,590	31,650	30,650	0	0	19,711
CUMENE HYDROPEROXIDE	0	0	150	0	0	0	0	0	0	0
CUPFERRON	0	0	0	0	690	0	0	0	0	0
CYANIDE COMPOUNDS	30,158	750	2,770	4,800	7,900	250	0	0	0	8
CYCLOHEXANE	3,097	0	30,742	26,474	10,366	131,740	40,254	97,554	3,600	0
DECABROMODIPHENYL OXIDE	0	0	1,000	0	0	0	0	1	0	0
DI-(2-ETHYLHEXYL) PHTHALATE	440	0	22,489	7,350	3,150	327,505	0	278,980	0	611
DIAMINOTOLUENE (MIXED ISOMERS)	0	0	1,000	0	0	0	0	0	0	0
DIBENZOFURAN	250	0	3,700	0	796	750	0	547	0	0
DIBUTYL PHTHALATE	20,890	0	3,902	1,800	0	0	0	10,850	0	0
DICHLOROBENZENE (MIXED ISOMERS)	0	51,742	0	0	3	0	0	0	0	0
DICHLOROBROMOMETHANE	0	0	0	0	0	0	0	0	0	0
DICHLOROMETHANE	483,002	177,900	6,731,042	1,931,917	1,920,311	57,400	0	8,957,879	0	1,705,269
DICHLORVOS	0	0	0	0	0	0	0	0	0	0
DICOFOL	0	0	0	0	0	0	0	0	0	0
DIETHANOLAMINE	0	0	32,278	0	500	1,400	3,100	773	600	0
DIETHYL PHTHALATE	0	0	854	0	36,750	0	0	26	0	0
DIETHYL SULFATE	0	0	0	0	0	0	0	0	0	0
DIMETHYL PHTHALATE	116,250	0	4	661,737	15,250	0	0	134,760	0	0
DIMETHYL SULFATE	0	0	0	0	97	0	0	0	0	0
EPICHLOROHYDRIN	0	0	7,500	0	603	21,792	0	376	0	0
ETHYL ACRYLATE	1,002	0	573	2,600	19	500	0	5,398	0	0
ETHYL CHLOROFORMATE	0	0	0	0	0	0	0	0	0	0
ETHYLBENZENE	19,240	33,597	369,609	258,561	23,009	21,550	46,940	43,416	4,500	0
ETHYLENE	0	0	79,627	28,740	0	74,600	95,760	0	2,200	0
ETHYLENE GLYCOL	110,620	0	67,898	6,361	27,336	0	0	1,759,873	880	1,650

CHEMICAL NAME	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE
ETHYLENE OXIDE	5,350	0	93,826	0	58,350	250	0	35,882	0	126,000
ETHYLENE THIOUREA	0	0	0	0	0	0	0	0	0	0
ETHYLENEIMINE	0	0	0	0	0	0	0	0	0	0
FLUOMETURON	0	0	0	0	1,611	0	0	0	0	0
FORMALDEHYDE	3,775	180,987	511,511	875,551	157,884	77,200	76,700	526,233	500	14,127
FREON 113	192,816	146,150	1,343,325	2,525,365	928,407	35,000	0	1,403,967	0	855,586
GLYCOL ETHERS	183,401	450,000	5,248,738	467,618	2,925,941	150,171	0	960,415	14,000	77,500
HEPTACHLOR	0	0	0	0	0	0	0	0	0	0
HEXACHLORO-1,3-BUTADIENE	0	0	0	0	160	0	0	0	0	0
HEXACHLOROBENZENE	0	0	0	0	0	0	0	0	0	0
HEXACHLOROCYCLOPENTADIENE	0	0	0	0	0	0	0	0	0	0
HEXACHLOROETHANE	0	0	0	0	1,000	0	0	0	0	0
HEXACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
HYDRAZINE	0	0	0	0	842	0	0	0	0	0
HYDRAZINE SULFATE	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID	1,521,097	183,556	1,523,218	142,708	109,495	279,000	1,000	1,115,687	1,000	6,048
HYDROGEN CYANIDE	0	0	0	69	0	0	0	0	0	0
HYDROGEN FLUORIDE	412,250	500	15,340	99,700	21,557	357,055	465,420	188,844	3,700	0
HYDROQUINONE	0	0	500	0	0	0	0	0	0	0
Invalid no. should be 117817	0	0	0	0	0	0	0	0	0	0
ISOBUTYRALDEHYDE	0	0	0	0	0	0	0	0	0	0
ISOPROPYL ALCOHOL (MANUFACTURING)	101,457	54,780	342,897	82,439	315,564	250	0	1,542,428	253,776	141,278
LEAD	540	0	17,663	12,445	355,278	160	103	4,921	0	538
LEAD COMPOUNDS	16,082	0	22,459	2,744	92,532	3,053	66,501	12,250	29	35,300
LINDANE	0	0	0	0	0	0	0	0	61	0
M-CRESOL	0	0	0	0	0	0	0	250	0	0
M-XYLENE	2,550	0	8,200	0	500	257,000	1,500	23,317	0	0
MALEIC ANHYDRIDE	437	500	750	860	3,349	95	0	0	0	0
MANEB	250	0	0	0	0	0	0	0	17	0
MANGANESE	6,762	0	10,542	1,530	53,204	21	0	1,251	0	1,045
MANGANESE COMPOUNDS	189,804	5,900	54,046	0	1,260	22,150	0	8,507	0	2,050
MELAMINE	0	1,650	4,250	0	500	0	0	1,250	0	0
MERCURY	0	1,051	0	7	44	0	0	114,249	0	0
MERCURY COMPOUNDS	0	0	0	0	250	0	0	0	0	0
METHANOL	475,043	1,625,225	4,643,513	2,274,901	2,829,917	98,422	58,250	12,460,807	22,506	250,541
METHOXYCHLOR	0	0	0	0	0	0	0	0	0	0
METHYL ACRYLATE	0	2,700	500	4,700	0	500	0	2,406	0	0

CHEMICAL NAME	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE
METHYL ETHYL KETONE	1,405,775	22,850	12,419,314	1,624,288	3,031,991	4,529,241	0	6,512,564	346,214	529,307
METHYL HYDRAZINE	0	0	0	0	0	0	0	0	0	0
METHYL IODIDE	*0*	*0*	*0*	*0*	*0*	0	0	0	0	0
METHYL ISOBUTYL KETONE	214,955	0	1,575,865	263,081	464,576	804,556	7,300	263,347	0	212,769
METHYL ISOCYANATE	0	0	0	0	0	0	0	0	0	0
METHYL METHACRYLATE	868	188,250	115,984	172	3,166	500	0	4,900	0	0
METHYL TERT-BUTYL ETHER	0	0	46,309	0	5,200	500	0	1,550	*0*	*0*
METHYLENE BROMIDE	2,231	0	13,731	0	0	0	0	0	13,200	0
METHYLENEBIS(PHENYLISOCYANATE)	500	250	8,551	250	431,004	0	0	1,000	0	1,000
MICHLER'S KETONE	0	0	0	0	400	0	0	0	0	0
MOLYBDENUM TRIOXIDE	3,056	500	20,000	0	0	500	250	0	0	0
N,N-DIMETHYLANILINE	0	0	0	250	12,250	0	0	0	0	0
N-BUTYL ALCOHOL	178,410	73,585	2,572,906	573,034	1,934,673	36,600	8,600	1,784,138	0	10,458
N-DIOCTYL PHTHALATE	0	0	14,500	0	0	0	0	1,875	*0*	0
N-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	58,500	0	46,579	17,510	6,452	28,764	24,864	113,892	580	180,750
NICKEL	1,450	250	10,891	18,478	3,621	250	0	2,897	0	503
NICKEL COMPOUNDS	*23,146*	603	7,900	250	8,140	0	154	2,011	0	0
NITRIC ACID	17,816	15,855	53,121	25,982	2,588,232	4,000	0	20,489	0	20,383
NITRILOTRIACETIC ACID	0	0	500	0	0	0	0	0	0	0
NITROBENZENE	0	0	0	0	1,200	37,800	0	2,550	0	0
NITROGEN MUSTARD										
NITROGLYCERIN	0	0	0	0	750	0	0	0	0	0
O-ANISIDINE	0	0	0	0	0	0	0	2,531	0	0
O-CRESOL	0	0	0	0	0	6,945	0	0	0	0
O-TOLUIDINE	0	0	0	0	0	1,000	0	500	*0*	*0*
O-XYLENE	1,650	0	2,400	0	11,700	140,750	500	883,383	0	0
OCTACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
P-ANISIDINE	0	0	0	0	0	0	0	0	0	0
P-CRESIDINE	0	0	0	0	0	0	0	0	0	0
P-CRESOL	0	0	0	0	0	0	0	500	0	0
P-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
P-PHENYLENEDIAMINE	0	0	0	0	0	0	0	0	0	0
P-XYLENE	2,750	0	2,350	0	0	247,700	500	1,502,300	0	0
PARATHION	0	0	0	0	0	500	0	0	0	0
PENTACHLOROPHENOL	0	0	0	123	508	750	500	1	0	0
PERACETIC ACID	*0*	*0*	*0*	14	0	0	0	0	0	0

