

2002

DATA DETAIL

DELAWARE TOXICS RELEASE INVENTORY REPORT



Information available pursuant to
the Emergency Planning and
Community Right-to-Know Act
(EPCRA)

March 2004



Prepared by the EPCRA Reporting Program

Ruth Ann Minner

Governor

John Hughes

Secretary, DNREC

John Blevins

Director, Division of Air and Waste Management

Ali Mirzakhali

Administrator, Air Quality Management Section

Any questions or comments regarding this report should be directed to the principal author:

John Parker
TRI Coordinator
EPCRA Reporting Program, DNREC
156 South State Street
Dover, DE 19901
Tel. (302) 739-4791, Fax (302) 739-3106
e-mail: john.parker@state.de.us

DNREC MISSION STATEMENT

The mission of the Delaware Department of Natural Resources and Environmental Control is to ensure the wise management, conservation, and enhancement of the state's natural resources, protect public health and the environment, provide quality outdoor recreation, improve the quality of life, and educate the public on historic, cultural, and natural resource use, requirements, and issues.

TABLE OF CONTENTS

Introduction

What is the Toxics Release Inventory?	1
Reporting Requirements	1
Recent Developments in TRI Reporting	2
Persistent, Bioaccumulative Toxic Chemicals	3
Industry Expansion	3
Chemical List Changes	4
Carcinogenic TRI Chemicals	4
Pollution Prevention Programs in Delaware	5
Limitations of TRI Data	6

2002 Data Summary

Types of Data	7
TRI Facility Locations	8
SIC Industry Groups	10
On-Site Releases	
Releases to Air	11
Releases to Water	12
Releases to Land	13
Releases From Top 15 Facilities	14
Releases From Second 15 Facilities	22
Common Toxic Chemicals and Their Hazards	28
Off-Site Transfers	33
On-Site Waste Management	34
Total Waste	34
Receiving TRI Chemicals in Wastes	35
Persistent Bioaccumulative Toxic (PBT) Chemicals	36
National Perspective	37
Trend Analyses	
On-Site Releases 1995-2002	38
Off-Site Transfers 1995-2002	40
On-Site Waste Management 1995-2002	41
Total Waste 1995-2002	41
On-Site Releases 1998-2002	42
Off-Site Transfers 1998-2002	43
On-Site Waste Management 1998-2002	43
Total Waste 1998-2002	43
Carcinogens Trend 1995-2002	44

For Further Information	46
-----------------------------------	----

Appendices

Appendix A - What is community right-to-Know?
Appendix B - Facility Addresses and Contacts
Appendix C - 2002 On-Site Chemical Releases (by Facility)
Appendix D - 2002 Off-Site Transfers and Waste Managed On-Site (by Facility)
Appendix E - 2002 On-Site Release Summary (by Facility) Ranked by On-Site release
Appendix F - 2002 On-Site Chemical Releases (by Chemical)
Appendix G - 2002 Off-Site Transfers and Waste Managed On-Site (By Chemical)
Appendix H - 2002 On-Site Release Summary (by Chemical) Ranked by On-Site Release
Appendix I - 2002 PBT Release and Transfer Detail by Chemical (Alphabetical)
Appendix J - 2002 Carcinogen Release and Transfer Detail by Chemical (Alphabetical)

TABLES AND FIGURES APPEARING IN THIS REPORT

Tables

Table 1:	Covered Industries	2
Table 2:	PBT Chemicals and Reporting Thresholds	3
Table 3:	Carcinogens Reported by Delaware Facilities for 2002	4
Table 4:	2002 TRI Data Summary	7
Table 5:	2002 TRI Data by Primary SIC Group	10
Table 6:	Release to Water by Watershed	12
Table 7:	Release to Water by Basin	12
Table 8:	Top 15 Facilities - 2001 and 2002 Ranking by On-Site Release	14
Table 9:	Summary of Transfers to Delaware Facilities From Other Facilities	35
Table 10:	2002 PBT Data Summary	36
Table 11:	2002 PBT Release Summary	37
Table 12:	1995-2002 TRI Data Summary, Unadjusted	38
Table 13:	1995-2002 TRI Data Summary, Adjusted	9
Table 14:	1998-2002 TRI Data Summary, Adjusted	42
Table 15:	1995-2002 Carcinogens	44

Figures

Figure 1:	TRI Facility Locator Map	8
Figure 2:	On-Site Releases by County - Map	9
Figure 3:	On-Site Releases by SIC	10
Figure 4:	2002 On-Site Releases	11
Figure 5:	Top 15 Chemicals Released to Air	11
Figure 6:	Top 15 Chemicals Released to Water	13
Figure 7:	Top 15 Chemicals Released to Land	13
Figure 8:	2002 On-Site Releases, Top 15 Facilities	14
Figure 9:	2002 On-Site Releases, 1998-2002 Trend, Top 15 Facilities	21
Figure 10:	2003 On-Site Releases, 1998-2002 Trend, Second 15 Facilities	27
Figure 11:	2002 Off-Site Transfers	33
Figure 12:	2002 On-Site Waste Management	34
Figure 13:	Total 2002 TRI Chemical Management	34
Figure 14:	Total On-Site Releases, Unadjusted, 1995-2002	38
Figure 15:	Total On-Site Releases, Adjusted, 1995-2002	39
Figure 16:	Off-Site Transfers, Adjusted, 1995-2002	40
Figure 17:	On-Site Waste Management, Adjusted, 1995-2002	41
Figure 18:	Total Waste, Adjusted, 1998-2002	41
Figure 19:	Total On-Site Releases, Asjusted, 1998-2002	42
Figure 20:	Off-Site Ttransfers, Asjusted, 1998-2002	43
Figure 21:	On-Site Waste Management, Adjusted, 1998-2002	43
Figure 22:	Total Waste, Adjusted, 1998-2002	43
Figure 23:	1995-2002 Carcinogen Trend	44

Introduction

What is the Toxics Release Inventory?

The Toxics Release Inventory, or TRI, is a publicly-available data set containing information reported annually for toxic chemicals manufactured, processed, or otherwise used by certain facilities in Delaware and throughout the United States. Annually, these facilities report releases and waste management information for covered chemicals. The reportable list of toxic chemicals for 2002 included 582 individual chemicals and 30 chemical categories. TRI was established in 1986 under Title III, Section 313, of the Federal Superfund Amendments and Reauthorization Act to provide information to the public about the presence and release of toxic chemicals in their communities. Title III is also known as the Emergency Planning and Community Right-to-Know Act (EPCRA).

Facilities report TRI information to the U.S. Environmental Protection Agency (EPA) and to the State in which the facility is located. In Delaware, the EPCRA Reporting Program within the Department of Natural Resources and Environmental Control (DNREC) receives and compiles TRI data from facilities located within the State. The EPCRA Reporting Program maintains a database that is updated as new reports are received. The database currently contains sixteen years of reported data. Most releases reported under TRI are also regulated through Federal and/or State permits.

This report provides a summary and analysis of the 2002 TRI data and revisions received as of March 1, 2004 from Delaware facilities.

A second, less detailed report that provides a less technical perspective of the data presented here is also available. See page 46 for details.

Reporting Requirements

A facility is required to submit a report for a listed toxic chemical if the facility meets all of the following criteria:

1. Employs the equivalent of 10 or more full-time employees,
2. Is a covered industry, or is a federal facility (See Table 1 on the next page for a list of covered industries), and,
3. Manufactures or processes more than 25,000 pounds, or otherwise uses more than 10,000 pounds, of the listed toxic chemical during the course of the calendar year. Limits for specific chemicals known as PBT's (Persistent Bioaccumulative Toxics) are lower (Table 2 on page 3).

Note: From time to time, the EPA proposes changes in reporting requirements. It gives agencies, reporting facilities, and other interested parties time to comment on these changes prior to making a final decision about the proposed change.

Facilities that meet the criteria for reporting must submit one report for each listed toxic chemical manufactured, processed, or otherwise used above threshold quantities. Facilities must submit these reports to DNREC and EPA by July 1 of each year. The reports cover activities during the previous calendar year. It is important to note that a facility may need to report even if it has no releases of the toxic chemical, because reporting is based on the amount manufactured, processed, or otherwise used, and not the amount released.

**TABLE 1
COVERED INDUSTRIES**

SIC CODES	INDUSTRY
10XX	Metal Mining
12XX	Coal Mining
20-39XX	Manufacturing
4911	Oil and Coal Fired
4931	Electric Utilities
4939	
4953	Facilities Regulated Under RCRA Subtitle C
5169	Wholesale Chemical Distributors
5171	Wholesale Petroleum Stations and Terminals
7389	Solvent Recovery Services
	Federal Facilities

Table 1 provides a list of covered industries along with corresponding 4-digit Standard Industrial Classification (SIC) codes. SIC codes are used to identify the type of activities performed at a facility. Each industry sector represented by facilities reporting in Delaware for 2002 is described in Table 5 on page 10.

The standard report (Form R) contains general facility information and data about on-site releases, off-site transfers, and on-site waste management activities. In lieu of Form R, the short form (Form A) may be used, provided certain criteria are met. After a facility determines that it must report on a given chemical, the facility is eligible to use Form A for that chemical if:

1. The sum of the annual releases, transfers, and wastes managed on-site (known as the "reportable amount") does not exceed 500 pounds, and,
2. The total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds.

Form A, initiated in the 1997 reporting year, is a two-page report that provides facility information (essentially the same as Form R) and the identification of the chemical, but does not provide any release, transfer, or waste management data.

Recent Developments in TRI Reporting

The TRI reporting requirements change as EPA seeks to improve the program through changes to the list of reportable chemicals and through program expansions. As a result of these changes, considerable caution must be exercised when comparing TRI data from previous years. Some of the data presented later in this report will be adjusted for these changes in order to present the data on a more constant reporting basis from year to year. Notations will be made to indicate which data is presented with these adjustments.

In the future, the four-digit facility SIC codes will be phased out and replaced with six-digit NAICS (North American Industry Classification System) codes. Facilities will not be added or removed from the reporting requirements because of this change.

Persistent, Bioaccumulative, Toxic (PBT) Chemicals

For reporting year 2000 and beyond, EPA established substantially lower reporting thresholds for 15 chemicals and three chemical categories that are highly persistent and bioaccumulative in the environment (PBT's). Five chemicals were also added to the PBT list in 2000. The new thresholds apply regardless of whether the PBT chemical is manufactured, processed, or otherwise used. Table 2 provides a list of these PBT chemicals and their thresholds.

Beginning with reporting year 2001 and beyond, lead and lead compounds also have a reduced threshold of 100 pounds, down from the previous 25,000 pounds for manufactured and processed and 10,000 pounds otherwise used thresholds, except lead contained in stainless steel, brass, or bronze alloys.

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including

burning fossil fuels, mining, and manufacturing. Exposure to lead can happen from breathing workplace air or dust, eating contaminated foods, or drinking contaminated water. Children can be exposed from eating lead-based paint chips or playing in contaminated soil. Lead can damage the nervous system, kidneys, and reproductive system. Lead is listed as a possible carcinogen by the International Agency for Research on Cancer. Additional release information on all PBT's reported to the Delaware TRI program can be found starting on page 36.

**TABLE 2
PBT CHEMICALS AND
REPORTING THRESHOLDS
(pounds/year)**

Chemical or Chemical Category	Threshold
Aldrin	100
Benzo[g,h,i]perylene	10
Chlordane	10
Dioxin and dioxin-like compounds	0.1 grams
Heptachlor	10
Hexachlorobenzene	10
Isodrin	10
Lead *	100
Lead compounds *	100
Mercury	10
Mercury compounds	10
Methoxychlor	100
Octachlorostyrene	10
Pendimethalin	100
Pentachlorobenzene	10
Polychlorinated biphenyls (PCB's)	10
Polycyclic aromatic compounds	100
Tetrabromobisphenol A	100
Toxaphene	10
Trifluralin	100

* Lower Threshold Beginning with 2001 Reports

Industry Expansion

On May 1, 1997, EPA added seven industries to the list of facilities covered under TRI. Prior to the 1998 reporting year, only manufacturers (SIC codes 20XX-39XX) and federal facilities were required to report (See Table 1 on page 2). EPA included the seven new industries because facilities within these industries manufacture and use substantial quantities of TRI chemicals and engage in activities related to those conducted by manufacturing facilities. The greatest impact to Delaware is the Electric Utilities (4931). The industry expansion significantly increased the amount of reported releases. This did not necessarily represent an increase in

toxic releases in Delaware, but rather additional information that was made available to the public. Again, some of the data presented later in this report will be adjusted for these changes in order to present the data on a more constant reporting basis from year to year.

Chemical List Changes

The number of reportable chemicals substantially increased for the 1995 reporting year and beyond, including the addition of over 200 chemicals and six chemical categories. In response to the increased reporting burden on industry resulting from the chemical list expansion of 1995, EPA initiated the use of Form A described on page 2. The only recent significant deletion was phosphoric acid in 1999. It was reported by 11 facilities in 1998.

Carcinogenic TRI Chemicals

**TABLE 3
CARCINOGENS REPORTED BY
DELAWARE FACILITIES FOR 2002**

CHEM NAME	IARC	NO. OF REPORTS
ACRYLONITRILE	2A	1
ASBESTOS (FRIABLE)	1	1
BENZENE	1	7
1,3-BUTADIENE	2A	2
CHLOROFORM	2B	1
CHROMIUM COMPOUNDS	1	7
COBALT COMPOUNDS	2B	3
DI(2-ETHYLHEXYL) PHTHALATE	2B	1
DICHLOROMETHANE	2B	1
1,3-DICHLOROPROPYLENE	2B	1
DIETHYL SULFATE	2A	1
ETHYL ACRYLATE	2B	2
ETHYLBENZENE	2B	5
ETHYLENE OXIDE	1	2
FORMALDEHYDE	2A	1
HEXACHLOROBENZENE	2B	1
LEAD	2B	7
LEAD COMPOUNDS	2B	14
4,4'-METHYLENEBIS(2-CHLOROANILINE)	2A	1
NICKEL	2B	2
NICKEL COMPOUNDS	1	7
NITROBENZENE	2B	1
P-CHLOROANILINE	2B	1
POLYCHLORINATED BIPHENYLS (PCB)	2A	1
POLYCYCLIC AROMATIC COMPOUNDS	2A,B	14
PROPYLENE OXIDE	2B	1
STYRENE	2B	7
TETRACHLOROETHYLENE	2B	1
TOLUENE DIISOCYANATE (MIXED ISOMERS)	2B	2
TRICHLOROETHYLENE	2A	3
VINYL ACETATE	2B	2
VINYL CHLORIDE	1	2
TOTAL =		103

Some chemicals are reportable under TRI because they are either known or suspected human carcinogens. Known human carcinogens are those that have been shown to cause cancer in humans. Suspected carcinogens are those that have been shown to cause cancer in animals. Table 3 contains those known and suspected carcinogens that were reported by Delaware facilities for 2002. Next to each chemical is its International Agency for Research on Cancer (IARC) rating as a: Known (1), Probable (2A), or Possible (2B) carcinogen. Polycyclic aromatic compounds is a class of chemicals with chemicals in both 2A and 2B IARC classifications. Of the 8.0 million pounds of TRI chemicals reported by facilities as released on-site to the environment in 2002, 7.5% (602,000 pounds) were known or suspected carcinogens. Releases on-site of all carcinogens increased 9% over the 2001 data, but decreased 30% since its peak in 1998. For additional information on cancer rates and causes, please go to the Public Health cancer web site listed in the "For Further Information" section on page 46. The Trend Analysis section on page 44 presents additional carcinogen detail.

Pollution Prevention/Reduction Programs in Delaware

The Delaware Pollution Prevention Program in the Department of Natural Resources and Environmental Control (DNREC) facilitates the implementation of pollution prevention by industry, government and society. The Pollution Prevention Program (P2 Program) serves a non-regulatory function to provide information, technical assistance, training, and leadership on issues related to reducing and eliminating our generation of wastes and pollutants. The early years of the P2 program concentrated on industry and its wastes. In recent years the program has assisted all aspects of Delaware's society, including expanded efforts to schools, environmental organizations, commercial and service businesses, and to state government itself.

Data for TRI reportable chemicals and other chemicals is becoming increasingly more available to the public. This public awareness has focused attention on the existence and quantity of these chemicals and on their management and possible reduction. Although EPCRA does not require a facility to reduce releases of chemicals reportable under its programs, many companies and facilities have implemented programs to reduce or eliminate releases of these chemicals. These programs may take the form of efficiency improvements, reuse, recycling, energy recovery, or material substitutions. The benefits of these programs are reduced raw material and waste disposal costs and reduced risks associated with the toxic chemicals. Also, these reductions demonstrate corporate responsibility to the facility neighbors, and improve the corporate image with the public.

There are numerous programs within DNREC that impact the management of TRI chemicals through the issuance of permits or through other regulatory and non-regulatory activities. Most releases reported under TRI are also regulated through air emission, water discharge, and/or land disposal permits. Potential sources of toxics undergo technical reviews through which potential threats to the environment and to human health are reviewed prior to issuance of a permit. For example, the Engineering and Compliance Branch in the Air Quality Management Section enforces a provision in the Clean Air Act Amendment of 1990 that targets the control of hazardous air pollutants (HAPs). Nearly all HAPs are also reportable TRI chemicals. In addition, the Engineering and Compliance staff monitors TRI data to assess whether a facility complies with its Air Permits for TRI chemicals. Another example is the work performed by the Accidental Release Prevention (ARP) program. The ARP staff uses the TRI data to detect possible deficiencies at a facility that might result in an increased probability of an accidental release.

The Solid and Hazardous Waste Management Branch uses the TRI report to measure reductions of releases for the Waste Minimization Priority Chemicals list. The list is a result of EPA's Waste Minimization Program and has measurable goals that Delaware is working to attain. The DNREC Pollution Prevention program offers Consultations to any generator of hazardous waste that requests it. The consultation is non-regulatory and non-enforcement in nature, aimed at helping the company to reduce any and all waste streams, including the priority chemicals.

During 2002, DNREC's Air Quality Management Section monitored ambient air quality at 10 locations around the state. For more information, please refer to the "For Further Information" section under the [2002 Delaware Air quality Report](#) on page 47 of this report.

Limitations of TRI Data

The user of TRI data should be aware of its limitations in order to accurately interpret its significance.