CHEMICAL NAME	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE
PHENOL	7,325	3,667	253,693	215,882	29,813	2,850	2,350	160,592	0	0
PHOSGENE	0	0	500	0	0	0	0	0	0	0
PHOSPHORIC ACID	1,503	2,500	80,989	1,507	5,262	500	0	7,600	0	592
PHOSPHORUS (YELLOW OR WHITE)	0	0	3,400	0	0	0	3,550	250	0	0
PHTHALIC ANHYDRIDE	8,627	0	5,806	7,550	2,507	0	0	639	0	0
PICRIC ACID	0	0	0	0	0	500	0	250	0	0
POLY BROMINATED BIPHENYLS	0	0	0	0	0	0	0	0	0	0
POLYCHLORINATED BIPHENYLS (PCBs)	0	0	250	0	0	0	0	0	0	0
PROPANE SULTONE	0	0	0	0	0	0	0	0	0	0
PROPIONALDEHYDE	0	0	0	0	0	0	0	0	0	0
PROPOXUR	0	0	0	0	47	0	0	0	0	0
PROPYLENE	0	0	76,950	160,700	500	201,000	174,400	1	4,400	0
PROPYLENE OXIDE	1,700	250	304,802	14	11,448	275	0	4,560	0	0
PROPYLENEIMINE	0	0	0	0	0	0	0	0	0	0
PYRIDINE	0	0	13,250	0	0	0	0	121,700	0	0
QUINOLINE	0	0	1,570	0	0	250	0	0	0	0
QUINONE	0	0	0	0	0	0	0	0	0	0
QUINTOZENE	0	0	0	0	0	0	0	0	0	0
SACCHARIN (MANUFACTURING)	0	0	0	0	0	0	0	0	0	0
SAFROLE	0	0	0	0	0	0	0	0	0	0
SEC-BUTYL ALCOHOL	7,127	10	14,821	21	13	0	0	11,173	0	0
SELENIUM	500	0	0	22	250	0	0	250	0	0
SELENIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
SILVER	0	0	0	0	0	0	0	0	0	0
SILVER COMPOUNDS	0	0	0	0	500	0	940	250	0	500
SODIUM HYDROXIDE (SOLUTION)	32,545	17,800	990,024	17,136	29,847	500	500	64,284	0	8,424
SODIUM SULFATE (SOLUTION)	524	1,000	278	28,000	2,500	250	250	113,430	0	0
STYRENE	212,894	52,050	1,023,709	1,187,782	66,263	27,050	4,950	1,439,354	8,200	49,800
STYRENE OXIDE	0	0	0	0	0	0	0	0	0	0
SULFURIC ACID	301,540	267,859	599,432	228,813	181,514	17,310	17,310	496,121	1,100	10,437
TEREPHTHALIC ACID	0	0	0	0	0	0	0	132,630	0	0
TERT-BUTYL ALCOHOL	0	0	88,003	0	16	0	0	0	0	0
TETRACHLOROETHYLENE	66,452	96,970	614,508	186,482	225,222	7	0	894,260	32,000	162,250
TETRACHLORVINPHOS	0	0	0	0	0	0	0	0	0	0
THALLIUM	0	0	0	0	0	0	0	0	0	0
THALLIUM COMPOUNDS	0	0	0	0	250	0	0	0	0	0
THIOUREA	0	0	0	0	0	0	0	0	0	0

CHEMICAL NAME	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE
THORIUM DIOXIDE	0	0	0	0	0	0	0	0	0	0
TITANIUM TETRACHLORIDE	750	0	250	0	0	8,000	0	0	0	0
TOLUENE	808,678	296,424	15,744,734	5,163,692	4,710,857	238,500	237,500	22,392,615	83,000	2,223,641
TOLUENE-2,4-DIISOCYANATE	1,500	0	1,750	370	2,502	489	0	36,330	0	0
TOLUENE-2,6-DIISOCYANATE	1,500	0	1,008	500	1,500	122	0	1,642	0	250
TOTAL FOR MIXTURES	40	0	144,793	3,750	44,470	70,101	0	226,280	0	0
TRICHLORFON	0	0	0	0	17	0	0	0	0	0
TRICHLOROETHYLENE	291,735	0	1,939,717	862,967	1,716,959	6,624	7,324	329,096	0	255,876
TRIFLURALIN	0	0	0	0	99	0	0	0	0	0
URETHANE	0	0	0	0	0	0	0	0	0	0
VANADIUM (FUME OR DUST)	500	0	0	140	0	0	0	250	0	0
VINYL ACETATE	14,200	0	40,606	0	64	0	0	58,912	0	0
VINYL BROMIDE	0	0	0	0	0	0	0	0	0	0
VINYL CHLORIDE	0	0	2,203	0	790	120,001	0	0	0	0
VINYLIDENE CHLORIDE	0	0	18,539	0	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	926,672	281,132	16,923,360	3,193,202	7,340,100	332,914	324,950	2,340,369	208,618	1,073,194
ZINC (FUME OR DUST)	5,074	0	275,135	527	97,111	0	0	22,488	0	750
ZINC COMPOUNDS	24,438	750	367,170	505	22,655	1,180	55,850	74,918	0	64,452
ZINEB	0	0	0	0	0	0	0	0	0	0
TOTALS	18,655,969	11,624,580	106,236,445	29,031,436	43,151,138	18,686,813	5,032,798	92,328,287	1,333,903	13,698,725

CHEMICAL NAME	NH	NJ	NM	NV	NY	OH	OK	OR	PA	PR
1,1,1-TRICHLOROETHANE	1,103,631	1,131,132	370,000	0	7,123,489	9,252,408	443,546	455,698	7,081,576	467,658
1,1,2,2-TETRACHLOROETHANE	0	0	0	0	0	0	0	0	500	0
1,1,2-TRICHLOROETHANE	0	1,000	0	0	113,783	1,244	43,680	0	0	0
1,1-DIMETHYL HYDRAZINE	0	0	0	0	0	0	0	0	0	0
1,2,4-TRICHLOROBENZENE	0	1,000	0	0	467	943,451	0	0	0	0
1,2,4-TRIMETHYLBENZENE	0	31,334	11,000	0	250	116,472	18,254	9,654	45,246	750
1,2-BUTYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
1,2-DIBROMOETHANE	0	6,060	0	0	500	13,250	0	0	500	0
1,2-DICHLOROBENZENE	0	10,680	0	0	40,156	1,780	0	5,940	30,000	0
1,2-DICHLOROETHANE	0	99,052	0	0	126,156	24,380	250	0	235,602	46,310
1,2-DICHLOROETHYLENE	0	0	0	0	0	0	0	0	0	0
1,2-DICHLOROPROPANE	0	17,374	0	0	358,000	0	0	0	22,963	0
1,3-BUTADIENE	0	128	0	0	250	542,742	22	0	116,004	0
1,3-DICHLOROBENZENE	0	32,400	0	0	0	0	0	0	0	0
1,3-DICHLOROPROPYLENE	0	0	0	0	0	0	0	0	0	0
1,4-DICHLOROBENZENE	0	250	0	0	0	7,500	0	0	30,535	0
1,4-DIOXANE	11,750	250	0	0	88,103	10,790	0	0	500	1,500
2,4,5-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4,6-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-D (ACETIC ACID)	0	0	0	0	0	439	0	0	250	0
2,4-DIAMINOANISOLE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOANISOLE SULFATE	0	0	0	0	0	500	0	0	0	0
2,4-DIAMINOTOLUENE	0	0	0	0	0	0	0	0	0	0
2,4-DICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-DIMETHYLPHENOL	0	500	0	0	0	0	0	0	0	0
2,4-DINITROPHENOL	0	0	0	0	93	0	0	0	12,187	0
2,4-DINITROTOLUENE	0	278	0	0	0	0	0	0	0	0
2,6-DINITROTOLUENE	0	0	0	0	0	0	0	0	0	0
2,6-XYLIDINE										
2-CHLOROACETOPHENONE	0	0	0	0	0	0	0	0	0	0
2-ETHOXYETHANOL	0	750	0	0	108,800	268,293	16,738	5,738	19,245	0
2-METHOXYETHANOL	383,900	5,862	0	0	369,604	1,120,620	3,350	0	1,394,914	17,000
2-NITROPHENOL	0	0	0	0	0	0	0	0	0	0
2-NITROPROPANE	0	1,000	0	0	0	17,881	0	0	0	0
2-PHENYLPHENOL	0	0	0	0	0	0	0	0	0	0
3,3'-DICHLOROBENZIDINE	0	0	0	0	2	502	0	0	500	0
4,4'-DIAMINODIPHENYL ETHER	0	100	0	0	0	0	0	0	0	0

CHEMICAL NAME	NH	NJ	NM	NV	NY	OH	OK	OR	PA	PR
4,4'-ISOPROPYLIDENEDIPHENOL	0	7,767	0	0	69	175,777	0	0	750	0
4,4'-METHYENEDIANILINE	0	320	0	0	36,000	0	0	0	0	0
4,4'-METHYLENEBIS(2-CHLORO ANILINE)	0	0	0	0	0	0	0	0	0	0
4,4'-METHYLENEBIS(N,N-DIMETHYL)	0	0	0	0	0	0	0	0	0	0
4,6-DINITRO-O-CRESOL	0	0	0	0	0	0	0	0	0	0
4-AMINOAZOBENZENE	0	0	0	0	0	0	0	0	0	0
4-AMINOBIPHENYL	0	0	0	0	0	0	0	0	0	0
4-NITROPHENOL	0	0	0	0	0	0	0	0	0	0
5-NITRO-O-ANISIDINE	0	0	0	0	0	0	0	0	0	0
ACETALDEHYDE	0	1,250	0	0	1,400	3,200	0	0	0	0
ACETAMIDE	0	1,742	0	0	0	0	0	0	0	0
ACETONE	392,597	6,183,122	80,408	239,050	8,110,030	10,922,514	2,560,534	2,515,154	2,753,420	992,965
ACETONITRILE	0	29,450	0	0	177,860	216,000	0	0	3,400	115,800
ACROLEIN	0	0	0	0	0	0	0	0	0	0
ACRYLAMIDE	0	367	0	0	0	0	0	0	1,784	0
ACRYLIC ACID	0	5,803	0	0	0	161,339	0	0	6,734	0
ACRYLONITRILE	0	10,173	0	0	1,450	453,492	0	0	3,144	0
ALLYL CHLORIDE	0	2,210	0	0	1,500	0	0	0	0	0
ALPHA-NAPHTHYLAMINE	0	390	0	0	0	0	0	0	0	0
ALUMINUM (FUME OR DUST)	3,000	45,554	0	0	109,625	406,504	502	250	474,541	0
ALUMINUM OXIDE	4,850	265,434	1,440	2,600	1,806,893	2,930,334	991,250	991,250	901,850	250
AMMONIA	172,649	778,945	250	75,200	1,783,223	10,212,974	647,647	647,647	4,474,145	126,500
AMMONIUM NITRATE (SOLUTION)	0	0	0	0	0	43,700	1,750	1,750	5,160,940	0
AMMONIUM SULFATE (SOLUTION)	0	500	0	0	1,000	275	0	0	1,491	0
ANILINE	0	17,962	0	0	17,467	200,670	0	0	500	500
ANTHRACENE	0	679	0	0	250	54,844	0	87,225	5,175	0
ANTIMONY	0	1,250	0	0	250	2,182	500	250	1,431	0
ANTIMONY COMPOUNDS	0	1,988	0	0	20	19,418	0	0	914	0
ARSENIC	0	0	0	0	1,568	967	126	0	252	0
ARSENIC COMPOUNDS	250	250	0	0	500	250	0	53	502	250
ASBESTOS (FRIABLE)	0	1,000	0	4	9,505	6,725	0	0	7,550	0
BARIUM	0	1,650	0	0	5,214	3,248	0	0	2,894	0
BARIUM COMPOUNDS	0	3,792	0	8,521	15,311	95,150	750	500	2,505	0
BENZAL CHLORIDE	0	500	0	0	247	0	0	0	0	0
BENZENE	0	235,005	15,499	1,290	1,411,202	2,231,125	1,624	1,444	1,333,314	697,785
BENZIDINE	0	0	0	0	0	0	0	0	0	0
BENZOIC TRICHLORIDE	0	250	0	0	3,022	500	0	0	0	0

CHEMICAL NAME	NH	NJ	NM	NV	NY	OH	OK	OR	PA	PR
BENZOYL CHLORIDE	0	0	0	0	5,050	28,500	0	0	500	0
BENZOYL PEROXIDE	0	0	0	0	1,350	250	250	0	250	0
BENZYL CHLORIDE	0	9,206	0	0	55	500	500	0	2,027	3,400
BERYLLIUM	0	0	0	0	0	1,500	0	0	500	0
BERYLLIUM COMPOUNDS	0	0	0	0	1	0	0	0	250	0
BIPHENYL	0	750	0	0	250	9,659	0	0	53,747	3,400
BIS(2-CHLOROETHYL) ETHER	0	0	0	0	0	0	0	0	250	0
BIS(2-ETHYLHEXYL) ADIPATE	0	27,271	0	0	1,100	43,550	0	0	2,753	0
BIS(CHLOROMETHYL) ETHER	0	0	0	0	0	0	0	0	1	0
BROMOMETHANE	0	0	0	0	12,000	0	0	0	40,679	7,140
BUTYL ACRYLATE	0	12,752	0	0	178,595	11,624	0	1,000	40,455	138
BUTYL BENZYL PHTHALATE	0	31,072	0	0	32,500	22,371	0	0	2,250	0
BUTYRALDEHYDE	0	0	0	0	0	0	0	0	0	0
C.I. ACID BLUE 9, DIAMMONIUM SALT	0	0	0	0	0	0	0	0	0	0
C.I. ACID BLUE 9, DISODIUM SALT	0	0	0	0	41	500	0	0	0	0
C.I. BASIC GREEN 4	0	2	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 14	0	0	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 3	0	0	0	0	0	0	0	0	0	0
CADMIUM	0	1,501	0	0	500	502	50	0	2,110	0
CADMIUM COMPOUNDS	0	460	0	0	6,249	2,752	250	0	6,481	0
CALCIUM CYANAMIDE	0	0	0	0	0	0	0	0	0	0
CAPTAN	0	500	0	0	0	22,200	0	0	255	0
CARBARYL	0	0	0	0	0	0	0	0	250	0
CARBON DISULFIDE	0	12,273	0	0	1,058,650	720,144	370,000	0	377,072	1,101,100
CARBON TETRACHLORIDE	0	827,515	0	0	41,532	8,000	1,200	0	123,932	0
CARBONYL SULFIDE	0	0	0	0	0	220,000	0	0	0	0
CATECHOL	0	0	0	0	0	0	0	0	0	0
CHLORAMBEN	0	0	0	0	0	0	0	0	0	0
CHLORDANE	0	0	0	0	0	0	0	0	0	0
CHLORINE	690,500	117,011	500	362,553	513,409	436,797	949,410	949,660	511,726	1,753
CHLORINE DIOXIDE	540,000	0	0	0	132,880	15,000	0	816,460	66,500	0
CHLOROACETIC ACID	0	4,812	0	0	2,401	0	0	0	0	0
CHLOROBENZENE	0	17,768	0	0	10,690	1,938,197	0	0	8,171	0
CHLOROBENZILATE	0	0	0	0	0	0	0	0	0	0
CHLOROETHANE	0	285,313	0	0	0	531,350	0	0	8,000	0
CHLOROFORM	62,000	219,013	0	0	32,492	119,797	720,006	638,400	150,457	16,297
CHLOROMETHANE	0	87,050	0	0	67,000	403,000	0	0	101,753	0

VVV 00001022G

CHEMICAL NAME	NH	NJ	NM	NV	NY	OH	OK	OR	PA	PR
CHLOROMETHYL METHYL ETHER	0	771	0	0	0	0	0	0	48	0
CHLOROPHENOLS	0	0	0	0	0	183	0	0	0	0
CHLOROPRENE	0	1,000	0	0	0	1,500	0	0	0	0
CHLOROTHALONIL	0	0	0	0	0	0	0	0	250	0
CHROMIUM	1,000	9,435	250	0	12,011	58,941	8,226	8,202	51,592	0
CHROMIUM COMPOUNDS	250	1,751	1,020	0	27,237	26,934	750	123	43,374	250
COBALT	0	606	0	1,000	1,136	1,000	0	0	1,695	0
COBALT COMPOUNDS	0	1,350	420	0	5	2,745	0	0	2,314	0
COPPER	250	26,783	750	0	26,002	131,610	4,352	4,352	30,820	707
COPPER COMPOUNDS	500	15,712	225,559	0	5,053	15,472	2,002	1	13,326	250
CRESOL (MIXED ISOMERS)	58,840	9,483	0	0	11,350	17,990	1,000	0	4,750	0
CUMENE	0	170,361	0	0	0	205,763	23,401	0	1,019,300	0
CUMENE HYDROPEROXIDE	0	4,500	0	0	500	110,787	0	0	2,250	0
CUPFERRON	0	0	0	0	0	0	0	0	0	0
CYANIDE COMPOUNDS	0	2,323	0	0	7,617	5,703	250	0	117,000	250
CYCLOHEXANE	0	64,790	499	0	326,875	1,680,910	58,609	2,609	53,008	508,977
DECABROMODIPHENYL OXIDE	0	1,044	0	0	0	3,950	0	0	586	0
DI-(2-ETHYLHEXYL) PHTHALATE	1,000	13,321	0	751	3,321	136,350	40,638	40,600	42,778	0
DIAMINOTOLUENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
DIBENZOFURAN	0	348	0	0	250	11,877	0	49	5,007	0
DIBUTYL PHTHALATE	0	66,480	0	0	15,188	502	0	500	750	0
DICHLOROBENZENE (MIXED ISOMERS)	0	9,296	0	0	0	6,910	0	0	0	0
DICHLOROBROMOMETHANE	0	1,500	0	0	0	0	0	0	0	0
DICHLOROMETHANE	2,989,771	1,491,752	0	100	13,241,266	4,133,667	237,584	237,584	6,027,211	1,590,510
DICHLORVOS	0	0	0	0	0	0	0	0	0	500
DICOFOL	0	0	0	0	0	0	0	0	0	0
DIETHANOLAMINE	250	14,802	0	0	1,450	41,503	1,400	0	20,863	500
DIETHYL PHTHALATE	0	2,751	0	0	20,000	3	0	0	13,912	0
DIETHYL SULFATE	0	750	0	0	0	1,000	0	0	1,468	0
DIMETHYL PHTHALATE	0	63	0	0	4,441	12	0	0	500	0
DIMETHYL SULFATE	0	2,800	0	0	452	500	0	0	502	0
EPICHLOROHYDRIN	0	36,606	0	0	1,176	4,767	0	1,636	22	1,000
ETHYL ACRYLATE	0	18,858	0	0	0	6,648	0	500	34,094	0
ETHYL CHLOROFORMATE	9	0	0	0	0	0	0	0	0	500
ETHYLBENZENE	500	55,809	6,999	0	26,715	198,446	14,500	500	108,349	100,000
ETHYLENE	0	654,212	500	0	47,000	135,530	720	0	205,844	250
ETHYLENE GLYCOL	956	91,814	750	0	448,302	371,959	1,001	1,001	257,066	4,510

CHEMICAL NAME	NH	NJ	NM	NV	NY	OH	OK	OR	PA	PR
ETHYLENE OXIDE	53,000	437,208	10,073	0	30,247	272,600	9,900	0	164,179	197,491
ETHYLENE THIOUREA	0	0	0	0	0	0	0	0	0	0
ETHYLENEIMINE	0	0	0	0	0	0	0	0	0	0
FLUOMETURON	0	0	0	0	0	0	0	0	0	0
FORMALDEHYDE	8,434	236,275	18,500	0	242,820	499,712	2,424,275	2,444,775	92,218	2,700
FREON 113	665,527	901,085	991,931	0	3,399,242	656,541	395,389	496,389	1,684,494	1,431,112
GLYCOL ETHERS	46,970	645,374	11,650	5,430	889,217	4,421,449	165,120	62,200	453,871	0
HEPTACHLOR	0	0	0	0	0	0	0	0	0	0
HEXACHLORO-1,3-BUTADIENE	0	0	0	0	24	0	0	0	0	0
HEXACHLOROBENZENE	0	0	0	0	0	0	0	0	0	0
HEXACHLOROCYCLOPENTADIENE	0	0	0	0	1,250	0	0	0	0	0
HEXACHLOROETHANE	0	500	0	0	0	500	0	0	0	0
HEXACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
HYDRAZINE	0	2,975	0	0	258	46	2	0	0	0
HYDRAZINE SULFATE	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID	3,486	469,287	1,042	56,755	6,357,550	4,038,906	24,178	41,826	3,334,266	95,721
HYDROGEN CYANIDE	2,190	1,500	0	0	6,560	155,510	0	0	2,120	0
HYDROGEN FLUORIDE	0	10,876	252	1,000	785,848	701,091	945,308	12,558	262,660	500
HYDROQUINONE	0	500	0	0	22,539	420	0	0	0	0
Invalid no. should be 117817	0	0	0	0	0	0	0	0	0	0
ISOBUTYRALDEHYDE	0	500	0	0	0	0	0	0	0	0
ISOPROPYL ALCOHOL (MANUFACTURING)	1,007,153	381,950	6,000	0	427,310	1,174,053	60,244	36,376	412,450	29,144
LEAD	750	15,733	0	100	23,230	95,243	640	0	46,194	175
LEAD COMPOUNDS	29	10,200	400	0	17,584	77,570	19,050	4,612	66,558	270
LINDANE	0	0	0	0	0	0	0	0	0	0
M-CRESOL	0	0	0	0	0	5,673	0	0	3,850	0
M-XYLENE	250	0	31,000	0	74,530	0	571	0	7,978	270,000
MALEIC ANHYDRIDE	0	5,320	0	0	652	5,124	1,000	250	11,470	0
MANEB	0	500	0	0	0	0	0	0	250	0
MANGANESE	0	1,274	250	18,200	79,692	134,658	1,006	756	40,106	0
MANGANESE COMPOUNDS	0	1,462	0	0	4,435	56,991	11,000	0	19,552	0
MELAMINE	0	84	0	0	0	9,834	0	250	1,250	0
MERCURY	0	500	0	0	1,347	1,047	0	0	0	1
MERCURY COMPOUNDS	0	32	0	0	500	0	0	0	0	0
METHANOL	309,841	2,146,590	0	0	9,297,198	7,555,558	2,965,559	2,940,899	2,358,309	809,141
METHOXYCHLOR	0	0	0	0	0	0	0	0	0	0
METHYL ACRYLATE	0	7,120	0	0	3,710	28,651	0	500	804	0