- **NOT ALL FACILITIES ARE REQUIRED TO REPORT.** Only a small fraction of facilities in Delaware are required to report under TRI due to the criteria listed on pages 1 and 2.
- **OTHER SOURCES NOT COVERED UNDER TRI ALSO RELEASE TOXIC CHEMICALS.** Other sources include small businesses, motor vehicles, and agricultural operations, as examples. For some chemicals, their use as consumer products is a significant source of releases.
- **FACILITIES ARE ALLOWED TO BASE TRI DATA ON MEASUREMENTS AND MONITORING DATA IF THESE ARE AVAILABLE.** If such data is not available, quantities are estimated based on published emission factors, mass balance calculations, or good engineering judgment. Additional monitoring equipment and measurements are not required.
- **THE DATA ESTIMATION METHODS MAY CHANGE OR VARY.** The methods of estimating, analytical methodology, or basis of calculating data used by different facilities, or even the same facility over time, may vary, and may result in significant changes in reporting while the actual release may remain relatively unchanged. DNREC performs cross-checks of the data with other information sources to verify its accuracy, and contacts facilities concerning apparent discrepancies.
- **REVISIONS TO FORM R MAY OCCUR AT ANY TIME.** These revisions sometimes involve significant changes for data previously reported by a facility.
- **THIS DATA DOES NOT INDICATE AMOUNT OF HUMAN EXPOSURE.** An important consideration to keep in mind is that TRI does not provide an indication of potential exposure to the reported releases and cannot be used by itself to determine the impact on public health. The chemical's release rate, toxicity, and environmental fate, as well as local meteorology and the proximity of nearby communities to the release must be considered when assessing exposures. Small releases of highly toxic chemicals may pose greater risks than large releases of less toxic chemicals. The potential for exposure increases the longer the chemical remains unchanged in the environment. Some chemicals may quickly break down into less toxic forms, while others may accumulate in the environment, becoming a potential source of long term exposure. The chemical exposure of a population depends on the environmental media (air, water, land) into which the chemical is released. The media also affects the type of exposure possible, such as inhalation, dermal exposure, or ingestion.

Despite these limitations, TRI serves as a screening tool to identify areas of concern that may require further investigation.

2002 Data Summary

Statewide totals of reported 2002 TRI on-site releases, off-site transfers, and wastes managed on-site are provided in Table 4. On-site releases were lower by 3.6% compared to 2001. A total of 84 facilities submitted 372 reports on 106 different chemicals. Of the 372 reports, 55 were submitted using form A. Toluene, zinc compounds, polycyclic aromatic compounds, lead compounds, methanol, and ammonia all had greater than 10 reports. As in past years, air releases, led by acid gasses, constitute the largest portion of the total on-site releases.

Types of Data

Table 4 lists all the categories of data reported to Delaware and EPA under the TRI program. Within the actual reports from facilities, the data is broken down into additional sub-categories. For ease of presentation in this report, the data has been grouped into these categories as described below.

On-Site Releases: There are four categories, but no **underground injection** of chemical waste to wells is permitted in Delaware. On-site releases in Delaware are to **air, water, or land**. The **air** release category includes stack air collected by mechanical means such as vents, ducts, or pipes, and fugitive air escaping collection and released into the general atmosphere, including equipment leaks and evaporation. **Water** releases are to streams or water bodies, including streams, rivers, lakes, bays, or oceans. This includes releases from contained sources, such as industrial process outflow or open trenches. Water releases include TRI-reportable chemicals in runoff, including storm water runoff, are also reportable. **Land** releases (5 types) are to RCRA landfills, in which wastes are buried, surface impoundments, which are uncovered holding areas used to volatilize and/or settle waste materials, other land disposal such as waste piles or releases to land such as spills or leaks, land application/treatment in which waste containing a listed chemical is applied to or incorporated into soil, and other non-RCRA landfill.

Off-Site Transfers: Off-site transfers include transfer of chemical waste to **POTW's** (Wastewater Treatment Plants), to **recycle** operations (5 types), to **energy recovery** operations (2 types), to **treatment** operations (6 types), and to **disposal** (12 types), to facilities not at the facility generating the waste. This total of 23 sub-categories is provided for the purpose of classifying the types of final off-site waste management undertaken for each chemical.

On-site waste Management: Waste management operations at the facility generating the waste are categorized to include **recycle, energy recovery, and treatment**. These are as described above in Off-Site Transfers.

**TABLE 4
2002 TRI DATA SUMMARY
(IN POUNDS)**

	2002
No. of facilities	84
No of Form A's	55
No of Form R's	317
No. of Chemicals	106
On-site Releases	
Air	6,295,850
Water	928,813
Land	814,385
Total Releases	8,039,048
Off-site Transfers	
POTW's	1,201,161
Recycle	9,248,730
Energy Recovery	2,538,090
Treatment	398,572
Disposal	4,196,691
Total Transfers	17,583,245
On-site Waste Mgmt.	
Recycle	25,033,817
Energy Recovery	15,740,469
Treatment	33,376,885
Total on-site Mgmt.	74,151,170
Total Waste	99,773,463

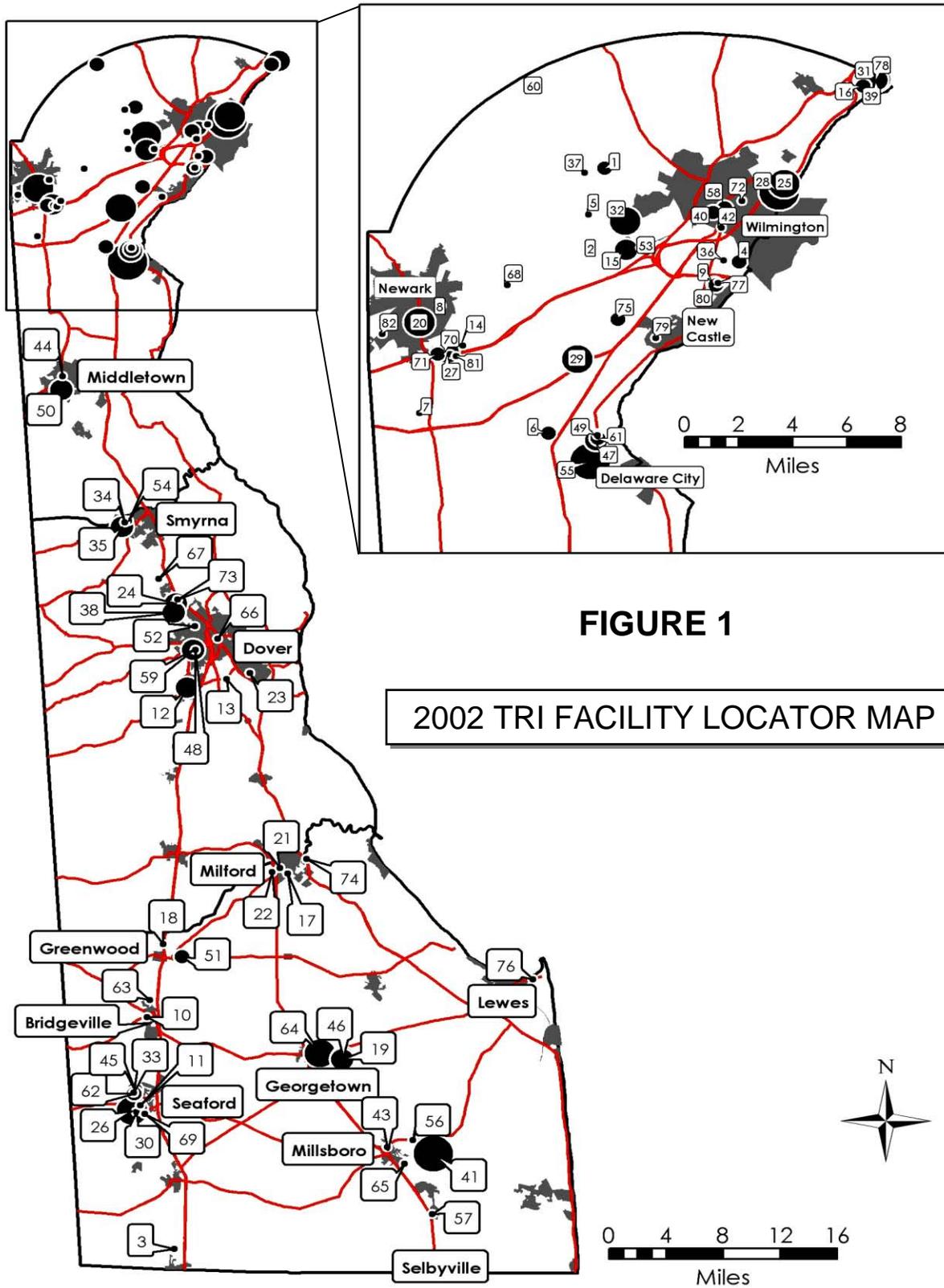


FIGURE 1

2002 TRI FACILITY LOCATOR MAP

FIGURE 1 MAP KEY

MAP ID	FACILITY
1	AGILENT TECHNOLOGIES LITTLE FALLS
2	AGILENT TECHNOLOGIES NEWPORT
3	ALLEN'S HATCHERY
4	AMERICAN MINERALS
5	AMETEK
6	ARLON
7	ASTROPOWER PENCADER
8	ASTROPOWER SOLAR PARK
9	AVECIA
10	BIRDS EYE FOODS
11	BLADES BULK PLANT
12	CAMDEL METALS
13	CARL KING
14	CHROME DEPOSIT
15	CIBA SPECIALTY CHEMICALS
16	CITISTEEL
17	CLARIANT
18	CUSTOM DECORATIVE MOLDINGS
19	D & B INDUSTRIAL GROUP
20	DAIMLER CHRYSLER
21	DENTSPLY CAULK MAIN
22	DENTSPLY CAULK WEST
23	DOVER AIR FORCE BASE
24	DOW REICHHOLD
25	DU PONT EDGE MOOR
26	DU PONT SEAFORD
27	E-A-R SPECIALTY COMPOSITES
28	EDGE MOOR/HAY RD. POWER PLT.
29	FORMOSA PLASTICS
30	GAC SEAFORD
31	GENERAL CHEMICAL
32	GENERAL MOTORS
33	GREEN TREE CHEMICAL
34	HALKO MANUFACTURING
35	HANOVER FOODS
36	HARDCORE COMPOSITES
37	HERCULES RESEARCH CENTER
38	HIRSH INDUSTRIES
39	HONEYWELL
40	IKO PRODUCTION
41	INDIAN RIVER POWER PLANT
42	INSTEEL WIRE
43	INTERVET
44	JOHNSON CONTROLS
45	JOHNSON POLYMER
46	JUSTIN TANKS
47	KANEKA
48	KRAFT FOODS
49	KUEHNE CHEMICAL
50	MACDERMID
51	MARBLE WORKS
52	MCKEE RUN POWER PLANT
53	MEDAL
54	METAL MASTERS
55	MOTIVA
56	MOUNTAIRE FARMS FEEDMILL
57	MOUNTAIRE FARMS OF DELAWARE
58	NORAMCO
59	NRG DOVER
60	NVF YORKLYN
61	OCCIDENTAL CHEMICAL
62	ORIENT
63	PERDUE BRIDGEVILLE
64	PERDUE GEORGETOWN
65	PINNACLE FOODS
66	PLAYTEX PRODUCTS
67	PPG DOVER
68	PPG INDUSTRIES
69	PROCINO PLATING
70	RODEL
71	RODEL TECH CENTER
72	ROLLER SERVICE
73	SERVICE ENERGY DOVER
74	SERVICE ENERGY MILFORD
75	SPATZ FIBERGLASS
76	SPI PHARMA
77	SPI POLYOLS, INC.
78	SUNOCO
79	TFL USA/CANADA
80	UNIQEMA
81	VP RACING FUELS
82	W.L. GORE OTTS CHAPEL

Figure 1 on the facing page provides the location of each reporting facility in the state. The size of the facility location marker depicts the relative size of its on-site release relative to other facilities in the state. The facility location, telephone number, and contact person is provided in Appendix B. Figure 2 below provides basic on-site release information for each county.

FIGURE 2

ON-SITE RELEASES BY COUNTY

NEW CASTLE

Air Releases = 4,171,833 Pounds
Water Releases = 232,685 Pounds
Land Releases = 307,118 Pounds
Total On-Site Releases = 4,711,636 Pounds
228 reports , 43 Facilities
58% of Statewide releases

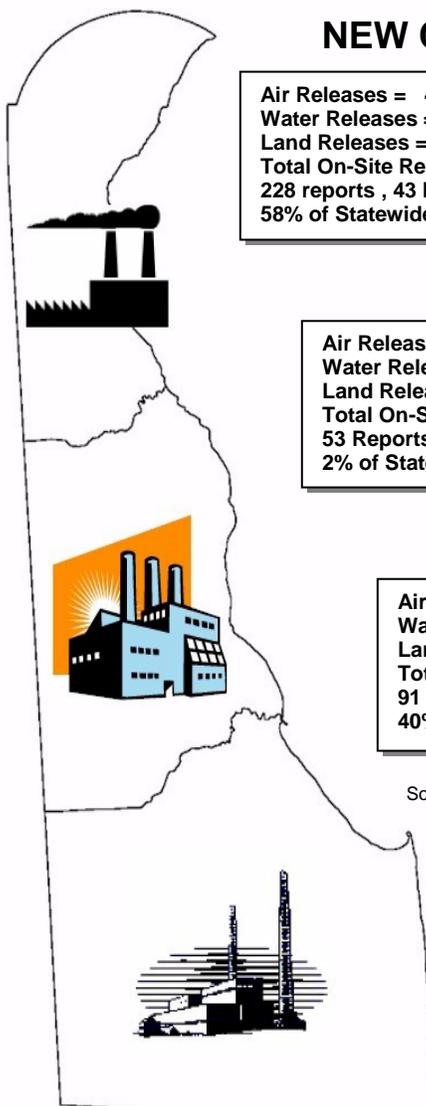
KENT

Air Releases = 125,594 Pounds
Water Releases = 0 Pounds
Land Releases = 0 Pounds
Total On-Site Releases = 125,594 Pounds
53 Reports, 16 Facilities
2% of Statewide releases

SUSSEX

Air Releases = 1,998,423 Pounds
Water Releases = 696,128 Pounds
Land Releases = 507,267 Pounds
Total On-Site Releases = 3,201,818 Pounds
91 Reports, 25 Facilities
40% of Statewide releases

Source: DNREC 2002 TRI Database 3-1-04



SIC Industry Groups

Table 5 provides a description of each Standard Industrial Classification (SIC) industry group and the number of facilities in each group that reported in Delaware. This table also provides on-site releases, off-site transfers, and wastes managed on-site for each group. All three power plants (SIC 4911) reporting in Delaware combust coal. The one reporting metal mining facility, American Minerals, processes metal ores that they receive by railcar. Lead and lead compounds used reduced thresholds starting in 2001, and 14 new facilities began reporting then. Reporting year 2000 included seven facilities in industry codes 10, 28, 33, 34, 36, and 37, and these facilities continue to report lead and lead compounds. The number of facilities reporting lead and lead compounds remains steady with 21 facilities reporting in 2002.

TABLE 5
2002 TRI DATA BY PRIMARY SIC GROUP

(in pounds)

SIC CODE	INDUSTRY GROUP	NUMBER OF REPORTS	NUMBER OF FACILITIES	FORM A	FORM R	ON-SITE RELEASE	OFF SITE TRANSFERS	ON-SITE WASTE MGMT.
10	Metal Mining	5	1		5	6,274	0	0
20	Food Products	22	9	12	10	560,967	1,120	10,000
22	Textiles	5	2	0	5	34,094	789,775	3,235,300
25	Furniture and Fixtures	1	1		1	12,612	0	0
26	Paper Products	1	1		1	8,013	11,914	4,270,402
28	Chemicals	127	26	12	115	1,135,452	7,963,064	33,212,209
29	Petroleum Refining and Products	64	5	6	58	1,452,125	167,856	19,018,857
30	Rubber and Plastics	14	11	3	11	67,832	76,169	123,104
32	Stone, Clay and Glass	1	1		1	0	750	0
33	Primary Metal	13	4		13	17,167	2,441,193	13,100,000
34	Fabricated Metal Products	5	3		5	20	108,803	18,720
36	Electronic equipment, except computers	6	3		6	730	4,571,788	64,920
37	Transportation Equipment	35	3	1	34	656,260	1,051,926	125,194
38	Measuring instruments, medical/optical goods	10	4		10	2,087	89,915	270
39	Miscellaneous Manufacturing	1	1		1	2,371	0	0
4911	Oil and Coal Fired Power Plants	42	4	2	40	4,083,044	308,972	972,194
5171	Wholesale Petroleum Terminals	19	4	19	0	0	0	0
97	National Security	1	1		1	1	0	0
	TOTAL	372	84	55	317	8,039,048	17,583,245	74,151,170

FIGURE 3
2002 ON SITE RELEASES BY SIC

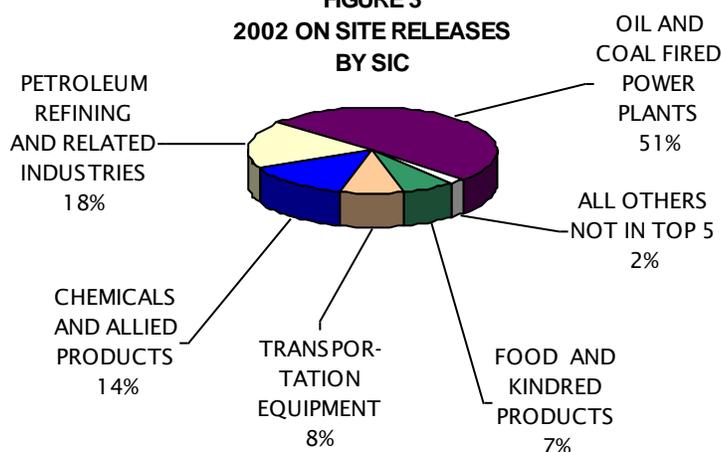


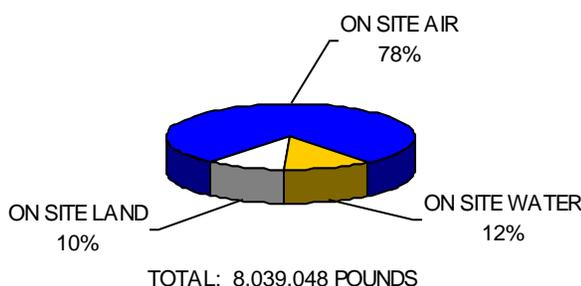
Figure 3 shows the relative contribution of each of the top 5 SIC groups to the total on-site releases and all others not in the top 5. Three of these - SIC groups 4911 (Oil and Coal Fired Power plants), 29 (Petroleum refining), and 28 (Chemicals) combined for 83% of the total on-site releases within the state. Facilities not in the top 5 industry groups contributed only 151,200 pounds on-site, or less than 2% of the total.

On- Site Releases

On-site releases are emissions from a facility to the environment because of normal operations, including emissions to the air, discharges to surface water, disposal onto or into the ground, and underground injection. Although underground injection is an approved method for disposal in some states, it is not an approved method of hazardous waste disposal in Delaware, and thus has not been reported by any facility in Delaware since reporting began. Total on-site releases to air, water, and land make up about 8% of all TRI-reported wastes.

Figure 4 shows the on-site releases reported in the state. A large portion, 78 percent, of the total on-site release is to air. Additional analysis of on-site releases is presented in Figures 5, 6, and 7 below, showing the top 15 chemicals and their releases to air, water, and land.

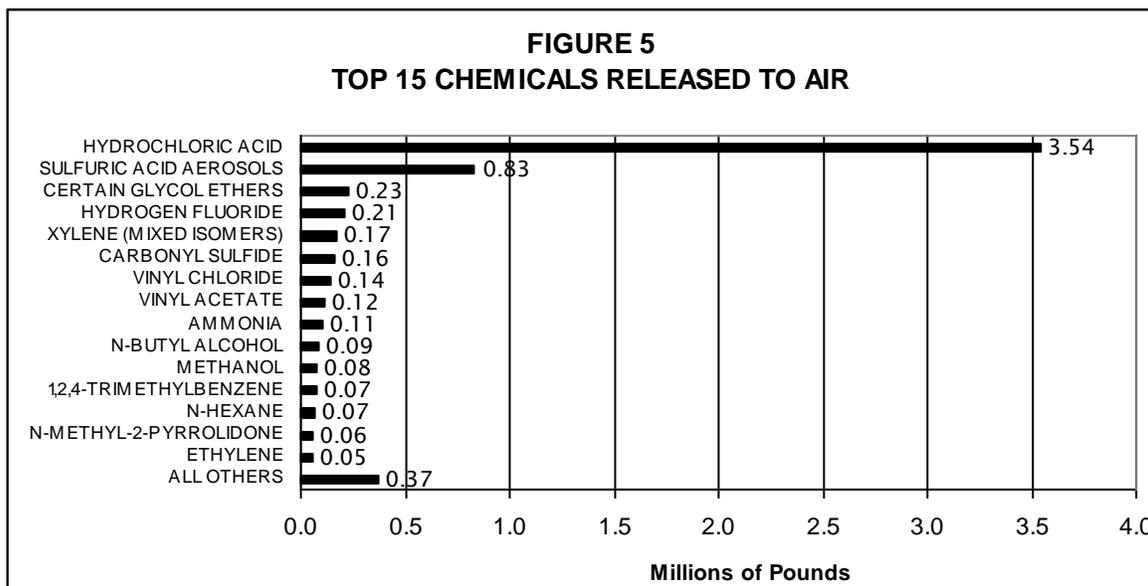
**FIGURE 4
2002 ON SITE RELEASES**



Releases to Air

Figure 5 provides an illustration of the relative release of the top 15 chemicals compared to the other 72 chemicals reported as released in 2002 to the air. As in all the years following the inclusion of power generating facilities, acid gasses top the list. Specifically, hydrochloric and sulfuric acid aerosols (gasses) and hydrogen fluoride are released from power generating facilities located in all three counties. These three chemicals comprise 73% of statewide air

**FIGURE 5
TOP 15 CHEMICALS RELEASED TO AIR**



releases. Nine facilities reported xylene, which represents 3% of all on-site releases to air. Xylene is primarily used as a solvent in paints for the automobile manufacturing industry. The two automobile manufacturing facilities in Delaware accounted for 92% of the xylene air releases. A similar condition exists for certain glycol ethers (4% of on-site air releases), where the automotive manufacturing industry accounted for over 94% of the releases from eight reporting facilities.

Releases to Water

As can be seen in Figure 4 on page 11, releases to water were much lower than releases to air. Table 6 provides the amount of TRI chemicals released to each receiving stream that received a TRI chemical. Figure 6 on the next page shows that nitrate compounds was the top chemical released (75% of the total water release), followed by cresol mixed isomers (6%), phenol (5%), and manganese compounds (4%). The biological treatment of nitrogen-containing compounds such as animal waste and ammonia is responsible for the formation of nitrate compounds. Perdue Georgetown and DuPont Seaford were the primary reporters of nitrate compounds released to the Savannah Ditch (Perdue Georgetown), and Nanticoke River (DuPont Seaford). Motiva was the only reporter of Cresol mixed isomers, a by-product

TABLE 6
RELEASES TO WATER BY RECEIVING STREAM

NAME	NO. OF FACILITIES	NO. OF REPORTS	RELEASE (IN POUNDS)
DELAWARE RIVER	7	57	224,427
DRAWYER CREEK TRIB.	1	1	5
INDIAN RIVER	1	1	120
LITTLE MILL CREEK	1	1	200
NAAMANS CREEK	1	6	40
NANTICOKE RIVER	1	3	146,008
RED CLAY CREEK	1	1	8,013
SAVANNAH DITCH	1	1	550,000
STATE TOTAL	14	71	928,813

of refining. DuPont Edge Moor and Motiva reported all but 1,111 pounds of manganese compounds released to the Delaware River. DuPont Edge Moor reported 90% of the total manganese release to water with 34,910 pounds, followed by Motiva with 7.5%, or 2,900 pounds. Manganese compounds are formed from ore refining and from impurities in coal used in the power generating facilities.

Not every report shows a release to its listed watershed. For example, of the 75 reports listing the Delaware River as their destination watershed, only 57 reports show an actual release quantity to the Delaware River. The other 18 met the reporting requirements listed on page 1 and had the potential to release to the river or may have released chemicals to other media (air or land), but did not report any amounts actually released to the river.

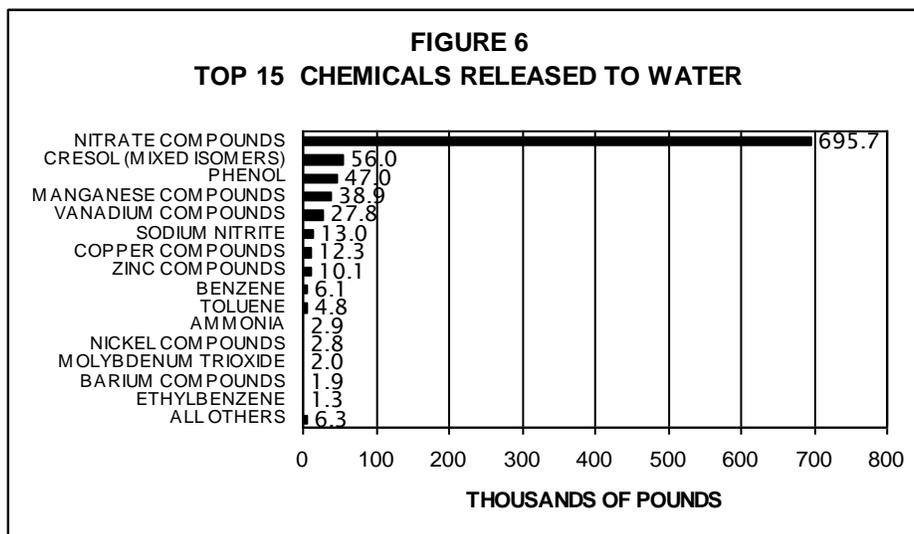
TABLE 7
RELEASES TO WATER BY BASIN

BASIN	RELEASE (IN POUNDS)	PERCENT
CHESAPEAKE	146,008	16%
DE BAY	719,013	77%
INLAND BAYS	120	0.01%
PIEDMONT	63,672	7%
STATE TOTAL	928,813	100%

Table 7 provides the total amount of TRI chemicals released to each basin in the state of Delaware. The Piedmont Basin contains lands that drain into the portion of the Delaware River above New Castle, and the Inland bays include lands that drain into the Indian River Bay/Rehoboth Bay area. All the receiving streams except the Nanticoke and Indian Rivers eventually feed into the Delaware Bay. The 361,000 pound increase in releases to the DE bay was caused by the 240,000 pound increase

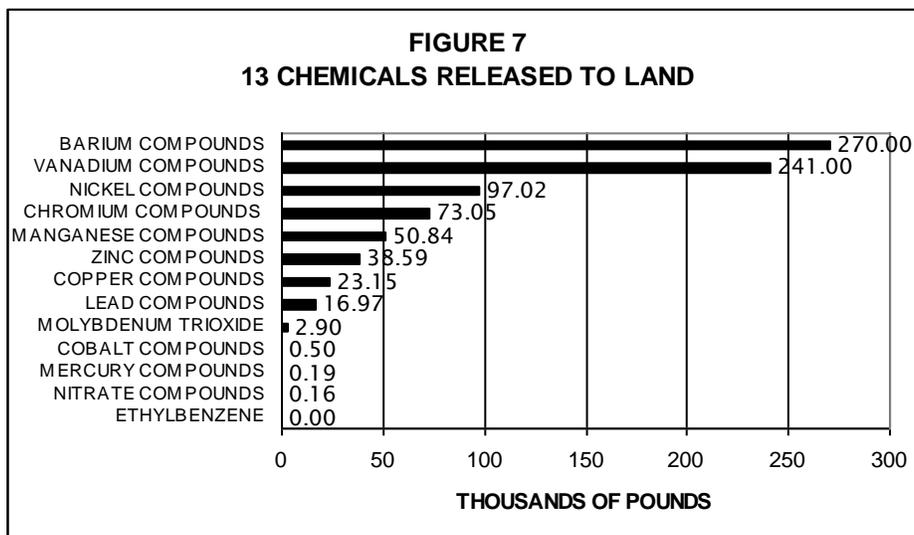
in nitrate compounds released by Perdue Georgetown, and Motiva contributed a 56,000 pound increase in cresol, a 47,000 pound increase in phenol, and a 16,000 pound increase in vanadium compounds. Additional discussion about these releases can be found in the Trend section starting on page 42.

Figure 6 shows the relative relationship of the top 15 TRI chemicals and the 23 other chemicals reported as released to water. This clearly shows the influence that nitrate compounds had on the total. On-site water releases make up 12% of the total on-site releases.



Releases to Land

Land releases, as shown in Figure 4 on page 11, are relatively small, comprising 10% of the total on-site releases. Figure 7 shows the relative contribution all 13 chemicals reported as being released to land. Nearly all the land releases are metals and metal compounds except for the small quantities of nitrate



compounds and ethylbenzene. Most of the metals and metal compounds being reported are formed during the combustion process from metal impurities that exist in coal or crude oil. Barium and vanadium compounds comprise 63% of the total land releases. Land releases, generally the metallic compounds shown above, by the Indian River power plant and Motiva facilities account for 99% of the total land releases.

RELEASES FROM THE TOP 15 FACILITIES

FIGURE 8
2002 ON SITE RELEASES
TOP 15 FACILITIES

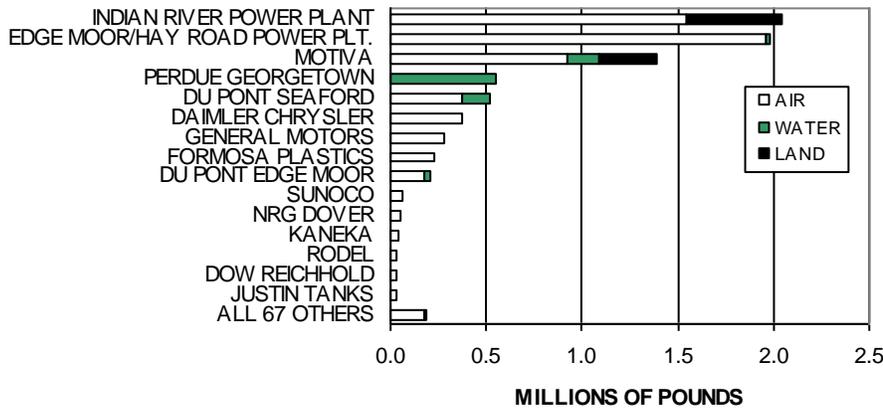


Figure 8 shows the relative contribution of each of the top 15 reporting facilities to on-site releases. The top 3 facilities are, or have as a significant portion of their facility, an energy generating operation. Of the on-site 8,026,409 pounds that were released statewide by all 82 facilities, the top 15 facilities accounted for 7,835,162 pounds, over 97% of the total on-site releases.

TABLE 8
TOP 15 FACILITIES 2001 AND 2002 RANKING BY ON SITE RELEASE
(in pounds)

2001 RANK	2002 RANK	FACILITY	2002			2002 TOTAL ON-SITE RELEASE	2001 TOTAL ON-SITE RELEASE	2001 TO 2002 CHANGE IN RELEASES
			TOTAL AIR	TOTAL WATER	TOTAL LAND			
1	1	INDIAN RIVER POWER PLANT	1,541,902	120	504,987	2,047,009	2,433,625	-16%
2	2	EDGE MOOR/HAY ROAD POWER PLT.	1,963,752	16,326	0	1,980,078	1,740,371	14%
3	3	MOTIVA	919,528	168,986	306,542	1,395,056	1,655,108	-16%
7	4	PERDUE GEORGETOWN	0	550,000	160	550,160	310,210	77%
4	5	DU PONT SEAFORD	373,593	146,008	2,120	521,721	571,057	-9%
5	6	DAIMLER CHRYSLER	371,459	0	0	371,459	384,450	-3%
6	7	GENERAL MOTORS	284,601	200	0	284,801	343,664	-17%
10	8	FORMOSA PLASTICS	226,402	0	0	226,402	116,616	94%
8	9	DU PONT EDGE MOOR	171,472	37,570	0	209,042	244,994	-15%
12	10	SUNOCO	57,063	0	0	57,063	41,825	36%
9	11	NRG DOVER	55,956	0	0	55,956	119,019	-53%
14	12	KANEKA	36,659	1	0	36,660	32,429	13%
13	13	RODEL	34,094	0	0	34,094	33,867	1%
11	14	DOW REICHHOLD	33,510	0	0	33,510	43,565	-23%
15	15	JUSTIN TANKS	32,151	0	0	32,151	31,117	3%
		ALL 67 OTHERS	193,708	9,602	576	203,886	234,370	-13%
		TOP 15	6,102,142	919,211	813,809	7,835,162	8,101,917	-3.3%
		STATE TOTALS	6,295,850	928,813	814,385	8,039,048	8,336,287	-3.6%

Source: 2001 and 2002 DNREC TRI Databases, February 2004

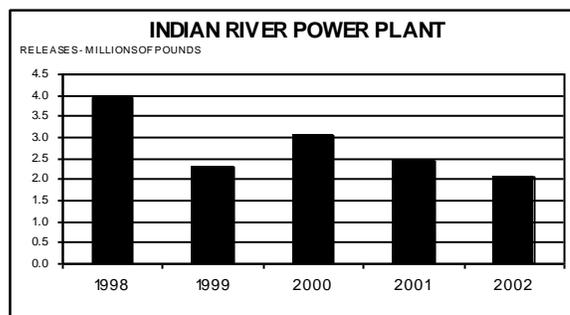
Table 8 shows the 2002 ranking of the top 15 facilities along with their 2001 ranking and the values of on-site releases for both years. The percent change in total on-site release from 2001 to 2002 is also shown. Releases to the environment as a result of remedial actions, accidents, catastrophic events, or one-time events are not shown here, as these releases are generally not associated with changes in production. Changes in production may or may not affect releases from a facility. Other changes at the facility, such as changes in raw materials or processing methods, placing an idle process or equipment back into operation, or installation of new/improved production equipment possibly used to limit or eliminate releases of all or specific chemicals, may affect releases. Interested individuals are encouraged to contact facilities and inquire as to the reasons why changes occurred.

You may note that some of the rankings have changed since 2001 and/or earlier years, or some facilities have had reductions in their off-site releases and their rank did not change. This is because of the general downward trend of the total group. In order to maintain their rank, individual facilities must keep pace with this trend and effect their reductions at a similar rate. In some cases significant reductions result in little, if any change in rank, and no change in release may result in an increase in rank.

The next several pages present a brief description of each of the top 30 facilities to provide an understanding of the use and importance of some of the TRI chemicals and basic operations at these facilities. As in Table 8, this rank is based on total on-site releases. The facility description describes the types of products manufactured at the facility and how their TRI chemicals relate to the products and the overall plant operation. The graph included with the facility description shows the trend of the facility total on-site releases since 1998, the date of the last major TRI reporting revision. Reporting revisions that have occurred since 1998 include the changes in reporting as described starting on page 3 with the threshold reductions for Persistent, Bioaccumulative Toxics (PBT's) and industry expansion. All newly reportable chemicals within this time have been included. Comparisons must be made carefully as the scales on each of the graphs may be different. Appendix C provides a complete list of 2002 release data grouped by facility and chemical. Again, please contact the facility for additional details or to inquire about any changes in trends or unusual events.

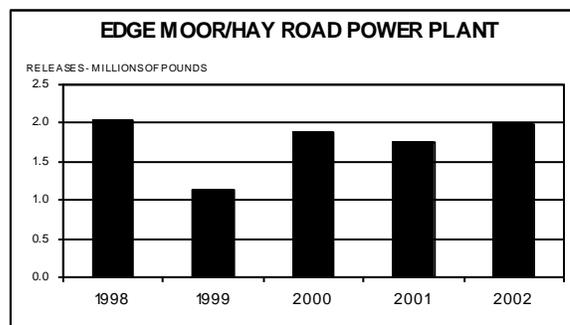
Rank #1 – NRG Indian River Power Plant - Oil- and coal-fired power plants were required to report under TRI for the first time for 1998. This facility, located near Millsboro, produces electricity, primarily from the combustion of coal.

The Indian River Plant reported on sixteen TRI chemicals for 2002. Nine of these were metal compounds, three were non-metallic PBT's, one was ammonia, and the remaining three were acid gases. All compounds except ammonia are formed during the combustion process as a result of impurities within the coal. Acid gas emissions - hydrochloric acid, hydrogen fluoride, and sulfuric acid - accounted for 74% of their on-site releases.



The metal compounds are largely captured in the fly ash and bottom ash and sent to an on-site landfill. This accounted for 25% of their on-site releases. The facility had a small amount of copper compounds released to the Indian River, and the remainder of the on-site releases was ammonia and the non-metallic PBT's. On-site releases have decreased 48% since 1998.

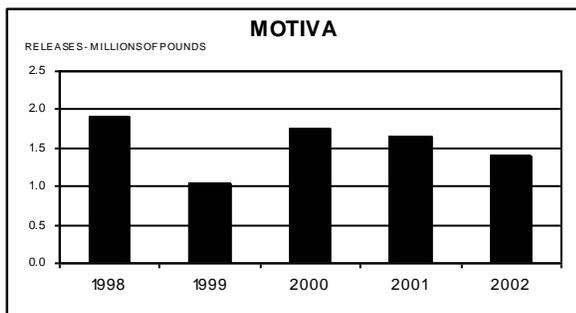
Rank #2 - Edge Moor/Hay Road Power Plant - Oil- and coal-fired power plants were required to report under TRI for the first time for 1998. This facility, located along the Delaware River a mile north of the Port of Wilmington, produces electricity from the combustion of coal, oil, and natural gas.



The Edge Moor Plant reported on eighteen TRI chemicals for 2002. This facility reported

three acid gasses, nine metal compounds, three non-metallic PBT's, and ammonia. Acid gas emissions -- hydrochloric acid, hydrogen fluoride and sulfuric acid -- accounted for 97% of on-site releases. Releases of hydrochloric acid and hydrogen fluoride increased from 2001, and sulfuric acid decreased due to changes in the amounts of oil and coal used. Overall, on-site releases increased in 2002 and now are just under the 1998 level. Ammonia is released in the power production process solely from the use of urea, a pollution control agent used for limiting the formation of oxides of nitrogen to the atmosphere. All listed compounds except ammonia are formed during the combustion process because of impurities within the fuel. About 87% of the metal compounds are largely captured in the fly ash and bottom ash. Generally, 100 percent of the captured ash is beneficially reused. It is used, for example, as an additive in concrete, as landfill stabilizer, as flowable fill in construction projects and as a base for road construction. The remaining 13% of metals in ash not captured was released to air and water and accounted for 2% of their on-site releases.