VVV 00001022B

CHEMICAL NAME	NH	NJ	NM	NV	NY	OH	OK	OR	PA	PR
METHYL ETHYL KETONE	743,647	3,114,479	11,750	61,791	3,038,231	11,463,664	684,506	683,922	4,891,559	271,916
METHYL HYDRAZINE	0	0	0	0	0	0	0	0	0	0
METHYL IODIDE	0	0	0	0	0	25,651	0	0	0	0
METHYL ISOBUTYL KETONE	85,114	1,037,639	0	0	1,613,956	1,446,205	522,184	522,184	1,287,019	39,340
METHYL ISOCYANATE	0	0	0	0	0	0	0	0	0	0
METHYL METHACRYLATE	5,000	77,681	0	0	669,610	53,085	0	1,223	357,492	11,500
METHYL TERT-BUTYL ETHER	0	101,574	998	0	0	33,800	5,400	0	42,534	87,762
METHYLENE BROMIDE	0	168	0	0	0	0	0	0	0	0
METHYLENEBIS(PHENYLISOCYANATE)	1,000	2,510	0	0	1,955	1,601	23,113	252	34,590	0
MICHLER'S KETONE	0	0	0	0	0	0	0	0	0	0
MOLYBDENUM TRIOXIDE	0	26,752	0	0	500	1,050	250	0	5,775	0
N,N-DIMETHYLANILINE	0	695	0	0	15,768	500	0	0	250	0
N-BUTYL ALCOHOL	25,959	1,061,647	0	0	873,299	2,331,889	372,091	84,412	360,986	51,660
N-DIOCTYL PHTHALATE	0	250	0	0	500	3,066	0	0	10	0
N-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	0	37,524	499	0	150,353	331,099	3,650	89,416	256,719	0
NICKEL	1,500	3,296	250	0	5,399	18,105	750	500	36,543	0
NICKEL COMPOUNDS	0	500	1,120	0	3,509	11,823	1,700	0	15,620	500
NITRIC ACID	3,931	411,998	6,050	0	207,954	418,924	8,885	8,535	403,974	3,622
NITRILOTRIACETIC ACID	0	0	0	0	0	0	0	0	250	0
NITROBENZENE	0	2,000	0	0	27,010	500	0	0	0	0
NITROGEN MUSTARD										
NITROGLYCERIN	0	30,172	0	0	0	0	0	0	0	0
O-ANISIDINE	0	0	0	0	0	0	0	0	0	0
O-CRESOL	0	504	0	0	34,347	585	0	0	0	0
O-TOLUIDINE	0	1,687	0	0	17,030	0	0	0	0	0
O-XYLENE	0	1,680	17,000	0	7,650	250	0	0	36,094	200,057
OCTACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
P-ANISIDINE	0	0	0	0	0	0	0	0	0	0
P-CRESIDINE	0	0	0	0	0	2,000	0	0	0	0
P-CRESOL	0	1,500	0	0	500	0	0	0	2,050	0
P-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
P-PHENYLENEDIAMINE	0	134	0	0	0	117,043	0	0	0	0
P-XYLENE	0	2,250	13,000	0	17,500	0	0	0	4,745	260,000
PARATHION	0	0	0	0	0	0	0	0	0	0
PENTACHLOROPHENOL	0	0	0	75	0	0	515	8,330	0	0
PERACETIC ACID	0	1,000	0	0	6,800	0	0	0	0	0

CHEMICAL NAME	NH	NJ	NM	NV	NY	OH	OK	OR	PA	PR
PHENOL	67,618	203,820	0	0	275,955	805,012	538,487	496,367	786,181	0
PHOSGENE	0	873	0	0	2,411	0	0	0	0	0
PHOSPHORIC ACID	750	42,444	0	0	19,065	143,121	3,924	3,424	32,773	2,000
PHOSPHORUS (YELLOW OR WHITE)	0	0	0	0	0	1,648	0	0	0	0
PHTHALIC ANHYDRIDE	250	45,465	0	0	13,556	13,382	250	250	41,854	0
PICRIC ACID	0	0	0	0	0	0	0	0	0	0
POLY BROMINATED BIPHENYLS	0	0	0	0	0	0	0	0	0	0
POLYCHLORINATED BIPHENYLS (PCBs)	0	0	0	0	0	0	0	250	0	0
PROPANE SULTONE	0	0	0	0	0	0	0	0	0	0
PROPIONALDEHYDE	0	0	0	0	120	0	0	0	7,600	0
PROPOXUR	0	0	0	0	0	0	0	0	0	0
PROPYLENE	6,900	308,050	8,250	0	8,472	3,556,435	500	250	126,380	250
PROPYLENE OXIDE	0	120,904	0	0	25,000	16,828	3,900	0	11,153	0
PROPYLENEIMINE	0	500	0	0	0	0	0	0	0	0
PYRIDINE	0	5,100	0	0	47,712	29,424	0	0	0	500
QUINOLINE	0	0	6,000	0	250	10,910	0	92	440	0
QUINONE	0	0	0	0	0	0	0	0	0	0
QUINTOZENE	0	0	0	0	0	0	0	0	250	0
SACCHARIN (MANUFACTURING)	0	0	0	0	0	500	0	0	0	0
SAFROLE	0	0	0	0	0	0	0	0	0	0
SEC-BUTYL ALCOHOL	0	63,075	0	0	15,204	16,784	0	0	2,250	0
SELENIUM	0	1,000	0	0	0	500	0	0	0	0
SELENIUM COMPOUNDS	0	0	0	0	250	0	0	0	0	0
SILVER	0	6,505	0	0	769	633	0	0	0	0
SILVER COMPOUNDS	0	575	0	0	5,189	0	0	0	0	0
SODIUM HYDROXIDE (SOLUTION)	32,719	97,971	0	2	401,975	132,373	28,573	58,023	67,694	15,417
SODIUM SULFATE (SOLUTION)	760,000	2,226	0	0	6,831	12,210	13	1,110,013	178,795	500
STYRENE	39,393	124,543	0	81,011	127,307	1,723,661	403,805	221,405	643,228	274
STYRENE OXIDE	0	0	0	0	0	0	0	0	0	0
SULFURIC ACID	56,150	439,355	523,650	1,752	169,390	574,914	114,623	122,723	560,733	8,708
TEREPHTHALIC ACID	0	34	0	0	5,266	1,000	0	0	750	0
TERT-BUTYL ALCOHOL	0	66,991	0	0	84,117	14,009	0	0	1,000	0
TETRACHLOROETHYLENE	115,597	57,164	0	0	1,402,247	2,173,389	224,440	82,440	546,367	24
TETRACHLORVINPHOS	0	0	0	0	0	0	0	0	0	0
THALLIUM	0	0	0	0	0	0	0	0	0	0
THALLIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
THIOUREA	0	0	0	0	0	0	0	0	0	0

CHEMICAL NAME	NH	NJ	NM	NV	NY	OH	OK	OR	PA	PR
THORIUM DIOXIDE	0	0	0	0	0	0	0	0	0	0
TITANIUM TETRACHLORIDE	0	1,475	0	0	0	92,540	0	500	0	0
TOLUENE	1,897,388	8,883,961	116,853	256,435	7,808,262	10,685,164	1,786,715	1,776,565	9,869,419	2,165,698
TOLUENE-2,4-DIISOCYANATE	250	9,764	0	0	3,756	4,265	0	250	162,442	45,356
TOLUENE-2,6-DIISOCYANATE	253	1,171	254	0	1	2,355	0	250	41,052	0
TOTAL FOR MIXTURES	169,856	374,453	0	0	247,160	30,715	15,470	17,921	130,746	7,560
TRICHLORFON	0	0	0	0	0	0	0	0	0	0
TRICHLOROETHYLENE	263,204	260,567	0	0	3,321,078	2,025,423	714,407	842,098	2,532,301	0
TRIFLURALIN	0	0	0	0	0	0	0	0	500	0
URETHANE	0	374,100	0	0	0	0	0	0	0	0
VANADIUM (FUME OR DUST)	0	1,450	0	0	0	750	0	250	563	0
VINYL ACETATE	250	154,967	0	0	0	123,939	0	2,000	120,329	1,304
VINYL BROMIDE	0	0	0	0	109,200	0	0	0	0	0
VINYL CHLORIDE	0	168,512	0	0	1,980	32,591	68,957	0	219,000	0
VINYLIDENE CHLORIDE	0	24,220	0	0	600	2,500	0	0	0	0
XYLENE (MIXED ISOMERS)	371,727	2,192,312	7,049	53,200	4,258,806	11,255,581	202,297	209,443	3,876,036	191,879
ZINC (FUME OR DUST)	250	36,383	0	0	35,617	270,531	8,700	9,200	787,109	0
ZINC COMPOUNDS	46	6,216	0	0	123,889	243,932	102,826	126,052	530,370	0
ZINEB	0	0	0	0	0	0	0	0	0	0
TOTALS	13,086,835	38,631,572	2,501,865	1,226,820	85,207,180	122,464,829	20,030,795	19,750,059	71,664,910	12,012,782

CHEMICAL NAME	RI	SC	SD	TN	TX	UT	VA	VI	VT	WA
1,1,1-TRICHLOROETHANE	768,590	3,670,716	82,404	4,672,935	5,530,516	1,641,163	2,722,407	129,731	259,631	1,977,156
1,1,2,2-TETRACHLOROETHANE	0	0	0	2,420	5,100	0	0	0	0	0
1,1,2-TRICHLOROETHANE	0	0	0	0	84,684	0	0	0	0	38,000
1,1-DIMETHYL HYDRAZINE	0	0	0	0	0	0	0	0	0	0
1,2,4-TRICHLOROBENZENE	10,346	1,000	0	0	4,050	0	64,032	0	0	0
1,2,4-TRIMETHYLBENZENE	0	500	0	0	323,768	18,150	87,000	0	0	41,248
1,2-BUTYLENE OXIDE	0	1,000	0	0	7,518	0	0	0	0	0
1,2-DIBROMOETHANE	0	0	0	0	15,016	0	0	0	0	0
1,2-DICHLOROBENZENE	1,000	4,933	0	0	106,377	0	0	0	0	0
1,2-DICHLOROETHANE	500	76,117	0	297,000	595,523	0	321	0	0	0
1,2-DICHLOROETHYLENE	0	0	0	0	13,128	0	0	0	0	0
1,2-DICHLOROPROPANE	0	0	0	0	172,220	0	60,000	0	0	0
1,3-BUTADIENE	0	14,000	0	683,884	5,902,209	0	35	0	0	9,900
1,3-DICHLOROBENZENE	0	0	0	0	0	0	0	0	0	0
1,3-DICHLOROPROPYLENE	0	0	0	0	25,600	0	0	0	0	0
1,4-DICHLOROBENZENE	0	0	0	0	10,450	0	0	0	0	0
1,4-DIOXANE	0	15,420	0	44,529	604	0	0	0	0	0
2,4,5-TRICHLOROPHENOL	500	0	0	0	0	0	0	0	0	0
2,4,6-TRICHLOROPHENOL	0	0	0	0	0	0	0	0	0	0
2,4-D (ACETIC ACID)	0	0	0	0	1	0	0	0	0	0
2,4-DIAMINOANISOLE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOANISOLE SULFATE	0	0	0	0	0	0	0	0	0	0
2,4-DIAMINOTOLUENE	0	2,667	0	0	0	0	0	0	0	0
2,4-DICHLOROPHENOL	0	0	0	500	0	0	0	0	0	0
2,4-DIMETHYLPHENOL	0	0	0	0	375	0	0	0	0	500
2,4-DINITROPHENOL	0	0	0	381	3,350	0	0	0	0	0
2,4-DINITROTOLUENE	0	0	0	0	17,600	0	0	0	0	0
2,6-DINITROTOLUENE	0	0	0	0	4,360	0	0	0	0	0
2,6-XYLIDINE										
2-CHLOROACETOPHENONE	0	0	0	0	0	0	0	0	0	0
2-ETHOXYETHANOL	53,844	329,720	0	17,460	117,518	0	53,750	0	0	16,263
2-METHOXYETHANOL	53,671	1,972,633	0	7,860	73,403	0	0	0	0	0
2-NITROPHENOL	0	0	0	0	0	0	0	0	0	0
2-NITROPROPANE	0	0	0	66	7,597	0	0	0	0	0
2-PHENYLPHENOL	0	1,000	0	0	0	0	0	0	0	0
3,3'-DICHLOROBENZIDINE	0	0	0	0	0	0	0	0	0	0
4,4'-DIAMINODIPHENYL ETHER	0	0	0	0	0	0	0	0	0	0