Rank #3 - Motiva Enterprises - The Motiva Refinery, located in the Delaware City industrial complex, refines crude oil into automobile gasoline, home heating oil, and a variety of other petroleum products. The facility, previously known as Star Enterprise, changed ownership to Motiva Enterprises on July 1, 1998. Motiva Enterprises, as of February 13, 2002, became a U.S. joint venture between Shell Oil Company and Saudi Refining, Inc.



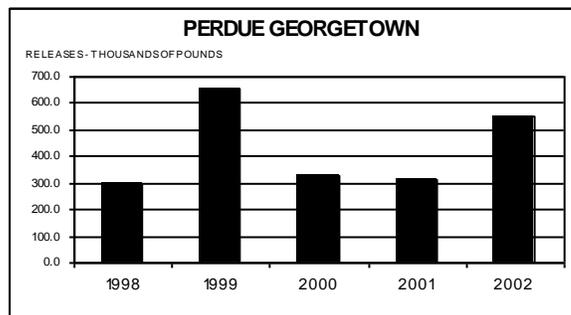
Motiva reported on 47 TRI chemicals for 2002. Their reported on-site releases decreased 16% in 2002 and have decreased 27% since 1998. Sulfuric acid and hydrochloric acid gas emissions accounted for over 50% of Motiva's on-site releases. Sulfuric and hydrochloric acids are formed as acid gasses in several units at the facility, including the Fluid Coker, Fluid Cat Cracker, and the on-site power plant that combusts oil and gas. Reported hydrochloric acid aerosol emissions increased

by 11% in 2002. Other increases - cresol (56,000 pounds), phenol (47,000 pounds), and nickel compounds (27,000 pounds) were more than offset by a 39% decrease (330,000 pounds) in sulfuric acid aerosols, along with decreases in vanadium compounds (48,000 pounds) and MTBE (48,000 pounds). The changes in cresol and phenol were due to new information about their existence in the process. The nickel release increased because of increased gassifier operation. The sulfuric acid decrease was a return to a normal level after higher than normal releases in 2000 and 2001. The decrease in vanadium compounds was due to lower concentration in gassifier slag. The reduction in MTBE release was due to a change in the estimation method.

Rank #4 - Perdue Farms - Perdue Farms is a producer of poultry products. The Georgetown facility processes chickens for sale to the retail market.

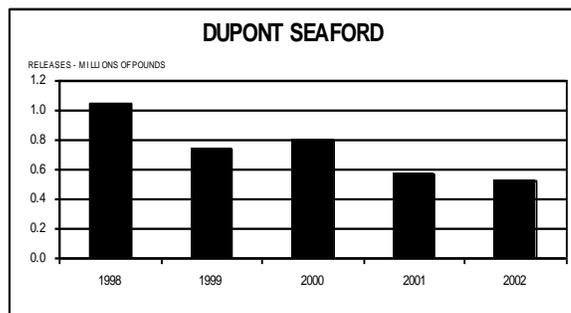
Perdue reported on three TRI chemicals for 2002. The majority of the releases were for nitrate compounds. The Perdue wastewater treatment plant digests ammonia and production waste from the poultry processing plant's wastewater stream and converts some of these wastes to nitrate compounds.

Nitrate compound volume at Perdue's wastewater treatment plant peaked in 1999 when new government-mandated processing plant procedures dramatically increased the amount of water required to process chickens. Improvements in the wastewater treatment plant operation cut nitrate releases by more than 50 percent in 2000 and 2001, but these reductions have been partially offset by recent changes in the way the amount of nitrate compounds releases are estimated.



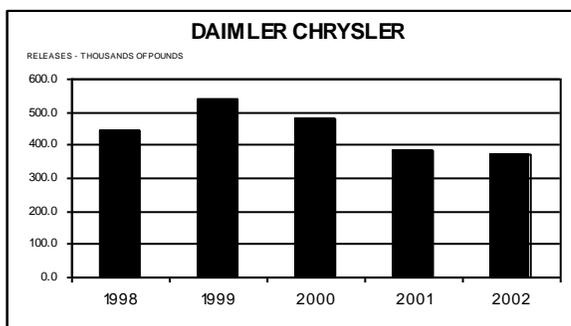
Rank #5 - DuPont Seaford - This facility was the first plant worldwide to produce spun nylon fibers, beginning operations in 1939. The spun nylon is used in the apparel industry, in carpeting, and other fabrics applications. The facility also produces nylon flake for export.

DuPont Seaford reported on 13 TRI chemicals for 2002. Almost 97% of their on-site releases were of three chemicals; hydrochloric and sulfuric acids aerosols to air and nitrate compounds to water. Combustion of coal in the DuPont power plant produces hydrochloric and sulfuric acids aerosols released from the stacks. The coal contains small amounts of chlorine- and sulfur-containing compounds that, through the combustion process, convert to acid gases. Nitrate compounds are formed as a by-product of the DuPont on-site process wastewater treatment plant. This facility has reduced its on-site releases by 9% since 2001 and by 50% since 1998.



Rank #6 - Daimler Chrysler Newark Assembly Plant - Daimler Chrysler assembles the Dodge Durango SUV for distribution to dealers.

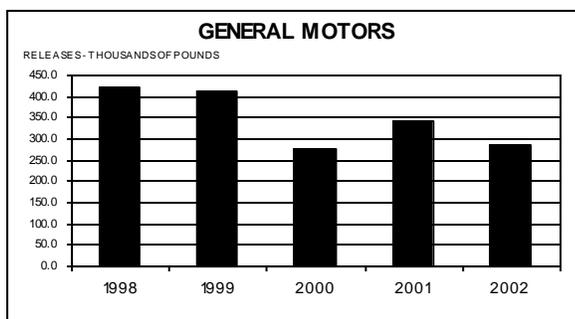
Daimler Chrysler reported on 19 TRI chemicals for 2002. All on-site releases were to the air. Many of these are solvents used in paints or for parts cleaning, while others are materials that are incorporated into the cars themselves, such as ethylene glycol (antifreeze) and methyl tert-butyl ether (gasoline additive). The vehicle body coating process makes use of certain glycol ethers, 1,2,4-trimethylbenzene, methyl isobutyl ketone, n-butyl alcohol, and xylene.



These materials are also used elsewhere in the plant. In total, they account for approximately 85% of the Daimler Chrysler on-site releases for 2002. Daimler Chrysler accounted for about 58% of certain glycol ethers and 22% of all xylene releases in the state in 2002.

This facility has reduced its emissions of on-site TRI reportable chemicals by 16% since 1998, and has realized reductions in off-site transfers and on-site waste management amounts as well.

Rank #7 - General Motors Wilmington Assembly Plant - General Motors assembles Saturn automobiles for distribution to dealers.

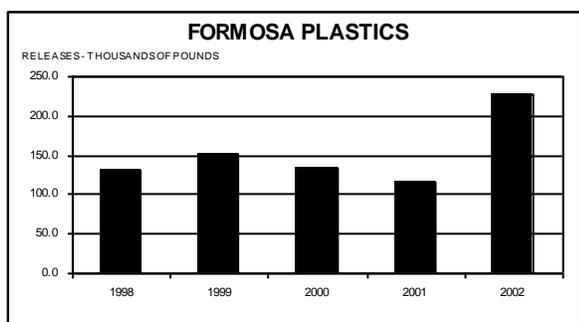


GM reported on 14 TRI chemicals for 2002. Many of these are solvents used in paints or for parts cleaning, while others are materials that are incorporated into the cars themselves, such as methyl tert-butyl ether (gasoline additive). Almost all on-site releases reported by GM were to the air. Xylene, 1,2,4-trimethylbenzene, certain glycol ethers, and paint solvents used in both the base and top coats accounted for over

85% of their on-site releases in 2002. General motors accounted for about 36% of certain glycol ethers and 70% of all xylene releases in the state in 2002.

GM Wilmington reported a 17% decrease in on-site release of TRI chemicals in 2002, and it has reduced its on-site releases of TRI chemicals by 32% since 1998 while increasing production by 20%.

Rank #8 - Formosa Plastics - Formosa Plastics, located in the Delaware City complex, produces polyvinyl chloride (PVC) resin for bulk sale to other industries that produce PVC based products, such as containers, flooring, carpet backing, upholstery, toys, and gloves.



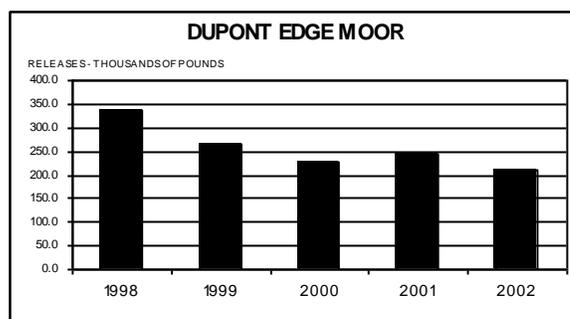
Formosa reported four TRI chemicals for 2002. Vinyl chloride monomer (VCM) accounted for 46% of their on-site releases. VCM is the primary ingredient for producing PVC and is released as residual unreacted monomer during the drying process of the PVC resin. Permits regulate the concentration of the residual monomer in the PVC before drying. Vinyl acetate accounted for 51% of Formosa's on site

releases. Vinyl acetate is also a raw material used in certain products and is released through the drying process. Ammonia is also used in several of Formosa's products and is released during the drying process. Ammonia accounted for 3% of Formosa's on site releases. Formosa also reported a small amount of dioxin and dioxin-like compounds for

both on-site releases and off-site transfers. Formosa Plastics also is currently investing funds in a process modification, which when complete should reduce vinyl chloride emissions significantly, although the site currently operates below permitted emission levels. Formosa started using a new basis on which to estimate vinyl acetate releases in 2002, so comparison of 2002 with prior years is not possible. However, on-site releases in 2001 were lower by 12% compared to 1998.

Rank #9 - DuPont Edge Moor - The Edge Moor Plant is one of four domestic DuPont facilities that manufactures titanium dioxide, a white pigment that is used in food-grade markets and in the paint, coatings, plastic, and paper industries. This facility exclusively serves the paper industry. The plant is located along the Delaware River a few miles north of the Port of Wilmington.

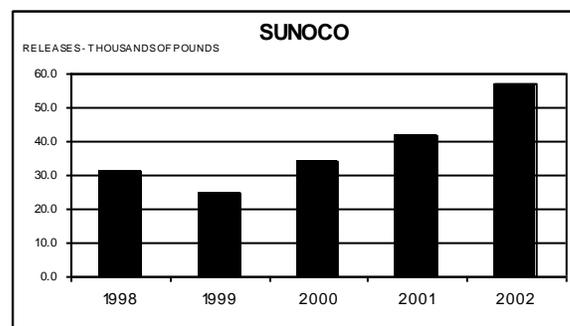
DuPont Edge Moor reported on 22 TRI chemicals for 2002. Carbonyl sulfide accounted for 78% of their on-site releases. Carbonyl sulfide is a by-product produced from the use of sulfur-bearing coke in the process of manufacturing the titanium dioxide from titanium-rich ores.



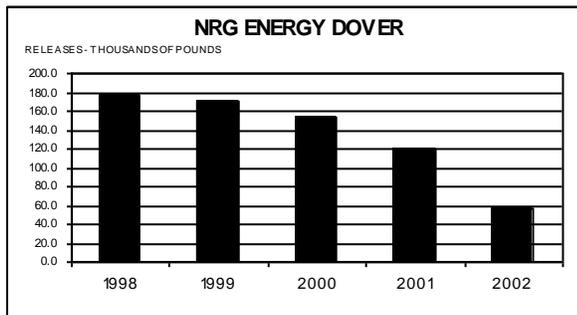
Also, dioxins and dioxin-like compounds are created as a result of ore processing. About 99.8% is contained within the solid material sent to an out-of-state landfill facility.

Rank #10 – Sunoco Refining and Marketing – Sunoco, located in Marcus Hook, PA extends its facility into the North Claymont area of Delaware. The Marcus Hook facility can process 175,000 barrels a day of crude oil into fuels – including gasoline, aviation fuel, kerosene, heating oil, residual fuel, propane and butane, and petrochemicals. The major petrochemicals are benzene, toluene, xylene, cyclohexane, propylene, ethylene, and ethylene oxide; these are sold to chemical companies, which use them to make a variety of other products.

The portion of the facility in Delaware reported five TRI chemicals in 2002. Ethylene and ethylene oxide account for 98% of the total Delaware releases. Small amounts of xylene, benzene, and toluene were reported for the first time in Delaware in 2001 and are released to air from tanks. This was the primary reason for the upward trend in 2001. The ethylene release for 2002 increased by 17,000 pounds and was the primary reason for the upward trend in 2002. Ethylene oxide releases, reported for several years in Delaware, have not changed significantly.



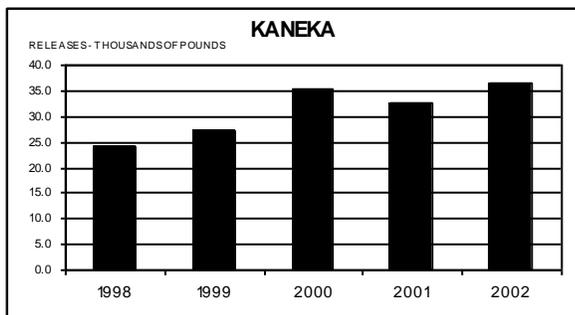
Rank #11 - NRG Dover Plant - Oil- and coal-fired power plants were required to report under TRI for the first time for 1998. This facility located on the West side of Dover produces electricity, primarily from the combustion of coal.



The NRG Dover Plant reported on six TRI chemicals for 2002. Two of these were acid gases formed during the combustion process. Acid gas emissions - hydrochloric acid and sulfuric acid - accounted for over 99% of their on-site releases. Small amounts of metal compounds are formed because of impurities in the coal and are largely captured in the fly ash and bottom ash and sent to an off-site landfill. The decrease in

2002 reported releases was the result of using a new basis for estimating releases of hydrochloric acid aerosols. This new basis reduced the reported release of hydrochloric acid by 65% (63,000 pounds).

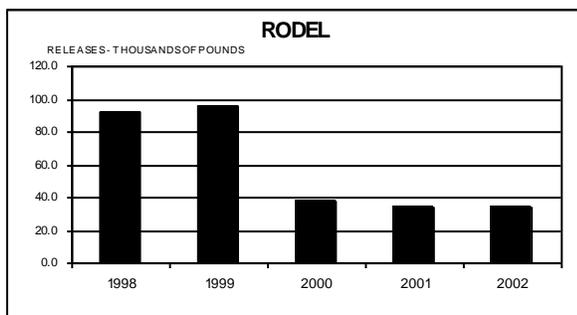
Rank #12 - Kaneka Delaware - Kaneka, located in the Delaware City complex, manufactures Polyvinyl Chloride (PVC) powder for use in PVC based applications such as inflatable balls, covers, foam carper backing, and similar products.



Kaneka reported two TRI chemicals released in 2002; vinyl chloride and hydrochloric acid. Vinyl chloride represented 99% of the Kaneka on-site releases for 2002. Vinyl chloride was released during the drying operations, when unreacted residual vinyl chloride monomer was removed from the finished powder. Permits regulate the concentration of the residual vinyl chloride monomer in the PVC before drying. Up by

13% over 2001 and operating below permit limits, Kaneka's on-site releases have increased by 52% since 1998.

Rank #13 - Rodel - Rodel manufactures polishing pads and slurries for the semiconductor, electronics, and glass industries. Rodel is located south of Newark in the Diamond State Industrial Park.

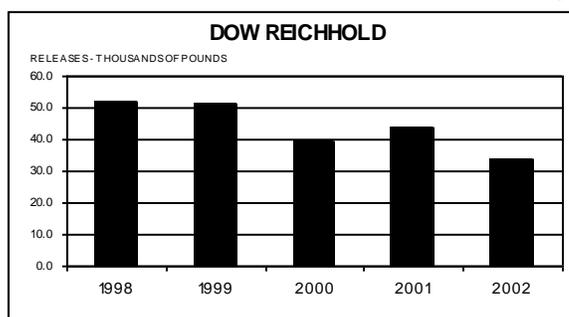


Rodel reported on four TRI chemicals for 2002. N,N-Dimethylformamide (DMF), used as a solvent carrier in the polishing pad manufacturing process, accounted for 68% of their on-site releases. Releases of DMF mostly occur through evaporation from the poromerics coating and washing process. The majority of the DMF used is recycled in

their distillation equipment for reuse in the process. The 2002 DMF release was 31% of the 1998 level. Methyl ethyl ketone (MEK) accounted for 32% of their on-site releases, and is now at 63% of its 1998 level. MEK is used as a solvent carrier in the Impregnation Process. All on-site releases were to air, and were primarily stack emissions from the oxidizer used to control process emissions. Total on-site release was 37% of their 1998 levels.

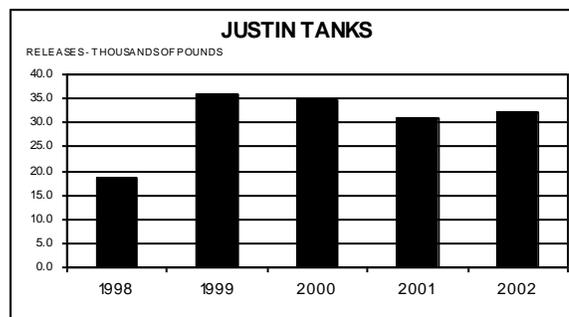
Rank #14 - Dow Reichhold – Dow Reichhold is located two miles south of Cheswold. Dow Reichhold produces emulsion polymers, sometimes referred to as latex. These products are sold in bulk liquid form and are used in the manufacture of paper, carpets, textiles, high performance gloves, coatings, and adhesives.

Reichhold reported on 11 TRI chemicals in 2002. Most of these are raw materials used to form the emulsion polymers. Pollution control equipment processed the residual monomers and achieved 98.0-99.9% removal efficiency before releasing its exhaust to the air. Dow Reichhold on-site releases are 65% of 1998 levels. Half of their 2002 on-site releases were attributable to 1,3,-butadiene.

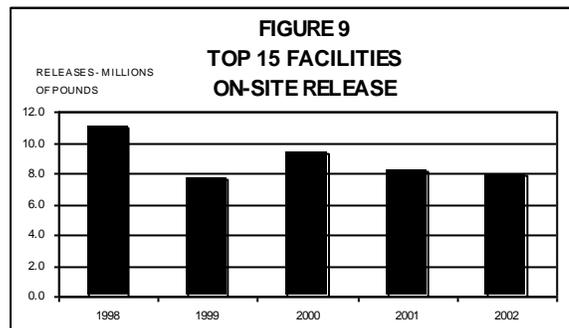


Rank #15 - Justin Tanks – Justin tanks, located in Georgetown, manufactures a wide variety of Fiberglass Reinforced Plastic (FRP) tanks for use in the chemical, agricultural, and food industries.

Justin reported on one TRI chemical, styrene, for 2002. Styrene is used as a monomer in the polymerization of fiberglass resin. The majority of the styrene remains in the resin during the polymerization process, and the curing process releases a small amount to the air after the tanks have been produced.



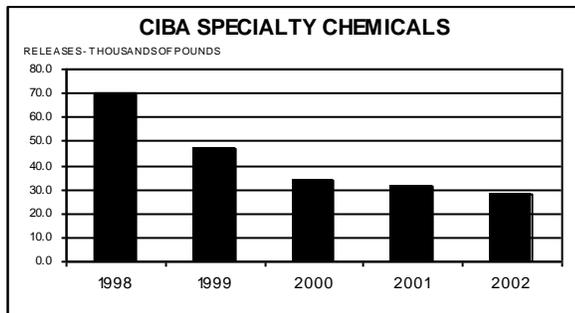
Combined Top 15 Facilities Trend – Figure 9 shows the totals for on-site releases for the top 15 facilities. These facilities represent over 97% of the total on-site releases for 2002. The total on-site release trend for these facilities is down 28% since 1998. No adjustments were made to exclude newly reportable chemicals in this time. Additional trends will be presented later in this report, and some of these trends take into account the new reporting requirements.



Second 15 Facilities

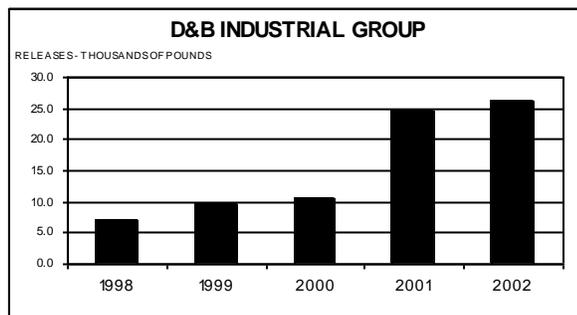
As with the first 15 facilities, a brief description of the second 15 facilities is presented on the next several pages. Although the second 15 group of facilities release a much smaller amount of TRI chemicals on-site, their operations are an important part of Delaware's economy. Again, the ranking is based on the total facility reported on-site releases.

Rank #16 – Ciba Specialty Chemicals - Ciba Specialty Chemicals is located in Newport. Ciba manufactures pigments for the paints, plastic, and printing industries. They reported on seven TRI chemicals for 2002. All on-site releases were to air.



The predominant chemical released to air was methanol. Methanol is used as a solvent in the pigment manufacturing process. A significant portion of methanol used at the facility is recycled. Ciba has expanded and modernized their operation since 1998. Although they doubled capacity, they achieved a 60% reduction in on-site releases since 1998. They also reduced transfers off-site to water treatment by 76%.

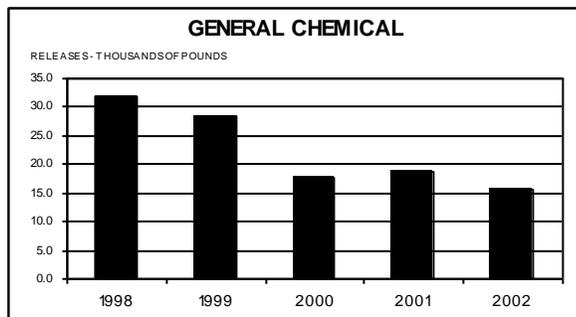
Rank #17 – D&B Industrial Group – D&B is Located in Georgetown adjacent to the airport.



D&B manufactures electrical insulating sleeves and bushings for industrial and appliance applications.

D&B reported one TRI chemical, methyl ethyl ketone. It is used as a solvent in their process. Because of a change in the way MEK releases were calculated, reported on-site releases of MEK have increased by over a factor of 3 since 1998.

Rank #18 – General Chemical – General Chemical is located in Claymont near the

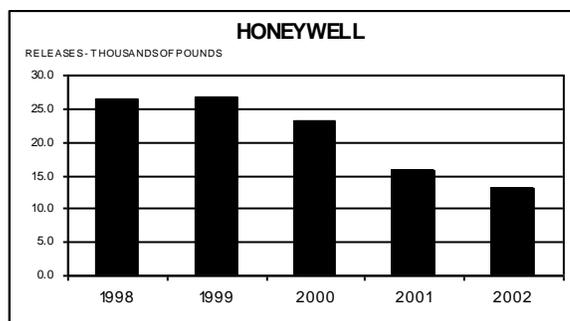


Pennsylvania state line. General Chemical recycled spent sulfuric acid and acid gas in 2002 and earlier. This acid and acid gas came from petroleum refineries that used virgin sulfuric acid as a catalyst in their manufacturing process and needed to regenerate the spent sulfuric acid. The facility produced regenerated sulfuric acid, sulfur, and other sulfur based products.

On-site releases have decreased about 50% over the past 5 years. This decrease reflects reductions in operations during 2002 and installation of new process equipment that resulted in increased manufacturing efficiencies and reduced releases. This facility closed its South Plant sulfuric acid regeneration operation in 2003, but its North plant fluosulfonic acid and related products plant remains in operation.

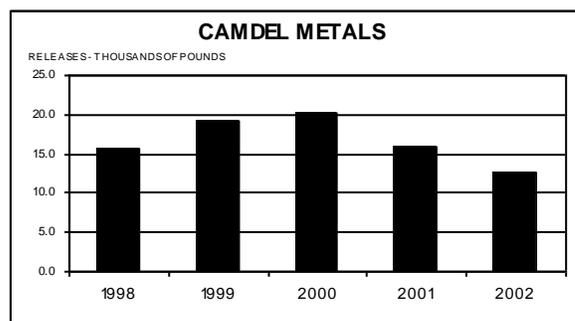
Rank # 19 – Perdue Agrirecycle - Perdue Agrirecycle is located near Seaford and manufactures fertilizer products from waste received from its poultry growing operations. Reporting year 2002 was the first year for this facility to report, and they reported 14,000 pounds of ammonia released to on-site air. No trend graph for this facility will be available until enough years are reported to establish a meaningful trend.

Rank #20 – Honeywell International - Honeywell, located in Claymont adjacent to General Chemical and Sunoco, manufactures specialty chemicals that are used in agricultural, pharmaceutical, and household products. This facility also produces boron trifluoride, used in the production of hydrocarbon resins, lubricants, and adhesives.



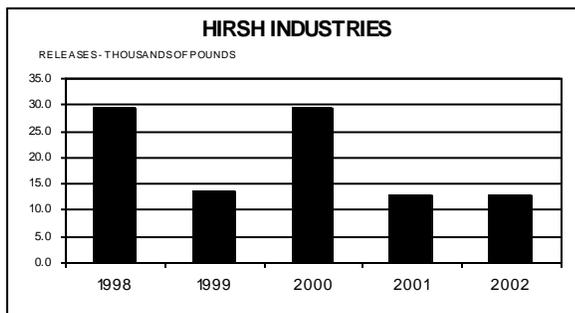
The Honeywell facility reported on six TRI chemicals in 2002. Releases of ammonia and n-hexane, used in production of caulking, accounted for about 95% of their total on-site releases. Honeywell has reduced their on-site releases by 50% since 1998.

Rank #21 - Camdel Metals - Camdel Metals manufactures seamless and welded specialty stainless steel tubing. The tubing is used in medical, oil drilling, semiconductor, chemical, and instrumentation applications. The tubing ranges in size from 1/8 to 3/4 inch diameter. Some types may be supplied in coils as long as 25,000 feet.



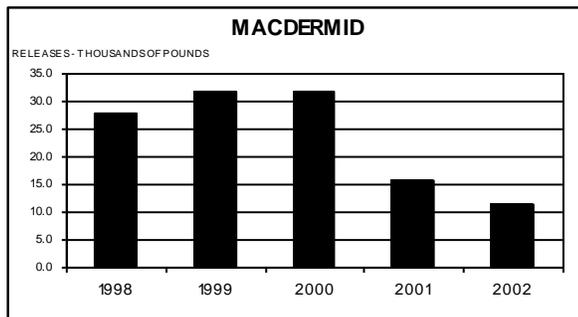
Trichloroethylene is used as a solvent to clean the tubing. Camdel Metals reports on-site releases of this chemical each year. These on-site releases have decreased by 20% since 1998.

Rank #22 – Hirsh Industries – Hirsh Industries produces a line of consumer durables. These products include file cabinets, shelving units, and lateral filing systems. These items are used in home and office applications. Hirsh Industries is located on the north side of Dover.



Hirsh reported one TRI chemical, certain glycol ethers. It is used as a paint solvent in their process. On-site releases of certain glycol ethers have decreased by over 50% since 1998. This trend is the result of a more effective painting process, improved paint products from their vendors, and improvements in estimating the amounts of release. The amount also varies year-to-year because of the amount used in the process.

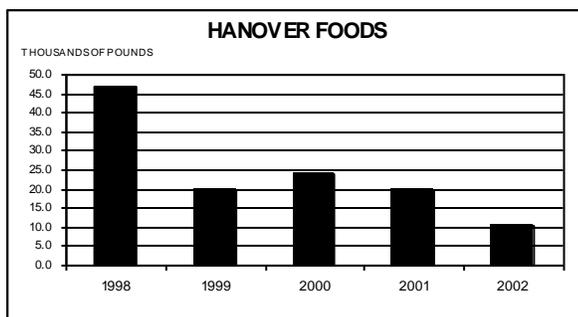
Rank # 23 - MACDERMID, INC. - MacDermid, Inc. is a specialty chemical manufacturer. It serves industries that include industrial finishing, electronics, and graphic arts/printing. MacDermid is also a supplier of consumable products and services for the printing, packing, and converting industries worldwide.



Located in Middletown, the MacDermid facility manufactures photopolymer resins, photopolymer film and liquid resist compounds. These products are used in the graphic arts, electronics and semi-conductor industries respectively.

MacDermid reported on-site releases of Methyl Ethyl Ketone and Toluene Diisocyanate in 2002. Their releases since 1998 have decreased 59%.

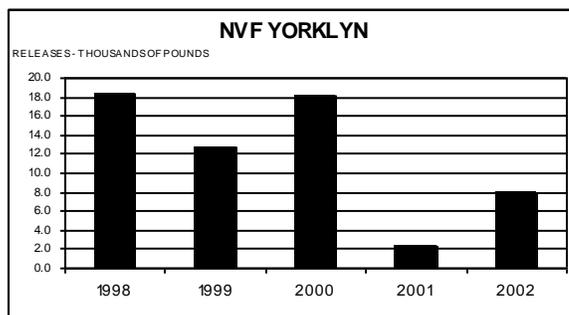
Rank #24 - Hanover Foods - Hanover Foods produces a variety of fresh, frozen, refrigerated, and canned vegetables, entrees, and snack foods. Customers for these products are the retail, foodservice, private label, military, club store, and industrial markets.



Located in Clayton, the facility freezes fresh vegetables including corn, peas, lima beans, spinach, carrots, and mushrooms, and packages frozen entrees. Hanover reported ammonia releases for the past several years. This was primarily due to leaks and other losses in their refrigeration equipment. Their on-site releases have decreased by 78% since 1998.

Rank #25 – NVF Yorklyn – NVF Yorklyn produces high density, 100% cellulose, vulcanized fiber products. This product is used for punched and molded electrical insulation products, tubular fuses, furniture laminates, and abrasive sanding discs. NVF is located in Yorklyn, in northern Delaware near the Pennsylvania state line.

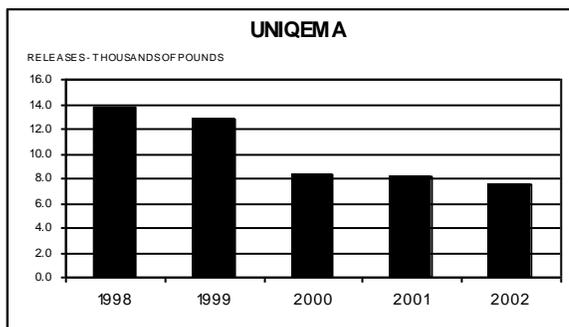
NVF reported one TRI chemical, zinc compounds. The vulcanizing process involves the simultaneous immersion of multiple rolls of cellulose-based paper into a zinc chloride acid bath that gelatinizes them into a single, high density material. The zinc chloride is then leached out and reclaimed internally for reuse. Onsite releases are down 50% from the 1998-2000 period reflecting reductions in operations and improvements in the reclamation process.



Rank # 26 – UNIQEMA - Formerly ICI Atlas Point, these companies have occupied this site located in New Castle near the Delaware Memorial Bridge since 1971.

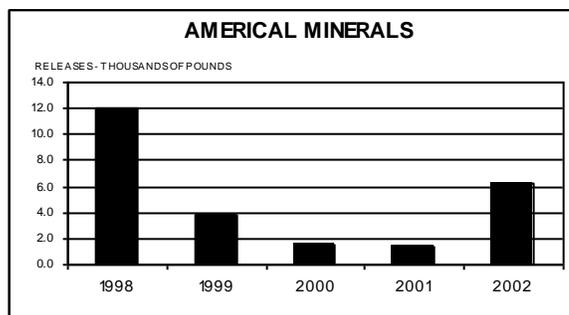
This facility manufactures products that promote the mixing of oil and water based ingredients in many consumer products, such as baby shampoo, shaving cream, mouthwash, pharmaceuticals, and many other personal care and industrial products.

Uniqema reported on seven chemicals for 2002. The majority of chemical release was ethylene oxide and propylene oxide. All on-site releases were to air. Uniqema TRI releases have decreased 45% since 1998.



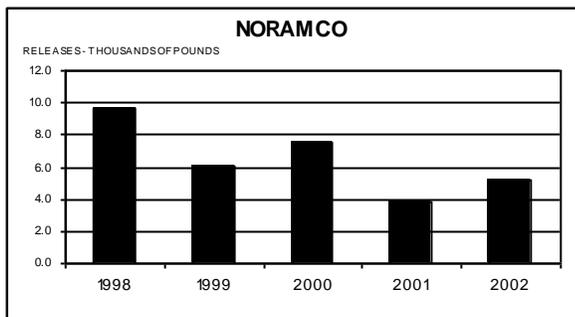
Rank #27 - American Minerals - American Minerals Inc. is a custom processor of natural occurring ores and minerals. These minerals include manganese, olivine, iron chromite, and magnesite.

American Minerals is located in New Castle. This facility converts ore materials into products which are which are utilized by industry and the public on a daily basis such as bricks, steel, and fertilizer. American Minerals grinds, crushes, screens, and blends these materials into products tailored to the specific needs of their industrial, agricultural, and environmental remediation customers.



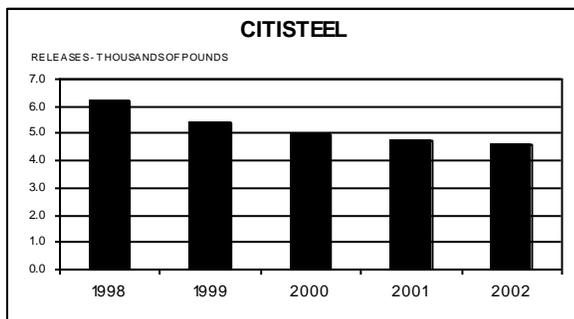
American Minerals reported on 5 TRI chemicals for 2002. These were all metals or metal compounds. The greatest release was to air for manganese compounds. Although this facility has reduced its on-site releases by 48% since 1998, they did have an increase over 2001 because manganese inventory was increased and the manganese emission factor used to estimate releases was increased.

Rank #28 – Noramco - Located in Wilmington, Noramco was formed in 1979. Noramco products include bulk active pharmaceutical ingredients and medical devices. The pharmaceutical products are primarily sold to Johnson & Johnson pharmaceutical sector finishing facilities in the United States, Argentina, Belgium, Brazil, Ireland, and Mexico. The medical devices are incorporated in medical products used by other Johnson & Johnson companies.



Noramco reported on-site releases of five TRI chemicals in 2002. The largest on-site chemical release was dichloromethane. All on-site releases were to air. Noramco on-site releases have decreased by 46% since 1998, with year-to-year variations reflecting both the level of production and efforts to reduce releases.

Rank #29 - CitiSteel - Located on a 425 acre site in Claymont, CitiSteel manufactures carbon steel plate for heavy industrial applications. The facility purchases and recycles over 300,000 tons of scrap steel annually and melts it in an electric arc furnace. The melted steel is cast into large slabs which are rolled into plates of thicknesses from 3/8" to 4" or more. The plates are sold throughout the Northeast, Mid-Atlantic, Southeast, and Midwestern regions of the United States.

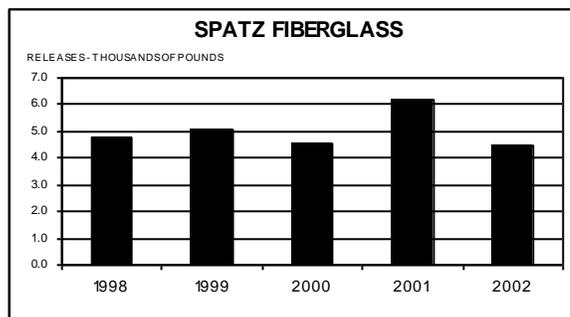


The plates are sold throughout the Northeast, Mid-Atlantic, Southeast, and Midwestern regions of the United States.

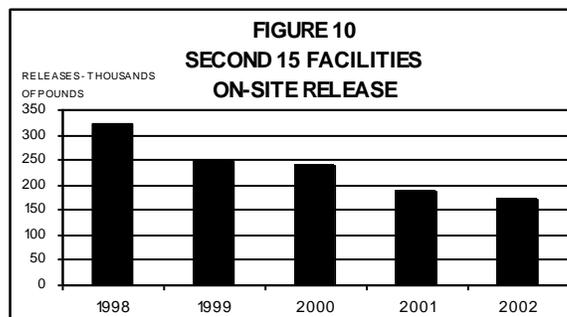
CitiSteel reported on-site releases of 7 TRI chemicals, all metallic compounds, in 2002. Most of the releases were to air. The largest reported release to air was zinc compounds. CitiSteel reported a decrease of 26% in on-site releases since 1998.

Rank #30 – Spatz Fiberglass – Spatz Fiberglass Inc. is a custom manufacturer of fiberglass-reinforced products. Spatz manufactures Industrial duct and fume hood fiberglass components. They also manufacture seats and tables for restaurants, and architectural columns and landscaping products. Typical customers include industrial facilities, restaurants, and schools.

Spatz reported one TRI chemical, styrene, in 2002. It is used as a solvent in their process. On-site releases of styrene have decreased by 7% since 1998, with some variation year-to-year. The amount varies because of the amount of product produced by the facility.



Combined Second 15 Facilities Trend - Figure 10 shows the totals for the facilities ranked #16-30 for on-site releases. The trend is down by 44% since 1998. This trend shows a greater percent decrease than the top 15 group, which had a 28% decrease. Because of the larger percent reduction of the Second 15, its contribution to the state total decreased from 3% in 1998 to 2% in 2002. Again, as with the top 15 facilities, a facility would have to effect annual reductions in its on-site releases in order to maintain its rank. In the Second 15, this annual reduction would be about 11%. A facility may, in fact, show a decrease, yet have an increase in rank. For example, two facilities in this group each showed a total decrease of greater than 19% since 1998, yet each climbed 7 places in rank since 1998 because the group had an average decrease of 44%. In addition, facilities in this group tend to be more closely spaced in their rankings with regard to pounds released on-site. This adds to the variability in rankings from year-to-year as individual facility releases vary in their normal course of operations.