CHEMICAL NAME	RI	SC	SD	TN	TX	UT	VA	VI	VT	WA
4,4'-ISOPROPYLIDENEDIPHENOL	500	0	0	0	12,010	0	0	0	0	0
4,4'-METHYENEDIANILINE	0	0	0	0	51,644	0	0	0	0	0
4,4'-METHYLENEBIS(2-CHLORO ANILINE)	0	0	0	300	0	0	0	0	0	0
4,4'-METHYLENEBIS(N,N-DIMETHYL)	0	0	0	0	0	0	0	0	0	0
4,6-DINITRO-O-CRESOL	0	0	0	0	1,030	0	0	0	0	0
4-AMINOAZOBENZENE	0	0	0	0	0	0	0	0	0	0
4-AMINOBIPHENYL	0	0	0	0	0	0	0	0	0	0
4-NITROPHENOL	0	0	0	2	0	0	0	0	0	0
5-NITRO-O-ANISIDINE	0	0	0	0	0	0	0	0	0	0
ACETALDEHYDE	0	1,164,200	0	848,812	1,476,229	0	11,050	0	0	0
ACETAMIDE	0	0	0	0	0	0	0	0	0	0
ACETONE	753,991	5,330,496	44,100	40,117,471	17,766,947	414,833	14,793,036	0	35,002	1,471,116
ACETONITRILE	0	0	0	250	269,657	0	0	0	0	0
ACROLEIN	0	0	0	0	12,666	0	0	0	0	0
ACRYLAMIDE	0	236	0	90	0	0	0	0	0	0
ACRYLIC ACID	0	4,070	0	1,130	503,465	0	49,136	0	0	0
ACRYLONITRILE	0	337,092	0	2,366	462,659	0	637,772	0	0	0
ALLYL CHLORIDE	0	0	0	0	9,500	0	265	0	0	0
ALPHA-NAPHTHYLAMINE	0	0	0	0	0	0	0	0	0	0
ALUMINUM (FUME OR DUST)	0	9,630	0	84,300	160,850	450	4,086	0	500	26,325
ALUMINUM OXIDE	0	312,767	16,247	98,358	14,323,513	1,708,750	1,787,601	0	6,820	10,952,972
AMMONIA	7,704	2,655,916	188,861	7,017,425	12,481,487	53,048	1,628,880	0	6,200	2,431,590
AMMONIUM NITRATE (SOLUTION)	0	750	0	0	9,750	0	0	0	0	250
AMMONIUM SULFATE (SOLUTION)	0	3,500	0	84,000	75,228	0	0	0	0	65
ANILINE	750	9,473	0	4,110	80,762	0	0	0	0	0
ANTHRACENE	0	520	250	500	5,085	1,500	1,796	0	0	72
ANTIMONY	5	0	0	484	15,266	0	0	0	180	250
ANTIMONY COMPOUNDS	0	1,002	0	0	5,308	0	1,426	0	0	0
ARSENIC	0	9,173	0	653	52,858	0	750	0	0	0
ARSENIC COMPOUNDS	0	500	0	1,240	4,094	8,150	1,028	0	0	1
ASBESTOS (FRIABLE)	0	496	0	11,844	1,000	0	500	0	0	549
BARIUM	0	4,043	0	500	1,220	0	1,200	0	0	0
BARIUM COMPOUNDS	0	0	0	4,054	568,493	11,750	22,291	0	87	86,000
BENZAL CHLORIDE	0	0	0	4,143	0	0	0	0	0	0
BENZENE	0	236,923	750	253,570	6,069,308	58,381	642,102	0	0	433,195
BENZIDINE	0	0	0	0	0	0	0	0	0	0
BENZOIC TRICHLORIDE	0	0	0	20,238	0	0	0	0	0	0

CHEMICAL NAME	RI	SC	SD	TN	TX	UT	VA	VI	VT	WA
BENZOYL CHLORIDE	250	4	0	26,322	4,085	0	0	0	0	0
BENZOYL PEROXIDE	0	0	0	0	0	0	0	0	0	0
BENZYL CHLORIDE	0	1,000	0	11,832	4,795	0	0	0	0	0
BERYLLIUM	1,947	0	0	0	0	0	0	0	0	0
BERYLLIUM COMPOUNDS	0	0	0	1	0	0	0	0	0	0
BIPHENYL	0	217,599	500	135,817	33,873	1,000	96,785	0	0	8,861
BIS(2-CHLOROETHYL) ETHER	0	0	0	1,742	1,000	0	0	0	0	0
BIS(2-ETHYLHEXYL) ADIPATE	0	600	0	8,040	580	0	2,854	0	0	0
BIS(CHLOROMETHYL) ETHER	0	0	0	0	0	0	0	0	0	0
BROMOMETHANE	0	220,000	0	0	30,000	0	0	0	0	0
BUTYL ACRYLATE	0	9,711	0	5,590	53,004	0	500	0	0	0
BUTYL BENZYL PHTHALATE	0	0	0	0	1,100	0	500	0	0	0
BUTYRALDEHYDE	0	0	0	60,160	1,177,554	0	500	0	0	0
C.I. ACID BLUE 9, DIAMMONIUM SALT	0	0	0	0	0	0	0	0	0	0
C.I. ACID BLUE 9, DISODIUM SALT	0	0	0	0	0	0	0	0	0	0
C.I. BASIC GREEN 4	0	0	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 14	0	0	0	0	0	0	0	0	0	0
C.I. SOLVENT YELLOW 3	0	0	0	0	0	0	0	0	0	0
CADMIUM	2	1,000	0	0	10,420	0	264	0	0	4
CADMIUM COMPOUNDS	0	0	0	21	0	500	0	0	0	250
CALCIUM CYANAMIDE	0	0	0	0	0	0	0	0	0	0
CAPTAN	0	0	0	0	433	0	0	0	0	0
CARBARYL	0	250	0	0	2,070	0	1,500	0	0	0
CARBON DISULFIDE	0	250	0	22,355,826	2,027,395	0	49,481,000	0	0	0
CARBON TETRACHLORIDE	0	500	0	598,852	532,147	0	2,000	0	0	0
CARBONYL SULFIDE	0	0	0	10,000,000	658,167	0	0	0	0	0
CATECHOL	0	1,000	0	0	0	0	270,750	0	0	0
CHLORAMBEN	0	0	0	0	0	0	0	0	0	0
CHLORDANE	0	0	0	1,230	0	0	0	0	0	0
CHLORINE	1,600	356,338	3,400	1,153,225	2,345,017	68,348,950	2,833,099	0	270	898,782
CHLORINE DIOXIDE	0	149,761	0	1,140	78,500	0	245,312	0	0	956,886
CHLOROACETIC ACID	0	0	0	172	250	0	17,650	0	0	0
CHLOROBENZENE	0	112,467	0	24,650	915,792	0	12,754	0	0	0
CHLOROBENZILATE	0	0	0	0	0	0	0	0	0	0
CHLOROETHANE	0	2,194	0	1,000	435,897	0	223,920	0	0	0
CHLOROFORM	0	413,766	0	332,993	854,850	0	3,093,250	0	0	1,688,569
CHLOROMETHANE	0	131,037	0	20,530	1,159,674	0	507,200	0	0	0

CHEMICAL NAME	RI	SC	SD	TN	TX	UT	VA	VI	VT	WA
CHLOROMETHYL METHYL ETHER	0	0	0	0	0	0	0	0	0	0
CHLOROPHENOLS	0	0	0	0	250	0	0	0	0	0
CHLOROPRENE	0	0	0	0	245,544	0	0	0	0	0
CHLOROTHALONIL	0	0	0	0	18,500	0	0	0	0	0
CHROMIUM	0	27,006	0	3,026	27,601	250	2,355	0	3,120	4,212
CHROMIUM COMPOUNDS	0	3,380	0	2,022	185,938	14,450	2,384	0	500	1,401
COBALT	0	22	0	0	796	0	250	0	0	0
COBALT COMPOUNDS	0	750	0	9,446	23,847	0	490	0	0	0
COPPER	1,253	56,962	0	15,329	188,451	64,172	80,636	0	250	2,285
COPPER COMPOUNDS	41,500	17,556	0	2,626	19,218	0	1,539	0	0	250
CRESOL (MIXED ISOMERS)	0	900	0	16,173	14,449	1,250	7,250	0	0	500
CUMENE	0	0	0	0	806,679	500	19,581	0	0	250
CUMENE HYDROPEROXIDE	0	0	0	297	13,550	0	0	0	0	1
CUPFERRON	0	0	0	0	140	0	0	0	0	90
CYANIDE COMPOUNDS	361	1,000	0	3,280	20,200	0	500	0	0	71
CYCLOHEXANE	12,390	105,800	0	46,747	4,665,128	129,278	25,400	0	0	33,885
DECABROMODIPHENYL OXIDE	0	750	0	0	0	0	2,858	0	0	0
DI-(2-ETHYLHEXYL) PHTHALATE	740	670	0	53,550	8,560	1,750	172,263	0	250	0
DIAMINOTOLUENE (MIXED ISOMERS)	0	1,620	0	0	75,778	0	0	0	0	0
DIBENZOFURAN	0	530	500	500	11,281	1,000	2,815	0	0	813
DIBUTYL PHTHALATE	0	750	0	7,757	1,084	0	1,000	0	0	0
DICHLOROBENZENE (MIXED ISOMERS)	0	250	0	0	1,750	0	0	0	0	0
DICHLOROBROMOMETHANE	0	0	0	0	6,100	0	0	0	0	0
DICHLOROMETHANE	167,323	1,642,416	40,150	2,531,307	3,027,079	940,600	3,987,137	0	3,700	1,221,218
DICHLORVOS	0	0	0	0	241	0	0	0	0	0
DICOFOL	0	0	0	0	0	0	0	0	0	0
DIETHANOLAMINE	1,000	1,252	0	1,270	105,671	0	0	0	0	0
DIETHYL PHTHALATE	0	500	0	13,043	11,139	0	0	0	0	0
DIETHYL SULFATE	0	0	0	3	11,322	0	0	0	0	0
DIMETHYL PHTHALATE	0	32,650	0	1,222	1,410	0	0	0	0	523,129
DIMETHYL SULFATE	0	250	0	17	0	0	1,307	0	0	0
EPICHLOROHYDRIN	500	0	0	2,318	98,973	0	0	0	0	0
ETHYL ACRYLATE	0	25,625	0	18,273	28,254	0	500	0	0	0
ETHYL CHLOROFORMATE	0	0	0	0	3,300	0	0	0	0	0
ETHYLBENZENE	0	43,500	0	32,704	1,671,983	7,500	70,573	0	0	33,392
ETHYLENE	0	356,584	0	48,500	41,894,368	5,150	130,462	0	0	8,200
ETHYLENE GLYCOL	2,499	1,177,707	0	1,330,548	2,209,787	750	874,308	0	0	871