Common Toxic Chemicals and their Hazards

Presented here in descending order of the amount released on-site to air, water, and/or land (see Figures 5-7 on pages 11-13) are the top 15 TRI chemicals. This information is presented as a quick reference summary of information for these toxic chemicals. This is not a detailed source of information on the sources, uses, or hazards of these chemicals. This information was obtained from the DNREC Chemical Data Fact Sheets and the Hazardous Substance Fact Sheets provided by the New Jersey Department of Health and distributed by the EPA. The source for this information is listed in the For Further Information section in pages 46-47 of this report. The reader may also consult other chemical or toxicology reference materials to learn more about chemicals of interest. Excerpts for Nitrate Compounds came from EPA The National Nitrate Compliance Initiative, April 2002. Excerpts for metallic compounds came from EPA Risk Burn Guidance for Hazardous Waste Combustion Facilities.

AIR - From Figure 5 on page 11

Hydrochloric Acid

(Aerosol portion only is reportable)

Used in: Metal processing and cleaning, analytical chemistry, and making other chemicals.

Hazard: Corrosive. Can cause skin and eye burns, irritation of mouth, nose and throat.

Sulfuric Acid

(Aerosol portion only is reportable)

Used in: Fertilizers, chemicals, dyes, petroleum refining, etching, analytical chemistry, metal manufacturing, and explosives.

Hazard: Corrosive. Can cause skin and eye burns, irritation of mouth, nose and throat.

Certain Glycol Ethers

Used in: Solvents.

Hazard: Can irritate the eyes, nose, and throat and skin, toxic by inhalation and ingestion or skin absorption.

Hydrogen Fluoride

Used in: Etching glass, manufacturing chemicals and gasoline.

Hazard: Corrosive. Can cause severe irritation to the eyes, nose, and throat and skin, toxic by inhalation and ingestion or skin absorption.

Xylene – Mixed Isomers

Used in: Solvents and in making drugs, dyes, insecticides, and gasoline.

Hazard: Can irritate the eyes, nose, and throat. Toxic by inhalation and ingestion. May cause memory and concentration problems. Repeated exposure may cause low blood cell count.

Carbonyl Sulfide

Used in: Chemical manufacturing

Hazard: Can irritate the eyes, nose, and throat and skin, toxic by inhalation and ingestion or skin absorption. High exposure may cause nausea dizziness, confusion, vomiting, increased or irregular heartbeat.

Vinyl Chloride

Used in: Plastics and chemical manufacturing

Hazard: Carcinogen, mutagen. Toxic by inhalation and ingestion or skin absorption. May cause damage to developing fetus. May damage liver, kidneys, bones, blood vessels, and skin. Exposure may cause you to feel drowsy or lightheaded.

Vinyl Acetate

Used in Plastics and chemical manufacturing

Hazard: Can irritate the eyes, skin, nose, and throat. High levels of exposure can cause dizziness. Can damage the lungs. Is a hazardous substance, is flammable and reactive. Is soluble in water and toxic to wildlife.

Ammonia

Used in: Refrigerant, in manufacturing fertilizer, plastics, dyes, and textiles. A product of natural organic decomposition, run-off from fields and feedlots, waste treatment plant and refinery/chemical manufacturing effluents.

Hazard: May irritate lungs, eyes, nose, throat, and mouth. Corrosive, can severely damage eyes and cause permanent damage, Contact with liquid can freeze skin.

N-Butyl Alcohol

Used in: Solvent for fats, resins, waxes, gums, shellac and varnish. Also used in manufacture of chemicals and oils.

Hazard: Toxic by inhalation and ingestion or skin absorption. May irritate and damage skin and eyes on contact. Breathing high concentrations can cause coughing, wheezing and shortness of breath, can cause headache, nausea, vomiting and dizziness, and may lead to an irregular heartbeat. Exposure can damage the liver, heart, kidneys, hearing and the sense of balance.

Methanol

Used in: Solvents, cleaners.

Hazard: Toxic when inhaled, ingested, or by skin contact. Exposure may cause blindness, nausea, headaches, vomiting, and dizziness. Flammable and a fire hazard.

1,2,4,-Trimethylbenzene

Used in: Manufacture of dyes, pharmaceuticals.

Hazard: Toxic when inhaled and by skin contact. Can irritate the nose, throat and eyes. Contact can irritate the skin. Prolonged contact may cause skin burns. Repeated exposure may damage the liver and kidneys.

N-Hexane

Used in: Chief constituent of petroleum ether, gasoline, and rubber solvents. Also used in solvents for adhesives, in organic analysis, and in denaturing alcohols.

Hazard: Toxic when inhaled, ingested, or by skin contact. Exposure can cause lightheadedness, giddiness, headaches and nausea. Flammable liquid and a fire hazard.

N-Methyl-2-Pyrrolidone

Used for: Process solvent, paint stripper, industrial cleaners.

Hazard: Toxic when inhaled and by skin contact. Can irritate the skin, nose, throat and eyes.

Ethylene

Used in: Manufacture of ethylene oxide and other organics such as plastics resins, fibers, solvents coatings, and antifreeze.

Hazard: Flammable and reactive. Normally a gas, but also soluble in water. Exposure to high concentrations can irritate the skin eyes, nose and throat and can cause dizziness.

WATER – From Figure 6 on page 13 - Chemicals not reported in the Air section above

Nitrate & Nitrite Compounds (Sodium Nitrate, Sodium Nitrite)

Nitrates are toxic chemicals that can pose serious risks to human health and the environment. High levels of nitrates may cause significant environmental damage to streams, lakes, and rivers. Elevated levels of nitrates may damage surface water and ground water with excess nutrients and can cause algae blooms in coastal waters, which can remove oxygen from the water and result in fish kills. High levels can displace oxygen from the bloodstream and produce blue color in the skin and lips. The National Academy of Sciences recently reported that pollution by nitrogen and phosphorous were causing damage in most of the nation's coastal inlets, and severe problems were identified in 44 of the 139 coastal areas examined.

Cresol

Used in: Making synthetic resins, photographic developers, explosives. Used in disinfectants and fumigants. .

Hazard: Toxic by inhalation or skin exposure. Corrosive, will cause skin and eye burns, possibly blindness. Soluble in water, toxic fish life. Is on hazardous substances list.

Phenol

Used in: Making in making plywood, pharmaceuticals, plastics, and rubber. Common product of refinery wastes

Hazard: Toxic by inhalation or skin exposure. Mutagen, can cause genetic changes, will cause skin and eye burns, possibly permanent eye damage. Soluble in water, toxic to fish life. Is on hazardous substances list.

Manganese Compounds *

Used in: Dry-cell batteries, matches, fireworks, and the production of other manganese compounds, in animal feed, fertilizer, livestock nutritional supplement, in glazes and varnishes, and in ceramics, for water purification purposes in water and waste-treatment plants.

Hazard: Toxic when Inhaled.

Vanadium Compounds *

Used in: Steel alloys, other Vanadium compounds, x-ray equipment, sulfuric acid, and synthetic rubber.

Hazard: Toxic when inhaled. Can irritate skin, nose, throat and lungs.

* These metallic compounds are usually by-products produced from impurities in the fuel associated with coal or oil combustion and/or ore processing.

Copper and Copper Compounds *

Used in: Electrical wiring, plumbing, fungicides, pesticides, electroplating, paint pigments and catalysts.

Hazard: Toxic when inhaled. Can irritate the eyes, nose and throat. May cause a skin allergy. Repeated high exposure to copper can affect the liver.

Zinc and Zinc Compounds *

Used in: Rustproof coating on iron and steel, making brass alloys, car parts, electroplating, batteries, electrical products, paints, and fungicides.

Hazard: Zinc Oxide Fumes (released during welding on galvanized metal) are toxic when inhaled. Zinc dust is a skin irritant.

Benzene

Used in: Used to make other chemicals which are used to make plastics, resins, and nylon and synthetic fibers. Also used to make some types of rubbers, lubricants, dyes, detergents, drugs, and pesticides. Benzene is also a natural part of crude oil, gasoline, and cigarette smoke.

Hazard: Benzene is a carcinogen. Toxic when inhaled or ingested. Exposure to high levels can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness.

Toluene

Used in: Solvent for perfumes, medicines, dyes, explosives, detergents gasoline and chemicals.

Hazard: Toxic when inhaled, ingested, and by skin contact. It may damage the developing fetus. Contact can irritate the skin and eyes. Breathing toluene can irritate the nose and throat causing coughing and wheezing. Exposure can affect the nervous system causing trouble concentrating, headaches and slowed reflexes. Repeated Toluene exposure may cause liver, kidney and brain damage. Highly flammable and explosive.

Nickel and Nickel Compounds *

Used in: Alloys and electroplating, catalysts, dyes, and textile printing.

Hazard: Carcinogenic. Toxic by inhalation. Eye and skin irritant. Repeated exposure may cause scarring of the lungs and may affect the kidneys.

Molybdenum Trioxide *

Used in: Agriculture, making other Molybdenum compounds, ceramic glazes, enamels, pigments, and in analytical chemistry.

Hazard: Toxic when inhaled, may irritate the nose throat and bronchial tubes. Repeated overexposure may cause weight loss, diarrhea, poor muscle coordination, headaches, and muscle or joint pain.

Barium and Barium Compounds *

Used in: Spark plugs and engine rod bearings, and to remove gas from vacuum tubes and television picture tubes.

Hazard: Toxic when inhaled, may irritate skin, eyes, nose and throat.

* These metallic compounds are usually by-products produced from impurities in the fuel associated with coal or oil combustion and/or ore processing.

Ethylbenzene

Used in: Ethylbenzene is used primarily to make another chemical, styrene. Other uses include as a solvent, in fuels, and to make other chemicals.

Hazard: Toxic by inhalation, will irritate eyes, nose throat, and skin. Exposure may cause dizziness, lightheadedness, and breathing difficulty.

LAND – From Figure 7 on page 13 - Chemicals not reported in the Air and/or Water sections above

Chromium Compounds *

Used in: Stainless and alloy steels, refractory products, tanning agents for leather, pigments, electroplating, catalysts, and corrosion-resistant products.

Hazard: Irritant and corrosive to human tissue, chromium compounds are carcinogens. Hexavalent compounds are more toxic than trivalent compounds.

Manganese*

Used in: Steelmaking, dry cell batteries, potassium permanganate.

Hazard: Is a hazardous substance. Toxic by inhalation. Repeated exposure can cause brain damage, may damage kidneys and liver.

Lead and Lead Compounds *

Used in: Storage batteries, ammunition, cable covering, ceramic glazes, casting metals and solders.

Hazard: Toxic by ingestion. Can cause brain damage, particularly in children, suspected carcinogen.

Cobalt Compounds *

Used in: Cobalt is used in steel alloys and jet engines, in nuclear technology, and in cemented carbide abrasives and tools. It is a component in vitamin B12

Hazard: Possible carcinogen. Toxic by inhalation, is a skin irritant. Exposure can irritate the lungs and skin. Repeated exposure to the metal dust can cause scarring of the lungs. Normally appears as dust or solid form.

Mercury and Mercury Compounds

Used in: Thermometers, barometers, vapor lamps, mirror coatings, and in making chemicals and electrical equipment.

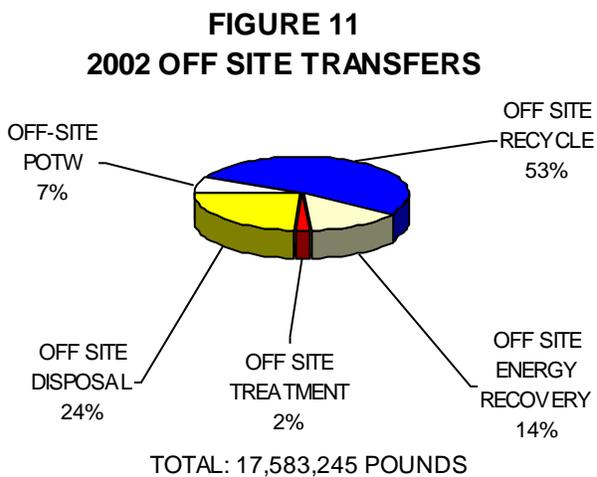
Hazard: The nervous system is very sensitive to all forms of mercury. Methylmercury and metallic mercury vapors are more harmful than other forms, because more mercury in these forms reaches the brain. Exposure to high levels of metallic, inorganic, or organic mercury can permanently damage the brain, kidneys, and developing fetus. Effects on brain functioning may result in irritability, shyness, tremors, changes in vision or hearing, and memory problems.

* These metallic compounds are usually by-products produced from impurities in the fuel associated with coal or oil combustion and/or ore processing.

Off-Site Transfers

Off-site transfers are material transfers to off site locations for the purpose of disposal, recycling, energy recovery, treatment, or to publicly owned treatment works (POTW's), typically, municipal wastewater treatment plants.

Figure 11 shows the relative portions transferred to the five off-site transfer categories, and Table 4 on page 7 shows these values in tabular form. Appendices D and G provide additional detail. TRI Chemicals in wastes are transported by various means through Delaware to their final destinations, many of which are out of state. TRI chemicals were sent to 21 states, some as far away as Arizona, Texas and Utah. About 93% of TRI chemicals in all wastes and over 99% of non-POTW wastes were sent to out of state locations for further processing and/or disposal.

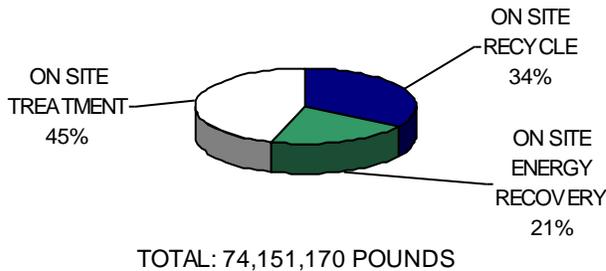


Off-site transfer to recycle operations accounted for more than half of the amounts in these five categories, and disposals accounted for almost another quarter of the transfers. Over 90 percent of the transfers to POTW's were to the City of Wilmington POTW. Note that the pounds recycled off-site (Table 4 on page 7) is greater than all on-site releases, and the total amount transferred off-site is over 2 times the amount of on-site releases. Off-site transfers account for 18 percent of the total TRI wastes.

On-Site waste Management

On-Site Waste Management is the amount of wastes that never leave the facility site and are managed by the facility on-site. The total amount of TRI chemicals managed on-site is 74 percent of the total TRI chemical waste.

FIGURE 12
2002 ON SITE WASTE MANAGEMENT



The categories of **Recycle, Energy recovery, and Treatment** are used to define the on-site management of TRI chemical wastes. Figure 12 shows the portions of these wastes processed on-site. Appendices D and G provide additional detail about waste management of these chemicals. **Recycled waste** is the quantity of the toxic material recovered at the facility and made available for

further use. **Energy Recovery** includes the quantity of toxic material that had heat value and was combusted in some form of energy recovery device such as a furnace. The **Waste Treatment** segment includes the amount of toxic material that was destroyed in on-site waste treatment operations.

Total Waste

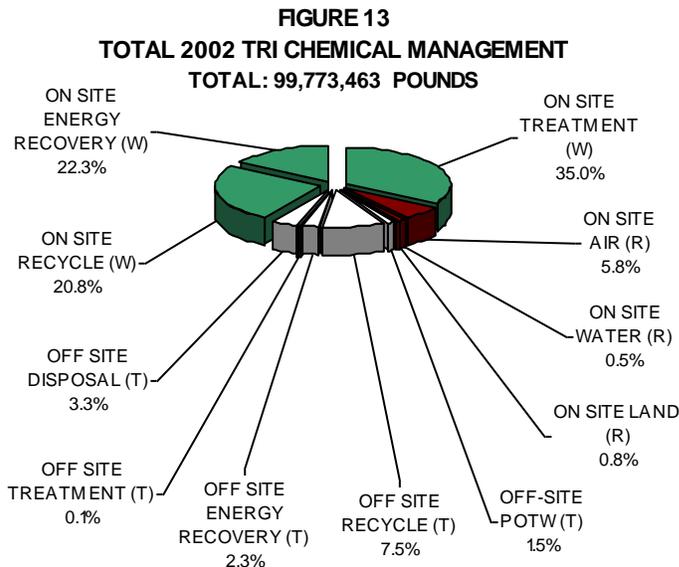


Figure 13 key

(R) – On-Site Release
(T) – Off-Site Transfer
(W) – On-Site Waste Management

Total waste is the combined total of the on-site release, off-site transfer, and on-site waste management portions of the TRI chemical report. Figure 13 provides a perspective of the total TRI chemical waste picture in Delaware. About three quarters of the total TRI chemical wastes in Delaware are managed on-site through treatment, energy recovery, and recycle operations by the facility generating the waste.

Receiving TRI Chemicals in Wastes

When a facility transfers TRI chemical waste off-site, these wastes go to a receiving facility. Some of the receiving facilities report to the TRI program as well, but many do not, based on the reporting requirements shown on pages 1 and 2. Less than four percent of the TRI chemical wastes transferred to Delaware facilities is transferred to a TRI reporting facility. Table 9 provides the total amounts of TRI chemicals received by Delaware facilities from in-state and out-of-state facilities. This data is separated into wastes transferred from other Delaware facilities and wastes transferred from out-of-state facilities. DNREC does not receive reports from any out-of-state facilities that transfer wastes into Delaware. This data was obtained from the U. S. EPA. Some changes may have occurred since the date of this data.

TABLE 9
SUMMARY OF TRANSFERS IN 2002
TRI CHEMICALS TRANSFERRED TO DELAWARE FACILITIES
FROM OTHER FACILITIES

(in pounds)

<i>DE RECEIVING FACILITY</i>	<i>TOTAL TRANSFERS FROM DELAWARE FACILITIES (DE DATA) (1)</i>	<i>TOTAL TRANSFERS TO DE FROM OUT OF STATE (EPA DATA) (2)</i>	<i>TOTAL TRANSFERS RECEIVED BY DELAWARE FACILITIES</i>
ASHWORKS DELAWARE	0	252	252
BRANDYWINE RECOVERY	0	1,877,631	1,877,631
CLEAN EARTH	0	1,419	1,419
CANNON SCRAP METAL	11,038	0	11,038
D & D DISMANTLING	36,006	0	36,006
D & S WAREHOUSE	53	0	53
DE RECLYABLE PRODUCTS	293	0	293
DSWA CHERRY ISLAND	302	0	302
DSWA LAMBSON LANE	10,135	0	10,135
DSWA SANDTOWN	160	0	160
DUPONT EXPERIMENTAL STATION	17	1,302,672	1,302,689
FIRST STATE RECYCLING	0	133	133
GENERAL CHEMICAL *	2,905	145,299	148,204
GEORGE & LYNCH	238	0	238
INDUSTRIAL RESOURCE NETWORK	0	1,551	1,551
INTERNATIONAL PETROLEUM CORP.	0	11,009	11,009
KENT COUNTY TREATMENT PLANT	1,492	0	1,492
MILLSBORO TREATMENT PLANT	0.18	0	0.18
MOT TREATMENT PLANT	275	0	275
NEW CASTLE DEPT. OF PUBLIC WORKS	30,671	0	30,671
SEAFORD MUNICIPAL TREATMENT PLANT	4,732	0	4,732
TILCON DELAWARE INC.	78	0	78
UNIQEMA *	21,074	0	21,074
VFL TECHNOLOGY CORPORATION	665	18,423	19,087
WILMINGTON WASTEWATER PLANT	1,163,880	5,377	1,169,257
TOTAL TRANSFERS RECEIVED	1,284,013	3,363,765	4,647,778

(1) Source: DNREC TRI Database 2002 Data, February 2004

(2) Source: U.S.EPA 2002 TRI Data Run, December, 2003

* TRI Reporting Facility

The top receiving facility is Brandywine Recovery, receiving toluene for recycling from one out-of-state TRI facility. The DuPont Experimental Station received the second largest amount of off-site TRI chemicals, primarily from other out-of-state DuPont facilities. Some of these chemicals are TRI chemicals, 99.9% of which were incinerated. The third largest receiver of TRI chemicals in wastes was the Wilmington Wastewater Plant; receiving wastewater from industrial and municipal customers in the region. Some of this wastewater contains TRI chemicals. These three receiving facilities account for 94% of all TRI chemicals received from other TRI facilities.

Persistent Bioaccumulative Toxic (PBT) Chemicals

Persistent Bioaccumulative Toxics (PBT's) are receiving increased scrutiny as we learn more about them, and reporting PBT's is also being emphasized to an increasing degree. These chemicals are of particular concern because they are not only toxic, but because they remain in the environment for long periods of time, are not readily destroyed, and build up and accumulate in body tissues. The EPA established substantially lower reporting thresholds in 2000 for 15 chemicals and three categories that are highly persistent and bioaccumulative in the environment. Starting in 2001, lead and lead compounds (except lead contained in stainless steel, brass, or bronze alloys) have reduced thresholds of 100 pounds. Table 2 on page 3 shows the lower thresholds for all PBT's. Therefore, not all of the PBT chemicals released in prior years were reportable, even though they were likely released at or near the current reported rate. For example, twenty one facilities reported lead or lead compounds in 2002 and 2001 compared to seven in 2000. All of these facilities were in operation prior to 2001.

TABLE 10
2002 TRI PBT DATA SUMMARY
(IN POUNDS)

	All Data 2002	PBT's only 2002	PBT's only 2001
No. of facilities	84	32	23
No. of Form A's	55	0	0
No. of Form R's	317	66	51
No. of Chemicals	106	11	12
On-site Releases			
Air	6,295,850	5,282	5,681
Water	928,813	784	3,659
Land	814,385	17,166	21,852
Total Releases	8,039,048	23,232	31,192
Off-site Transfers			
POTW's	1,201,161	818	521
Recycle	9,248,730	5,053,729	4,570,954
Energy Recovery	2,538,090	0	0
Treatment	398,572	1	0
Disposal	4,196,691	69,178	61,680
Total Transfers	17,583,245	5,123,727	4,633,155
On-site Waste Mgmt.			
Recycle	25,033,817	3,960	4,075
Energy Recovery	15,740,469	0	210
Treatment	33,376,885	390	400
Total on-site Mgmt.	74,151,170	4,350	4,685
Total Waste	99,773,463	5,151,309	4,669,032

Table 10 shows the results of PBT reporting for 2001 and 2002, compared to total 2002 TRI data. PBT on-site releases for 2002 comprise about 0.3% of the total TRI on-site releases. PBT on-site releases were lower by 26% for 2002 but off-site transfers and on-site waste management amounts increased, increasing the total PBT waste by 10%. Not enough years have passed to provide a meaningful trend since the lead threshold change in 2001. Form A may not be used to report PBT's.

Table 11 on the next page shows the amounts of each PBT chemical reported released by the TRI reporting facilities in 2002. Lead compounds, reported at 21,362 pounds with its lower threshold starting in 2001, made up 87% of the total on-site PBT releases and 95% of the transfers off-site.

Although the Dover Air Force Base Small Arms Range was top reporter for on-site lead release in 2001, it did not report any lead release for 2002. The Indian River Power Plant was the top reporter in 2002 for on-site lead compounds release.

Johnson Controls again reported the top amount of lead transferred off-site, to recycling. Dover Air force Base and Indian River Power Plant reported on lead and lead compounds for the first time in 2001. Johnson controls has been reporting on lead compounds since 1987.

TABLE 11
2002 PBT RELEASE SUMMARY
(IN POUNDS)

PBT CHEMICAL	REPORTS	ON-SITE RELEASES				TOTAL	TRANSFERS OFF SITE	ON-SITE ON SITE WASTE
		TOTAL AIR	TOTAL WATER	TOTAL LAND				
BENZO(G,H,I)PERYLENE	11	0.96	2.5	0.0	3.5	0.0	250.0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS (1)	7	0.0077	0.0300	0.0021	0.0398	153.0300	0.0000	
HEXACHLOROBENZENE	1	0.0	52.9	0.0	52.9	2,746.9	0.0	
LEAD	7	4.3	0.7	0.0	5.0	212,159.3	0.0	
LEAD COMPOUNDS	14	3,701.2	689.0	16,972.0	21,362.2	4,877,872.1	270.0	
MERCURY	2	1,073.9	20.8	0.0	1,094.7	29,243.5	3,675.0	
MERCURY COMPOUNDS	7	449.4	0.1	194.2	643.7	112.9	0.0	
OCTACHLOROSTYRENE	1	0.0	0.2	0.0	0.2	469.5	0.0	
PENTACHLOROBENZENE	1	0.0	15.9	0.0	15.9	824.0	0.0	
POLYCHLORINATED BIPHENYLS (PCB)	1	0.0	0.3	0.0	0.3	38.9	0.0	
POLYCYCLIC AROMATIC COMPOUNDS	14	52.9	1.4	0.0	54.3	106.9	155.0	
TOTALS	66	5,282	784	17,166	23,232	5,123,727	4,350	

Mercury and mercury compounds remained relatively unchanged this year and remained in third place. Occidental chemical reported again the top amount of on-site PBT chemical waste management with mercury being recycled on-site, and was the sole contributor to the 1,095 pounds of mercury released on-site. Appendix I Shows the PBT data detail, listing all the facilities reporting each PBT chemical.

NATIONAL PERSPECTIVE

The national 2002 TRI report has not been released by the U.S. Environmental Protection Agency (EPA) as of the writing of this report. However, placing the 2002 Delaware reports alongside the 2001 EPA reports yields some rankings which provide a perspective for Delaware in the national TRI picture. Changes in the 2002 national values may change these rankings.

This data shows that Delaware ranks 45th in the nation in total on-site releases for all TRI chemicals. For on-site releases, 83 facilities in the nation each released more individually than all the facilities in Delaware combined. Delaware provided 0.14% of the total on-site release amounts nationwide.

Some facilities in Delaware do rank at or near the top of the national ranking for specific releases. DuPont Edge Moor ranks #1 in the nation for off-site transfer of dioxin and dioxin-like compounds. Formosa Plastics ranks #2 in the nation for on-site release of vinyl chloride and 8th for on-site release of vinyl acetate. Occidental Chemical ranks 16th in the nation for on-site release of mercury. Motiva ranks 35th for on-site release of methyl tert-butyl ether. Edge Moor/ Hay Road Power Plants rank 91st for on-site release of hydrochloric acid.

TREND ANALYSIS

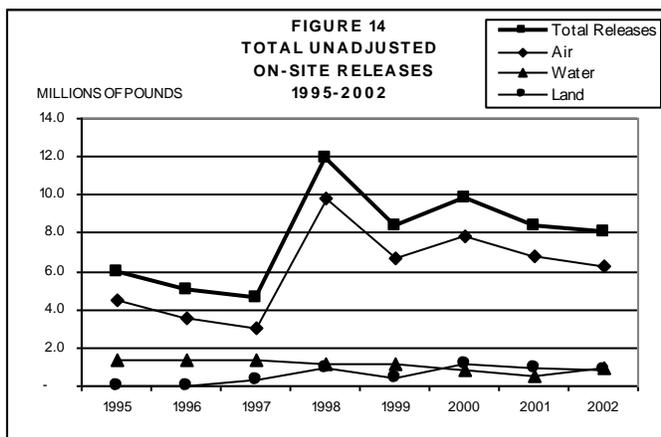
TRI data is available back to 1987. Changes in the reporting requirements over time have caused an increase both in the number of chemicals and in the types of facilities subject to reporting. As explained on pages 2-4, two of the most significant changes to TRI reporting occurred in 1995 and 1998, when large increases in chemicals (1995) and facilities subject to reporting (1998) occurred. The analysis presented in this Trends Analysis section uses 1995 and 1998 as base years for presenting trends for all chemicals (not adjusted) and for only chemicals and facilities subject to reporting over the entire time span (adjusted). Table 12 and Figure 14 show the results of reporting during the 1995-2002 period and are not adjusted for any changes in reporting requirements.

TABLE 12
1995-2002 TRI DATA SUMMARY
(IN POUNDS)

NOT ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS

	1995	1996	1997	1998	1999	2000	2001	2002
No. of facilities	75	77	74	80	76	80	82	84
No of Form A's	33	40	34	75	72	61	57	55
No of Form R's	228	220	242	277	254	310	316	317
No. of Chemicals	90	98	100	106	101	109	104	106
On-site Releases								
Air	4,483,402	3,586,182	2,995,461	9,796,431	6,651,166	7,841,017	6,796,684	6,295,850
Water	1,394,739	1,395,328	1,328,937	1,126,527	1,197,861	866,312	573,937	928,813
Land	28,678	42,409	317,243	937,708	462,579	1,103,632	965,666	814,385
Unadjusted On-Site Releases	5,906,819	5,023,919	4,641,641	11,860,666	8,311,606	9,810,961	8,336,287	8,039,048
Off-site Transfers								
POTW's	3,270,800	4,575,131	4,354,095	3,334,302	2,996,401	2,199,807	1,575,732	1,201,161
Recycle	17,127,835	10,054,483	10,612,518	12,002,926	9,295,315	8,649,678	8,845,326	9,248,730
Energy Recovery	2,427,102	1,173,331	1,663,440	1,491,543	1,389,936	2,543,840	2,642,626	2,538,090
Treatment	910,090	1,297,004	688,661	630,761	894,822	901,604	183,567	398,572
Disposal	2,767,339	2,905,928	4,010,594	3,983,506	3,056,466	3,816,862	3,878,572	4,196,691
Total Transfers	26,503,166	20,005,877	21,329,308	21,443,038	17,632,940	18,111,791	17,125,823	17,583,245
On-site Waste Mgmt.								
Recycle	29,100,208	29,882,121	32,996,062	34,549,050	32,671,856	31,188,694	24,133,870	25,033,817
Energy Recovery	332,834	219,184	19,255,280	16,155,665	22,981,591	29,095,221	25,863,740	15,740,469
Treatment	55,990,904	51,590,060	69,425,233	68,475,327	69,501,151	64,404,879	40,716,252	33,376,885
Total on-site Mgmt.	85,423,946	81,691,365	121,676,575	119,180,042	125,154,598	124,688,794	90,713,862	74,151,170
Total Waste	117,833,931	106,721,161	147,647,524	152,483,746	151,099,144	152,611,546	116,175,972	99,773,463

NOT ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS
SOURCE: DNREC 2002 DATABASE, FEBRUARY 2004



On-Site Releases 1995-2002

On-site releases include emissions to the air, discharges to bodies of water, and releases at the facility to land including placement in on-site landfills. Figure 14 shows the trend of on-site releases without adjustments. The increase in 1998 was due to the change in reporting requirements as explained on page 3 with the large increase in the number of facilities required to report. When the new facilities and chemicals that were added starting in 1995 are removed from

the trends, the adjusted result is shown in Table 13 and Figure 15. The amount of on-site chemicals removed by this adjustment increased to 6.2 million pounds in 1998, up from only 21,800 pounds in 1997, and is now at 4.3 million pounds for 2002. Facilities such as the power plants and chemicals such as PBT's at their lower thresholds are not shown in the adjusted trends unless they were already being reported in or prior to 1995. On-site releases have decreased 3.7% since 2001 and 32% since 1998 for all chemicals (Table 12 and Figure 14). On-site releases also decreased 37% since 1995 for "old/adjusted" chemicals – (Table 13 and Figure 15).

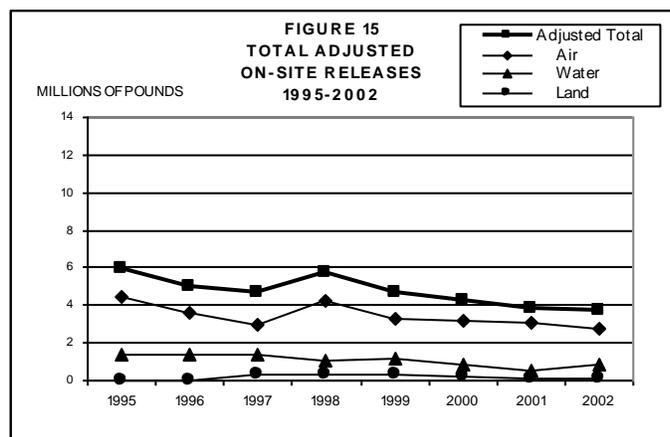
TABLE 13
1995-2002 TRI DATA SUMMARY
(IN POUNDS)
ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS

	1995	1996	1997	1998	1999	2000	2001	2002
No. of facilities	73	75	73	69	66	67	67	70
No of Form A's	28	34	29	30	32	31	31	34
No of Form R's	221	212	237	240	231	241	239	55
No. of Chemicals	87	94	98	103	98	101	95	99
On-site Releases								
Air	4,466,247	3,569,898	2,973,704	4,286,623	3,246,226	3,179,789	3,095,920	2,723,022
Water	1,394,739	1,395,328	1,328,937	1,066,787	1,186,039	826,597	524,292	884,109
Land	28,678	42,409	317,243	347,129	278,319	194,448	145,055	117,249
Total Releases	5,889,664	5,007,635	4,619,884	5,700,539	4,710,584	4,200,834	3,765,266	3,724,380
Off-site Transfers								
POTW's	3,270,795	4,564,126	4,354,090	3,334,189	2,996,375	2,199,732	1,575,639	1,200,858
Recycle	17,127,835	10,054,483	10,544,518	11,963,716	9,295,315	8,613,087	8,840,227	9,217,843
Energy Recovery	2,427,102	1,173,331	1,663,440	1,491,543	1,389,936	2,543,840	2,642,626	2,538,090
Treatment	897,090	1,277,004	675,561	611,696	894,822	899,534	172,939	398,571
Disposal	2,767,339	2,905,928	4,010,594	3,719,902	2,985,340	3,474,086	3,573,860	3,828,622
Total Transfers	26,490,161	19,974,872	21,248,203	21,121,046	17,561,788	17,730,279	16,805,291	17,183,984
On-site Waste Mgmt.								
Recycle	29,100,208	29,882,121	32,996,062	34,549,050	32,671,856	31,188,654	24,133,520	25,033,532
Energy Recovery	332,834	219,184	19,255,280	16,155,665	22,981,591	29,095,220	25,863,740	15,740,469
Treatment	55,811,179	51,424,487	68,575,887	67,199,660	69,149,944	63,832,520	40,103,027	32,404,441
Total on-site Mgmt.	85,244,221	81,525,792	120,827,229	117,904,375	124,803,391	124,116,394	90,100,287	73,178,441
Total Waste	117,624,046	106,508,299	146,695,316	144,725,960	147,075,763	146,047,507	110,670,844	94,086,806

ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS
SOURCE: DNREC 2001 DATABASE, FEBRUARY 2004

Table 13 shows the adjusted amounts of TRI chemicals in all categories that were reported in 1995-2002. This table is adjusted to show only those facilities and chemicals that were reportable in 1995 and later. The following trends for 1995-2002, in addition to Figure 15, are based on this adjusted data. Overall, adjusted on-site releases decreased 1.1% (41,000 pounds) from 2001, following a 10.4% decrease in 2000-2001. Since 1995, adjusted on-site releases have decreased 37%.

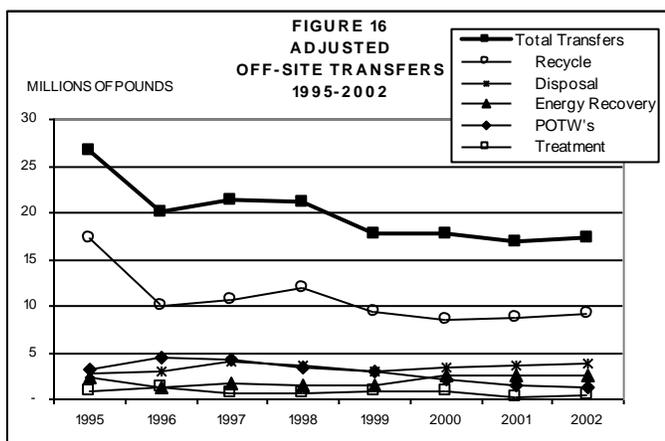
Two facilities ceased operations in 2002; Metachem and Nanticoke Homes. Neither facility filed their 2002 reports due in 2003 because of their closures. Their combined on-site releases for 2000 totaled 116,000 pounds. The state 2002 data might have been higher by approximately half that amount, allowing for their partial year operation in 2002. Metachem is permanently closed, and Nanticoke Homes has resumed operation under another name and may report for 2003.



Significant reported reductions in on-site releases in 2002 include reports from Motiva; decrease in sulfuric acid aerosols (-330,000 pounds) and decrease in methyl-tert-butyl ether (-43,000 pounds). Facilities reporting significant increases in on-site releases in 2002 include reports from Perdue Georgetown; increase in nitrate compounds (240,000 pounds), Formosa Plastics; increase in vinyl acetate (103,000 pounds), Motiva; increase in cresol (56,000 pounds) and increase in phenol (47,000 pounds). Some of these changes may have been caused by changes in the way the facility or EPA estimates amounts, and many of these were discussed in the top 15 or second 15 facility profiles. You may contact the facility for a more in-depth discussion of the reasons for specific changes. The changes noted in the sample above were balanced by other, smaller increases and decreases from other facilities.

Off-Site Transfers 1995-2002

An Off-site transfer is a transfer of toxic chemical in wastes to another facility that is physically separate from the reporting facility. Chemicals are reported as transferred to an off-site facility when they are moved away from the reporting facility for the purposes of treatment at a POTW, recycling, energy recovery, treatment, or disposal. Although the off-site transfers may be of less immediate concern than on-site releases, transfer to categories such as POTW's, treatment, and disposal still represent toxic chemicals in wastes that must be ultimately accounted for. As noted on page 33 and in Table 13 on page 39, the amounts transferred off-site are more than twice the amount of on-site releases. Figure 11 on page 33 and Figure 16 below show the trends in amounts of TRI chemicals in wastes transferred off site and the trends in recent years. Again, the amount of chemicals reported in this 1995-2002 time period is trending down. As noted in prior analysis on page 33, over half of the off-site transfers are to recycling operations.