VVV 000010235

CHEMICAL NAME	RI	SC	SD	TN	TX	UT	VA	VI	VT	WA
ETHYLENE OXIDE	34,740	146,981	0	17,866	1,545,555	3,818	8,860	0	0	0
ETHYLENE THIOUREA	0	0	0	0	0	0	0	0	0	0
ETHYLENEIMINE	0	0	0	0	0	0	0	0	0	0
FLUOMETURON	0	0	0	0	0	0	0	0	0	0
FORMALDEHYDE	1,001	641,702	89,200	11,843	1,344,042	0	216,075	0	1,135	56,080
FREON 113	202,856	747,118	206,747	750,038	2,599,202	245,519	934,943	0	176,000	344,806
GLYCOL ETHERS	0	1,091,323	45,000	367,912	1,926,492	0	463,567	0	3,300	333,123
HEPTACHLOR	0	0	0	1,786	0	0	0	0	0	0
HEXACHLORO-1,3-BUTADIENE	0	0	0	0	1,950	0	0	0	0	0
HEXACHLOROBENZENE	0	0	0	147	1,180	0	0	0	0	0
HEXACHLOROCYCLOPENTADIENE	0	0	0	1,271	0	0	0	0	0	0
HEXACHLOROETHANE	0	0	0	0	1,550	0	0	0	0	0
HEXACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
HYDRAZINE	0	500	0	802	23,176	0	0	0	0	0
HYDRAZINE SULFATE	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID	6,921	1,141,518	0	293,712	3,245,580	1,038,900	2,070,153	2,600	3,131	339,631
HYDROGEN CYANIDE	0	62,823	0	0	223,088	48,000	0	0	0	0
HYDROGEN FLUORIDE	787	94,902	0	439,432	869,287	47,870	4,350	0	2,700	1,206,798
HYDROQUINONE	0	0	0	600	710	0	0	0	0	0
Invalid no. should be 117817	0	0	0	0	0	0	0	0	0	0
ISOBUTYRALDEHYDE	0	73,766	0	6,900	679,407	0	12,450	0	0	0
ISOPROPYL ALCOHOL (MANUFACTURING)	1,214	159,559	0	2,257,298	517,773	500	835,026	0	128,000	48,148
LEAD	1,021	18,779	0	26,866	105,256	20,425	12,232	0	127	6,480
LEAD COMPOUNDS	250	22,350	0	5,605	15,682	3,800	2,630	0	0	1,357
LINDANE	0	0	0	0	0	0	0	0	0	0
M-CRESOL	0	2,882	0	0	0	0	0	0	0	0
M-XYLENE	0	530	0	62,727	641,767	2,290	91,000	0	0	0
MALEIC ANHYDRIDE	0	7,297	0	5,661	238,227	0	500	0	0	0
MANEB	0	0	0	0	500	0	0	0	0	0
MANGANESE	0	476	500	2,259	44,316	0	3,205	0	0	4,468
MANGANESE COMPOUNDS	28,500	132,089	0	92,375	5,389	250	587	0	0	250
MELAMINE	0	460	0	0	0	0	250	0	0	499
MERCURY	0	0	0	0	1,250	0	0	0	0	0
MERCURY COMPOUNDS	0	341	0	1,244	0	0	0	0	0	0
METHANOL	172,223	17,254,260	123,250	6,130,214	9,683,553	16,300	15,443,267	1,400	38,247	4,179,256
METHOXYCHLOR	0	0	0	0	1	0	0	0	0	0
METHYL ACRYLATE	0	16,854	0	1,600	538,789	0	21,500	0	0	0

CHEMICAL NAME	RI	SC	SD	TN	TX	UT	VA	VI	VT	WA
METHYL ETHYL KETONE	927,245	2,595,652	128,535	2,483,094	4,871,448	144,031	7,046,322	0	95,909	3,760,351
METHYL HYDRAZINE	0	0	0	0	0	0	0	0	0	0
METHYL IODIDE	0	0	0	0	500	0	0	0	0	0
METHYL ISOBUTYL KETONE	0	495,585	0	1,689,151	753,296	60,703	1,412,304	0	61,430	215,980
METHYL ISOCYANATE	0	0	0	0	0	0	0	0	0	0
METHYL METHACRYLATE	250	16,592	0	446,242	272,538	17	10,300	0	0	0
METHYL TERT-BUTYL ETHER	0	0	0	0	1,421,679	0	0	0	0	0
METHYLENE BROMIDE	0	2,472	0	6,903	0	0	0	0	0	0
METHYLENEBIS(PHENYLISOCYANATE)	0	500	0	10,100	105,928	250	552	0	0	250
MICHLER'S KETONE	0	0	0	0	0	0	0	0	0	0
MOLYBDENUM TRIOXIDE	0	0	0	0	35,538	4,250	0	0	0	0
N,N-DIMETHYLANILINE	0	0	0	41,310	0	0	0	0	0	0
N-BUTYL ALCOHOL	25,500	593,559	0	453,620	4,116,977	16,797	830,387	0	22,775	533,277
N-DIOCTYL PHTHALATE	0	500	0	0	0	0	500	0	0	2,848
N-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	11,000	5,600	500	24,158	580,114	3,810	23,399	0	0	26,043
NICKEL	750	2,512	0	17,089	9,370	250	1,250	0	5,750	1,777
NICKEL COMPOUNDS	29,000	1,750	0	2,754	30,514	1,000	0	0	0	250
NITRIC ACID	2,567	107,736	0	109,666	113,707	151,250	13,059	0	4,664	12,150
NITRILOTRIACETIC ACID	0	0	0	0	1	0	0	0	0	0
NITROBENZENE	0	250	0	0	41,051	0	0	0	0	0
NITROGEN MUSTARD										
NITROGLYCERIN	0	0	0	0	0	34	14,000	0	0	0
O-ANISIDINE	0	500	0	72	500	0	0	0	0	0
O-CRESOL	500	0	0	2,000	255	0	0	0	0	0
O-TOLUIDINE	250	0	0	87	2,400	0	0	0	0	0
O-XYLENE	0	19,500	0	361,000	532,375	500	41,000	0	0	15,000
OCTACHLORONAPHTHALENE	0	0	0	0	0	0	0	0	0	0
P-ANISIDINE	0	0	0	0	0	0	0	0	0	0
P-CRESIDINE	0	250	0	0	0	0	0	0	0	0
P-CRESOL	0	0	0	0	1,110	0	0	0	0	0
P-NITROSODIPHENYLAMINE	0	0	0	0	0	0	0	0	0	0
P-PHENYLENEDIAMINE	0	0	0	0	50	0	0	0	0	0
P-XYLENE	0	848,000	0	754,000	673,398	500	33,900	151,000	0	0
PARATHION	0	0	0	0	0	0	0	0	0	0
PENTACHLOROPHENOL	0	1,240	0	500	0	0	0	0	0	2,013
PERACETIC ACID	0	0	0	0	0	0	0	0	0	0

CHEMICAL NAME	RI	SC	SD	TN	TX	UT	VA	VI	VT	WA
PHENOL	0	182,002	0	152,262	685,606	1,000	182,096	0	0	33,886
PHOSGENE	0	15	0	250	3,503	0	0	0	0	0
PHOSPHORIC ACID	1,510	11,987	0	16,115	72,138	750	225,496	0	750	1,000
PHOSPHORUS (YELLOW OR WHITE)	500	10	0	200	0	0	0	0	0	0
PHTHALIC ANHYDRIDE	0	1,270	0	3,220	182,320	0	500	0	0	0
PICRIC ACID	0	0	0	0	0	0	0	0	0	0
POLY BROMINATED BIPHENYLS	0	0	0	0	0	0	0	0	0	0
POLYCHLORINATED BIPHENYLS (PCBs)	0	0	0	0	1	0	0	0	0	0
PROPANE SULTONE	0	0	0	0	0	0	0	0	0	0
PROPIONALDEHYDE	0	352	0	310,650	661,564	0	0	0	0	0
PROPOXUR	0	0	0	0	1	0	0	0	0	0
PROPYLENE	0	137,230	0	1,650	24,416,753	86,100	73,781	0	0	82,250
PROPYLENE OXIDE	0	39,067	0	4,200	1,477,576	0	875	0	0	0
PROPYLENEIMINE	0	0	0	0	0	0	0	0	0	0
PYRIDINE	0	0	0	2,434	21,958	0	12,250	0	0	0
QUINOLINE	0	0	500	0	250	0	0	0	0	868
QUINONE	0	0	0	1,050	3	0	0	0	0	0
QUINTOZENE	0	0	0	0	0	0	0	0	0	0
SACCHARIN (MANUFACTURING)	0	0	0	0	0	0	0	0	0	0
SAFROLE	0	0	0	0	500	0	0	0	0	0
SEC-BUTYL ALCOHOL	0	21,329	0	65,484	15,597	0	10,777	0	0	0
SELENIUM	0	0	0	0	750	0	0	0	0	0
SELENIUM COMPOUNDS	0	0	0	2	4,150	0	0	0	0	0
SILVER	0	0	0	0	250	1,220	0	0	0	0
SILVER COMPOUNDS	0	250	0	0	1,751	0	0	0	0	0
SODIUM HYDROXIDE (SOLUTION)	4,480	184,439	1,400	103,829	201,928	2,000	22,715	500	500	140,460
SODIUM SULFATE (SOLUTION)	0	500	0	2,500	265,090	128	49,750	0	0	199
STYRENE	134,587	481,842	37,110	1,544,721	4,013,915	1,178	408,290	0	0	1,720,722
STYRENE OXIDE	0	500	0	0	0	0	0	0	0	0
SULFURIC ACID	24,083	313,929	250	321,819	2,581,694	223,900	362,949	1,205	12,414	194,986
TEREPHTHALIC ACID	0	186,700	0	25,905	1	0	38,500	0	0	0
TERT-BUTYL ALCOHOL	0	0	0	0	479,738	0	127,395	0	0	0
TETRACHLOROETHYLENE	184,494	743,401	0	402,635	305,425	21,000	120,322	0	33,170	10,000
TETRACHLORVINPHOS	0	0	0	0	0	0	0	0	0	0
THALLIUM	0	0	0	0	0	0	0	0	0	0
THALLIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
THIOUREA	0	0	0	0	750	0	0	0	0	0

VVV 00001023B

CHEMICAL NAME	RI	SC	SD	TN	TX	UT	VA	VI	VT	WA
THORIUM DIOXIDE	0	0	0	1,330	0	0	0	0	0	0
TITANIUM TETRACHLORIDE	0	250	0	17,865	9,081	2,700	0	0	0	0
TOLUENE	12,923,306	7,189,570	452,348	12,687,721	9,265,998	290,686	11,551,235	155,677	280,515	2,196,664
TOLUENE-2,4-DIISOCYANATE	500	500	0	1,581	22,916	0	1,000	0	0	27,784
TOLUENE-2,6-DIISOCYANATE	0	42,375	0	1,334	7,849	0	500	0	0	7,141
TOTAL FOR MIXTURES	0	56,550	0	5,546	264,616	250	66,958	0	0	1,450
TRICHLORFON	0	0	0	0	0	0	0	0	0	0
TRICHLOROETHYLENE	434,443	1,208,673	17,828	2,005,109	1,803,916	0	518,492	0	7,180	476,310
TRIFLURALIN	0	0	0	0	0	0	0	0	0	0
URETHANE	0	0	0	0	250	0	0	0	0	0
VANADIUM (FUME OR DUST)	0	0	0	0	2,000	0	0	0	0	0
VINYL ACETATE	0	30,488	250	630	4,743,296	0	6,212	0	0	0
VINYL BROMIDE	0	0	0	0	0	0	0	0	0	0
VINYL CHLORIDE	0	0	0	0	294,426	0	0	0	0	0
VINYLIDENE CHLORIDE	0	0	0	0	22,262	0	11,004	0	0	0
XYLENE (MIXED ISOMERS)	133,394	2,349,139	427,656	4,677,881	6,445,289	452,462	3,382,569	461,968	123,968	1,033,036
ZINC (FUME OR DUST)	750	163,250	0	47,708	179,768	34,700	69,247	0	0	17
ZINC COMPOUNDS	765	26,047	0	31,326	272,519	5,150	2,715	0	0	6,350
ZINEB	0	0	0	0	0	0	0	0	0	0
TOTALS	17,170,133	61,186,447	1,908,236	132,461,157	229,910,640	76,369,383	131,359,106	924,081	1,320,175	39,893,330

CHEMICAL NAME	WI	WV	WY	POUNDS RELEASED
1,1,1-TRICHLOROETHANE	4,725,674	82,219	30,000	130,932,398
1,1,2,2-TETRACHLOROETHANE	0	0	0	126,289
1,1,2-TRICHLOROETHANE	0	0	0	1,690,784
1,1-DIMETHYL HYDRAZINE	0	0	0	1,000
1,2,4-TRICHLOROBENZENE	0	2,450	0	1,370,307
1,2,4-TRIMETHYLBENZENE	106,912	150,938	115,000	2,276,124
1,2-BUTYLENE OXIDE	0	4,400	0	79,264
1,2-DIBROMOETHANE	0	0	0	63,888
1,2-DICHLOROBENZENE	0	21,400	0	574,666
1,2-DICHLOROETHANE	0	736,000	0	5,712,143
1,2-DICHLOROETHYLENE	24,176	0	0	132,392
1,2-DICHLOROPROPANE	126,600	0	0	1,026,307
1,3-BUTADIENE	0	706,113	0	9,872,710
1,3-DICHLOROBENZENE	0	3,150	0	48,893
1,3-DICHLOROPROPYLENE	0	0	0	33,570
1,4-DICHLOROBENZENE	0	270,400	0	341,189
1,4-DIOXANE	0	0	250	337,514
2,4,5-TRICHLOROPHENOL	0	0	0	500
2,4,6-TRICHLOROPHENOL	0	0	0	0
2,4-D (ACETIC ACID)	0	0	0	130,216
2,4-DIAMINOANISOLE	0	0	0	0
2,4-DIAMINOANISOLE SULFATE	0	0	0	500
2,4-DIAMINOTOLUENE	0	0	0	2,667
2,4-DICHLOROPHENOL	0	0	0	2,321
2,4-DIMETHYLPHENOL	0	0	0	1,432
2,4-DINITROPHENOL	0	0	0	32,100
2,4-DINITROTOLUENE	0	0	0	88,091
2,6-DINITROTOLUENE	0	0	0	22,222
2,6-XYLIDINE				0
2-CHLOROACETOPHENONE	0	0	0	250
2-ETHOXYETHANOL	90,600	48,931	0	2,581,257
2-METHOXYETHANOL	1,056,508	16,570	0	8,113,631
2-NITROPHENOL	0	0	0	33,149
2-NITROPROPANE	250	0	0	287,740
2-PHENYLPHENOL	0	0	0	2,501
3,3'-DICHLOROBENZIDINE	0	0	0	1,007
4,4'-DIAMINODIPHENYL ETHER	0	0	0	560

CHEMICAL NAME	WI	WV	WY	POUNDS RELEASED
4,4'-ISOPROPYLIDENEDIPHENOL	1,500	0	0	216,087
4,4'-METHYENEDIANILINE	0	107	0	217,500
4,4'-METHYLENEBIS(2-CHLORO ANILINE)	0	0	0	300
4,4'-METHYLENEBIS(N,N-DIMETHYL)	0	0	0	16,173
4,6-DINITRO-O-CRESOL	0	0	0	1,066
4-AMINOAZOBENZENE	0	0	0	0
4-AMINOBIPHENYL	0	0	0	1
4-NITROPHENOL	0	0	0	4,952
5-NITRO-O-ANISIDINE	0	0	0	0
ACETALDEHYDE	0	147,879	0	5,205,755
ACETAMIDE	0	0	0	1,992
ACETONE	2,224,894	1,001,921	0	186,153,611
ACETONITRILE	0	0	0	2,721,212
ACROLEIN	0	0	0	40,399
ACRYLAMIDE	0	0	0	10,789
ACRYLIC ACID	1,250	23,300	500	632,211
ACRYLONITRILE	1,910	1,210,538	0	4,035,384
ALLYL CHLORIDE	0	0	0	68,217
ALPHA-NAPHTHYLAMINE	0	0	0	890
ALUMINUM (FUME OR DUST)	588,034	4,878	0	8,045,198
ALUMINUM OXIDE	623,686	1,144,792	211,260	73,132,776
AMMONIA	2,918,623	1,437,706	639,307	233,435,468
AMMONIUM NITRATE (SOLUTION)	0	0	26,000	8,321,561
AMMONIUM SULFATE (SOLUTION)	16,500	0	0	579,686
ANILINE	503	143,340	0	627,170
ANTHRACENE	4,138	3,763	0	218,011
ANTIMONY	754	0	0	36,722
ANTIMONY COMPOUNDS	750	5	0	91,124
ARSENIC	1	0	0	88,089
ARSENIC COMPOUNDS	0	0	0	130,742
ASBESTOS (FRIABLE)	0	0	0	48,717
BARIUM	110	0	0	67,828
BARIUM COMPOUNDS	8,112	350	0	964,486
BENZAL CHLORIDE	0	0	0	4,890
BENZENE	16,516	1,456,013	98,732	24,895,833
BENZIDINE	0	0	0	9,300
BENZOIC TRICHLORIDE	0	0	0	24,010

CHEMICAL NAME	WI	WV	WY	POUNDS RELEASED
BENZOYL CHLORIDE	0	0	0	65,803
BENZOYL PEROXIDE	500	0	0	5,850
BENZYL CHLORIDE	250	0	0	40,485
BERYLLIUM	0	0	0	4,447
BERYLLIUM COMPOUNDS	0	0	0	502
BIPHENYL	1,249	3,559	0	1,523,883
BIS(2-CHLOROETHYL) ETHER	0	0	0	6,877
BIS(2-ETHYLHEXYL) ADIPATE	0	0	0	111,602
BIS(CHLOROMETHYL) ETHER	0	0	0	1
BROMOMETHANE	0	0	0	683,998
BUTYL ACRYLATE	2,500	0	0	636,506
BUTYL BENZYL PHTHALATE	777	0	0	213,701
BUTYRALDEHYDE	0	70,850	0	1,671,714
C.I. ACID BLUE 9, DIAMMONIUM SALT	0	0	0	0
C.I. ACID BLUE 9, DISODIUM SALT	0	0	0	1,541
C.I. BASIC GREEN 4	0	0	0	2
C.I. SOLVENT YELLOW 14	0	0	0	4
C.I. SOLVENT YELLOW 3	0	0	0	0
CADMIUM	150	0	0	101,969
CADMIUM COMPOUNDS	0	1	0	137,428
CALCIUM CYANAMIDE	0	0	0	12,750
CAPTAN	0	0	0	26,615
CARBARYL	0	152	0	6,443
CARBON DISULFIDE	55,250	556,039	0	137,239,693
CARBON TETRACHLORIDE	0	201,335	0	4,259,720
CARBONYL SULFIDE	0	182,743	0	19,775,085
CATECHOL	0	0	0	272,241
CHLORAMBEN	0	0	0	500
CHLORDANE	0	0	0	2,614
CHLORINE	1,208,122	101,263	9,370	103,423,754
CHLORINE DIOXIDE	460,250	0	0	12,086,233
CHLOROACETIC ACID	0	0	0	29,893
CHLOROBENZENE	0	152,600	0	3,875,644
CHLOROBENZILATE	0	0	0	269
CHLOROETHANE	0	0	0	4,400,509
CHLOROFORM	892,309	1,260,325	0	23,728,300
CHLOROMETHANE	172,920	884,220	0	20,858,189

CHEMICAL NAME	WI	WV	WY	POUNDS RELEASED
CHLOROMETHYL METHYL ETHER	0	0	0	1,069
CHLOROPHENOLS	0	0	0	933
CHLOROPRENE	0	0	0	1,136,385
CHLOROTHALONIL	0	0	0	21,081
CHROMIUM	8,577	2,780	0	480,332
CHROMIUM COMPOUNDS	23,644	2,118	0	691,292
COBALT	750	22,146	0	42,671
COBALT COMPOUNDS	0	0	0	50,035
COPPER	7,911	94,313	0	2,397,474
COPPER COMPOUNDS	12,050	1,150	0	2,662,047
CRESOL (MIXED ISOMERS)	0	3,320	0	618,206
CUMENE	11,363	65,000	0	3,501,736
CUMENE HYDROPEROXIDE	2,567	6,800	0	182,527
CUPFERRON	0	0	0	920
CYANIDE COMPOUNDS	1,865	744,500	0	1,094,278
CYCLOHEXANE	29,577	82,881	117,566	10,621,381
DECABROMODIPHENYL OXIDE	0	0	0	27,191
DI-(2-ETHYLHEXYL) PHTHALATE	1,037	0	0	1,597,832
DIAMINOTOLUENE (MIXED ISOMERS)	0	0	0	79,359
DIBENZOFURAN	861	3,064	0	61,729
DIBUTYL PHTHALATE	304	0	0	326,315
DICHLOROBENZENE (MIXED ISOMERS)	0	750	0	71,708
DICHLOROBROMOMETHANE	0	0	0	14,850
DICHLOROMETHANE	1,524,412	1,494,024	0	112,252,293
DICHLORVOS	0	0	0	741
DICOFOL	0	0	0	0
DIETHANOLAMINE	1,870	1,041	10,341	480,065
DIETHYL PHTHALATE	0	0	0	183,001
DIETHYL SULFATE	250	0	0	15,698
DIMETHYL PHTHALATE	15,250	0	0	2,113,257
DIMETHYL SULFATE	500	2,209	0	10,817
EPICHLOROHYDRIN	6,400	3,500	0	310,580
ETHYL ACRYLATE	1,000	9,200	0	239,466
ETHYL CHLOROFORMATE	0	6,825	0	10,634
ETHYLBENZENE	156,328	105,934	77,202	5,008,405
ETHYLENE	0	119,300	58,400	54,199,221
ETHYLENE GLYCOL	177,845	967,819	2,200	13,337,401

CHEMICAL NAME	WI	WV	WY	POUNDS RELEASED
ETHYLENE OXIDE	62,250	114,081	0	4,950,571
ETHYLENE THIOUREA	0	0	0	0
ETHYLENEIMINE	0	0	0	0
FLUOMETURON	0	0	0	2,111
FORMALDEHYDE	754,826	196,144	6,120	15,026,270
FREON 113	743,598	481,250	0	49,061,620
GLYCOL ETHERS	1,544,835	140,418	0	32,865,927
HEPTACHLOR	0	0	0	7,286
HEXACHLORO-1,3-BUTADIENE	0	0	0	3,580
HEXACHLOROBENZENE	0	0	0	1,804
HEXACHLOROCYCLOPENTADIENE	0	0	0	3,071
HEXACHLOROETHANE	0	0	0	5,459
HEXACHLORONAPHTHALENE	0	0	0	0
HYDRAZINE	0	0	0	33,345
HYDRAZINE SULFATE	0	0	0	0
HYDROCHLORIC ACID	2,748,538	196,559	3,049	50,474,094
HYDROGEN CYANIDE	0	5,023	0	534,942
HYDROGEN FLUORIDE	5,908	267,622	30,983	11,793,228
HYDROQUINONE	3,750	750	0	31,023
Invalid no. should be 117817	0	0	0	3,171
ISOBUTYRALDEHYDE	0	5,200	0	1,380,605
ISOPROPYL ALCOHOL (MANUFACTURING)	134,081	31,528	4,000	14,363,700
LEAD	3,927	6,697	0	1,154,909
LEAD COMPOUNDS	5,700	0	0	953,057
LINDANE	0	0	0	561
M-CRESOL	0	0	0	20,568
M-XYLENE	183,879	78,500	0	2,495,507
MALEIC ANHYDRIDE	1,000	6,900	0	470,922
MANEB	0	0	0	35,930
MANGANESE	80,291	30,706	0	597,018
MANGANESE COMPOUNDS	12,060	1,030	0	1,649,650
MELAMINE	551	0	0	248,484
MERCURY	5	3,512	0	130,579
MERCURY COMPOUNDS	0	1	0	2,368
METHANOL	3,599,418	5,476,654	30,730	182,521,041
METHOXYCHLOR	3,600	0	0	3,852
METHYL ACRYLATE	300	0	0	673,021

WV 00010244

CHEMICAL NAME	WI	WV	WY	POUNDS RELEASED
METHYL ETHYL KETONE	4,235,149	438,679	83,000	124,626,050
METHYL HYDRAZINE	0	0	0	523
METHYL IODIDE	0	0	0	26,151
METHYL ISOBUTYL KETONE	251,478	214,206	0	25,284,541
METHYL ISOCYANATE	0	5,084	0	148,181
METHYL METHACRYLATE	9,020	244,714	0	3,275,442
METHYL TERT-BUTYL ETHER	24,660	0	2,615	2,067,002
METHYLENE BROMIDE	0	0	0	38,955
METHYLENEBIS(PHENYLISOCYANATE)	2,750	0	0	990,902
MICHLER'S KETONE	0	0	0	400
MOLYBDENUM TRIOXIDE	0	0	0	109,644
N,N-DIMETHYLANILINE	0	154	0	129,799
N-BUTYL ALCOHOL	944,138	286,934	60,000	27,144,279
N-DIOCTYL PHTHALATE	0	0	0	47,970
N-NITROSODIPHENYLAMINE	0	0	0	0
NAPHTHALENE	42,706	175,417	3,200	3,142,805
NICKEL	6,766	3,950	0	489,132
NICKEL COMPOUNDS	4,219	6,800	0	265,436
NITRIC ACID	326,939	34,200	33,297	6,660,433
NITRILOTRIACETIC ACID	0	0	0	1,752
NITROBENZENE	0	0	0	128,419
NITROGEN MUSTARD				0
NITROGLYCERIN	0	0	0	48,746
O-ANISIDINE	0	0	0	3,603
O-CRESOL	55	0	0	55,855
O-TOLUIDINE	0	0	0	23,204
O-XYLENE	54,439	35,100	0	2,680,900
OCTACHLORONAPHTHALENE	0	0	0	0
P-ANISIDINE	0	0	0	0
P-CRESIDINE	0	0	0	2,526
P-CRESOL	0	0	0	86,466
P-NITROSODIPHENYLAMINE	0	0	0	250
P-PHENYLENEDIAMINE	0	0	0	117,230
P-XYLENE	165,730	26,200	0	7,094,911
PARATHION	0	0	0	858
PENTACHLOROPHENOL	63	0	0	23,109
PERACETIC ACID	0	0	0	8,752

CHEMICAL NAME	WI	WV	WY	POUNDS RELEASED
PHENOL	531,835	24,335	24,450	8,513,582
PHOSGENE	0	1,792	0	80,519
PHOSPHORIC ACID	61,828	834	31,348	1,468,915
PHOSPHORUS (YELLOW OR WHITE)	0	0	0	11,306
PHTHALIC ANHYDRIDE	2,000	250	0	419,751
PICRIC ACID	0	0	0	750
POLY BROMINATED BIPHENYLS	0	0	0	0
POLYCHLORINATED BIPHENYLS (PCBs)	0	0	0	514
PROPANE SULTONE	0	0	0	0
PROPIONALDEHYDE	0	0	0	1,053,740
PROPOXUR	0	0	0	48
PROPYLENE	1,210	2,176,290	167,000	37,832,734
PROPYLENE OXIDE	38,590	376,769	0	3,660,826
PROPYLENEIMINE	0	0	0	500
PYRIDINE	0	3,317	0	297,936
QUINOLINE	0	2,711	0	28,481
QUINONE	0	0	0	1,053
QUINTOZENE	0	0	0	253
SACCHARIN (MANUFACTURING)	250	0	0	750
SAFROLE	0	0	0	500
SEC-BUTYL ALCOHOL	500	23,684	0	770,297
SELENIUM	250	0	0	5,022
SELENIUM COMPOUNDS	0	0	0	14,061
SILVER	0	0	0	11,362
SILVER COMPOUNDS	0	0	0	11,503
SODIUM HYDROXIDE (SOLUTION)	249,132	5,058	10,711	5,464,290
SODIUM SULFATE (SOLUTION)	159,250	0	0	4,435,245
STYRENE	369,007	676,035	500	24,694,164
STYRENE OXIDE	0	0	0	1,083
SULFURIC ACID	375,731	45,930	23,773	15,422,225
TEREPHTHALIC ACID	500	7,750	0	443,325
TERT-BUTYL ALCOHOL	0	0	0	911,353
TETRACHLOROETHYLENE	141,033	3,500	0	28,093,496
TETRACHLORVINPHOS	0	0	0	0
THALLIUM	0	0	0	0
THALLIUM COMPOUNDS	0	0	0	250
THIOUREA	0	0	0	6,270

CHEMICAL NAME	WI	WV	WY	POUNDS RELEASED
THORIUM DIOXIDE	0	0	0	1,330
TITANIUM TETRACHLORIDE	0	57	0	162,968
TOLUENE	4,708,601	2,310,824	527,011	235,686,684
TOLUENE-2,4-DIISOCYANATE	1,500	14,300	0	492,666
TOLUENE-2,6-DIISOCYANATE	1,000	3,660	0	126,471
TOTAL FOR MIXTURES	519,258	1,000	0	4,357,364
TRICHLORFON	0	0	0	9,718
TRICHLOROETHYLENE	1,102,542	315,234	0	47,509,637
TRIFLURALIN	0	0	0	2,849
URETHANE	0	0	0	374,600
VANADIUM (FUME OR DUST)	0	0	0	8,635
VINYL ACETATE	250	84,000	500	5,954,126
VINYL BROMIDE	0	0	0	162,900
VINYL CHLORIDE	0	0	0	1,511,157
VINYLIDENE CHLORIDE	0	15,000	0	836,371
XYLENE (MIXED ISOMERS)	4,715,347	994,347	394,956	120,120,266
ZINC (FUME OR DUST)	201,779	27,689	0	2,938,830
ZINC COMPOUNDS	32,909	250	0	3,161,659
ZINEB	0	0	0	0
TOTALS	46,491,970	31,582,771	2,835,391	2,396,915,248