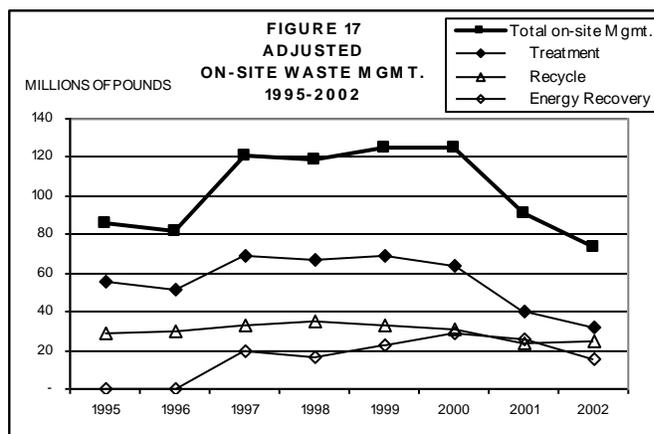
The total trend in Figure 16 is driven by the trend in amounts sent to recycle. The overall trend for off-site transfers is down since 1995 by 35% (-9,317,000 pounds). In recent years, smaller increases or decreases have caused the trend total to be relatively flat. Reports of significant reductions in 2002 came from: Ciba Specialty Chemicals; decrease in methanol (-413,000 pounds) resulting from reductions in transfers to POTW and to energy recovery, Noramco; decrease in methanol (-178,000 pounds) resulting from decreases in transfers to POTW and to

energy recovery, and General Motors; decrease in xylene (-70,000 pounds) resulting from reductions in transfers to energy recovery. Reports of significant increases came from: Noramco; increase in toluene (256,000 pounds) resulting from increases in transfers to energy recovery and treatment, Johnson Controls; increase in lead compounds (253,000 pounds) resulting from an increase in transfer to recycle, Halko; increase in lead compounds (208,000 pounds) resulting from an increase in transfer to recycle, and DuPont Edge Moor; manganese compounds (205,000 pounds) resulting from an increase in transfer to disposal. These changes are balanced by other smaller increases and decreases from other facilities. The total net change in 2002 was an increase of 2.3% (379,000 pounds) from 2001. Again, no reports were filed by Metachem for 2001 or 2002, their last year of operation. Their 2000 off-site transfers amounted to 383,000 pounds, and it was likely that they had some unreported off-site transfers in 2001 and 2002.

On-site Waste Management 1995-2002

In some facilities, wastes were managed on-site instead of being sent off-site for processing or disposal. On-site waste management is the processing of chemicals in wastes that do not leave the site of the reporting facility. When chemicals are recycled, recovered for energy, or treated at the facility, they are reported as managed on-site. Although these amounts represent a loss of finished product to the facility as waste, they are not as much a threat to the environment as the other categories since these amounts are managed and not disposed of on-site. There is, of course, the risk that these chemicals may be released accidentally on-site to the environment.

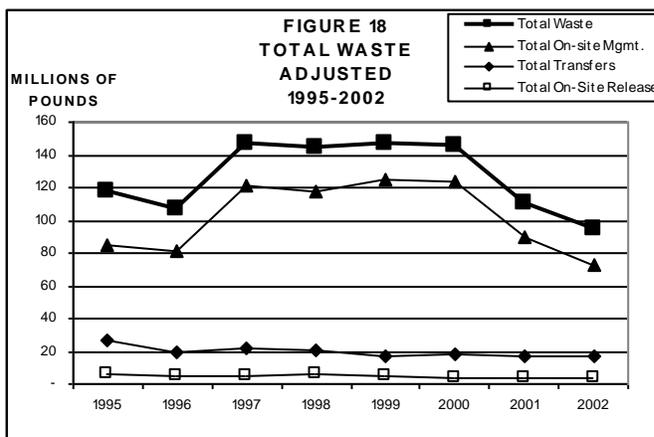
On-site treatment is classified by 64 different types, recycling by 16 types, and energy recovery by 4 types. The totals for these three categories of on-site management are shown in Figure 17 and Table 13. In 1997, a 17,000,000 pound increase in ammonia energy recovery and a 16,000,000 pound increase in methanol treatment were largely responsible for the 39,000,000 pound increase in on-site waste management. The total amount of waste managed on-site in 2002 was down 17 million pounds (19%) from 2001.



Energy recovery and treatment decreased 39% and 19% respectively, while recycle increased 4%. Significant reductions were: Motiva; methanol, reduction in energy recovery (-10,300,000 pounds) and ammonia, reduction in treatment and energy recovery (-1,000,000 pounds), DuPont Edge Moor; hydrochloric acid aerosols, reduction in treatment (-3,500,000 pounds) and chlorine, reduction in treatment (-2,100,000 pounds). Significant increases in on-site waste management occurred for Noramco; dichloromethane, increase in recycle (549,000 pounds), toluene, increase in recycle (423,000 pounds) and methanol, increase in recycle (365,000 pounds), Motiva; cresol, increase in energy recovery and treatment (228,000 pounds) and phenol, increase in energy recovery and treatment (150,000 pounds). Again, the impact of Metachem was not known for 2002. Metachem reported 993,000 pounds managed on-site for 2000, so the results for 2002 may be understated by approximately half that amount with their partial year operation. Other reductions and increases making up the 17 million pound reduction for 2002 in on-site waste management were smaller. Total pounds for on-site waste management have decreased by 14% since 1995.

Total Waste 1995-2002

Figure 18 shows totals of the three waste categories taken from the totals in figures 15, 16, and 17, and their grand total. This grand total is largely driven by on-site waste management. Pounds for total waste have decreased by 15% since 2001 and 20% since 1995.



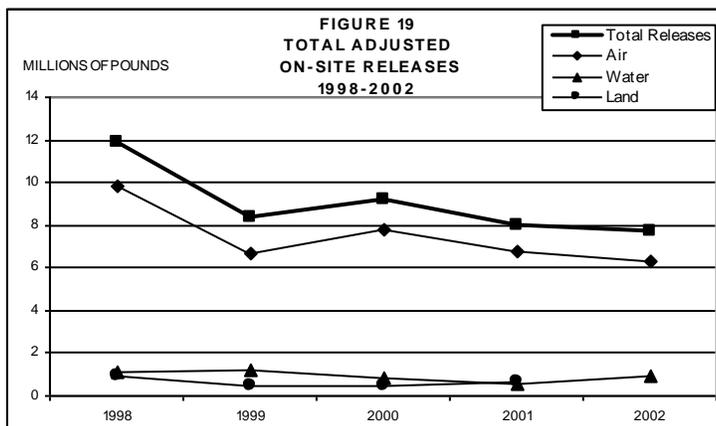
On-Site Releases 1998-2002

The second set of trends is for the 1998-2002 period. The new industry segments added in 1998 that were excluded in the 1995-2002 trends are included here. Because of the inclusion of additional facilities and chemicals, these totals in Table 14 are higher than those in table 13. Figure 19 shows the trend for on-site releases adjusted for new facilities and chemicals added

TABLE 14
1998-2002 TRI DATA SUMMARY
 (IN POUNDS)
 ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS

	1998	1999	2000	2001	2002
No. of facilities	79	76	80	80	80
No. of Form A's	70	72	61	57	55
No. of Form R's	271	254	278	283	272
No. of Chemicals	105	101	102	99	101
On-site Releases					
Air	9,787,574	6,651,166	7,827,600	6,780,039	6,285,278
Water	1,126,527	1,197,861	864,760	558,663	900,370
Land	937,708	462,579	500,395	637,024	556,219
Total On-Site Releases	11,851,809	8,311,606	9,192,755	7,975,726	7,741,867
Off-site Transfers					
POTW's	3,334,297	2,996,401	2,199,804	1,575,701	1,201,157
Recycle	11,963,926	9,295,315	8,649,675	8,580,368	8,960,940
Energy Recovery	1,491,543	1,389,936	2,543,840	2,642,626	2,538,090
Treatment	611,996	894,822	901,603	172,939	398,571
Disposal	3,983,506	3,056,466	3,712,649	3,776,121	4,073,039
Total Off-site Transfers	21,385,268	17,632,940	18,007,571	16,747,755	17,171,797
On-site Waste Mgmt.					
Recycle	34,549,050	32,671,856	31,188,654	24,133,520	25,033,547
Energy Recovery	16,155,665	22,981,591	29,095,220	25,863,740	15,740,469
Treatment	68,126,327	69,501,151	64,403,879	40,716,062	33,376,635
Total On-Site Mgmt.	118,831,042	125,154,598	124,687,753	90,713,322	74,150,650
Total Waste	152,068,119	151,099,144	151,888,079	115,436,803	99,064,315

ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS
 SOURCE: DNREC 2001 DATABASE, FEBRUARY 2004

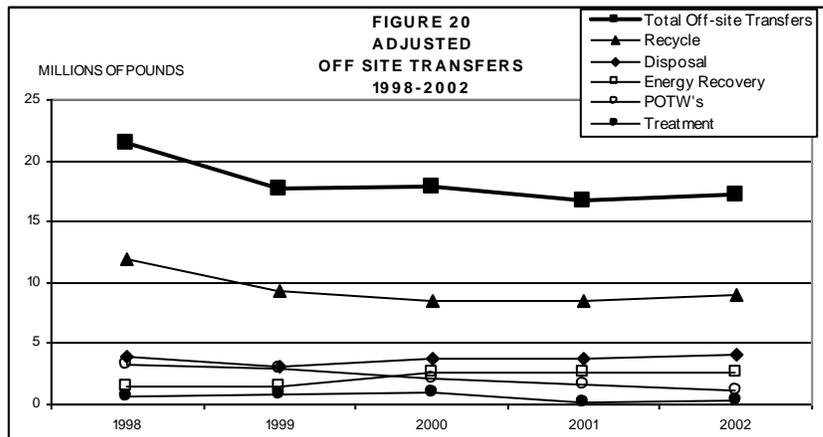


after 1998. Again, as in the prior on-site trend (Figure 15), the trend is generally down. Although there was an 11% increase in 2000, there has been a decrease of 35% in on-site releases over the 1998-2002 period including the 3% decrease from 2001-2002. In addition to the facility notes on pages 40-41 about how wastes may have changed this year, reports of significant reductions for facilities and/or chemicals added in 1998 and reporting in 2002 are: Indian River Power Plant; reduced hydrochloric acid aerosols

(330,000 pounds), and Edge Moor/Hay road Power Plant; reduced sulfuric acid aerosols (70,000 pounds). A report of significant increase was received from Indian River Power Plant; increase in hydrochloric acid aerosols (320,000 pounds). Changes in types of fuel (coal, oil, or gas), as well as the demand for electrical power and the basis the facility used for estimating releases are responsible for the changes in the power generating facility acid gas releases.

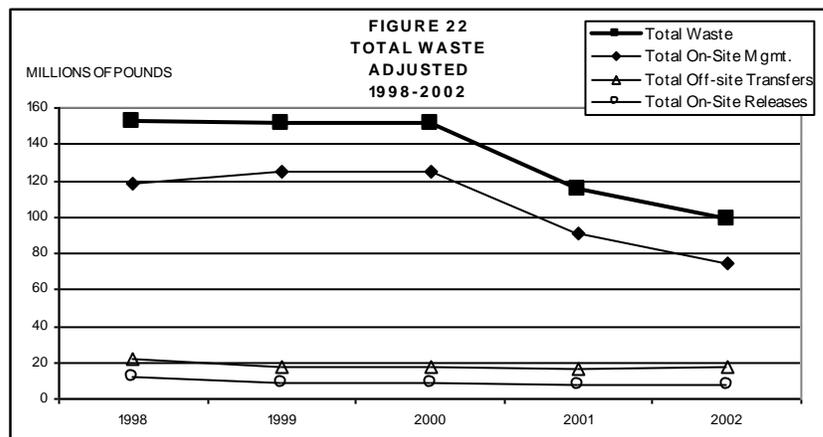
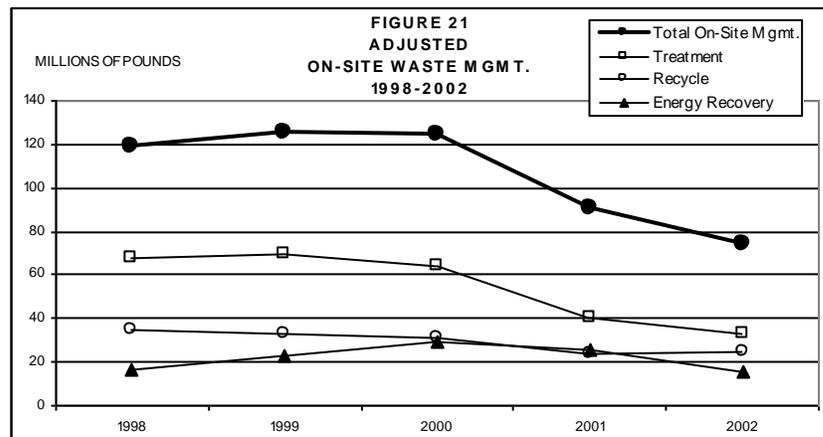
Off-Site Transfers 1998-2002

Off-site transfers trends were characterized by relatively unchanged amounts of toxic chemicals in wastes sent off-site for 2002. Table 14 and Figure 20 show the amounts transferred off-site, adjusted for the new reporting requirements starting in 1998. Although off-site transfers increased 3% in 2002, they have decreased 20% since 1998. There are no facility notes not already mentioned on page 40 for off-site transfers in this period.



On-Site Waste Management 1998-2002

The trend of on-site management of TRI chemicals in waste shows a continuing strong downward trend in 2002 due to declines in two of the three waste management activities as shown in Table 14 and Figure 21. Again, these figures include the newly added industry groups that started reporting in 1998. There are no changes of note for these new facilities in addition to the previously noted 17 million pound decline in 2002 and the facility notes for on-site waste management on page 41.



Total Waste 1998-2002

Figure 22 shows the sum of On-Site Releases, Off-Site Transfers, On-site Waste Management, and their grand total. The 2001-2002 trend is down by 14%, and the 1998-2002 trend is down by 35%, again driven by on-site waste management.

Carcinogens Trend, 1995-2002

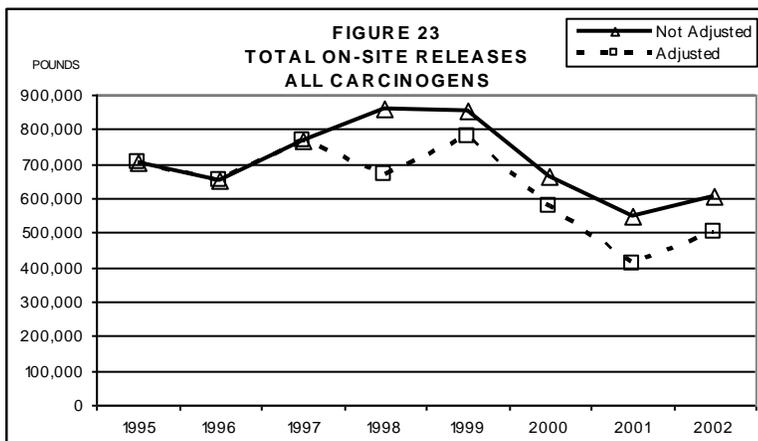
The number of Carcinogen reports increased by one to 103 in 2002 following a large increase in lead and lead compounds reporting in 2001 (because of the reduced reporting threshold). The total number of carcinogen chemicals was unchanged at 32. Although the downward trend of all on-site carcinogens reversed and increased by 9% in 2002 due to the 77% increase of the “possible” carcinogen (2B) category, this was because of a change in the basis for reporting vinyl acetate and probably not an actual increase in release. The “known” and “probable”

categories were down by 8% and 20%, respectively. Total on-site releases of all Carcinogens decreased by 14% since 1995. Carcinogens are classified into three groups by IARC, the International Agency for Research on Cancer: Group 1 - Known, Group 2A - Probable, and Group 2B - Possible. A list of carcinogens reported in Delaware is provided on page 4. On-site releases of all carcinogens comprise 7.5% of all on-site releases in 2002, and have decreased 30% since the peak in 1998 when the new facilities were added. Table 15 provides the individual data and overall

TABLE 15
1995-2002 CARCINOGENS
ON-SITE RELEASES, NOT ADJUSTED

	1995	1996	1997	1998	1999	2000	2001	2002
KNOWN								
AIR	253,818	225,184	192,099	209,094	219,970	209,828	209,295	177,473
WATER	596	201	6,917	10,246	3,048	4,395	9,114	9,682
LAND	1,791	331	286,041	363,793	306,630	258,008	169,197	170,074
KNOWN TOTAL	256,205	225,716	485,057	583,133	529,648	472,231	387,606	357,229
PROBABLE								
AIR	113,482	78,491	55,274	53,558	139,293	55,418	44,326	35,581
WATER	0	0	0	0	0	0	0	0
LAND	0	0	0	0	0	0	0	0
PROBABLE TOTAL	113,482	78,491	55,274	53,558	139,293	55,418	44,326	35,581
POSSIBLE								
AIR	331,904	344,888	223,518	167,420	186,506	135,946	91,851	189,296
WATER	359	351	196	1,175	290	271	4,873	2,109
LAND	0	5	2,550	51,625	142	40	21,607	17,475
POSSIBLE TOTAL	332,263	345,244	226,264	220,220	186,938	136,257	118,331	208,880
TOTAL AIR	699,204	648,563	470,891	430,072	545,769	401,192	345,472	402,350
TOTAL WATER	955	552	7,113	11,421	3,338	4,666	13,987	11,791
TOTAL LAND	1,791	336	288,591	415,418	306,772	258,048	190,804	187,549
GRAND TOTAL	701,950	649,451	766,595	856,911	855,879	663,906	550,263	601,690

Source: DNREC TRI 2002 Database, February 2004



totals for each of the IARC classes of carcinogens, and Figure 23 graphically illustrates the trend.

As with the prior trends,

adjustments must be made for changes in reporting requirements in this period, and the trends of both unadjusted and adjusted values are shown in Figure 23. Table 15 contains only the unadjusted values. Chemicals and facilities required to report only during a portion of the period because of changes in reporting requirements have been excluded for the entire time for the "Adjusted" trend. These adjustments generally involve the power generating and ore processing industries and include metallic compounds produced from impurities in the fuel and raw materials used by these facilities. These facilities were required to start reporting in 1998. Adjustments occurring in this period affected the air, water, and land release amounts. New reports for lead and lead compounds at their lower thresholds starting in 2001 accounted for 20,500 pounds of exclusions in 2002. Prior years' lead and lead compounds reports under the higher thresholds were not excluded if the facility was already reporting them. Table 3 on page 4 shows the number of facility reports for each IARC-classified chemical, and additional carcinogen report detail is in Appendix J.

Known Carcinogens

From 1997-2000, the land release of nickel compounds at Motiva greatly influenced the values for known carcinogens. Their 1997 value was 283,000 pounds. Now, because the Motiva amount is lower at 70,000 pounds, nickel compounds are second highest in this category. Vinyl chloride, with a total release of 140,000 pounds and released by Formosa and Kaneka, is highest. Chromium compounds released almost entirely to land by Motiva and the Indian River Power Plant are third place in Known Carcinogen on-site releases.

Air releases of known carcinogens have been gradually declining, and vinyl chloride contributes 84% of the known carcinogen category air releases. Vinyl chloride constitutes over 36% of all carcinogen category air releases and 28% of all carcinogen category total on-site releases for air, water, and land in 2002. Formosa Plastics released 103,000 pounds of vinyl chloride and Kaneka reported 36,000 pounds in 2002. Nickel compounds were #2 in on-site releases. Motiva and the Indian River Power plant reported 91% of the nickel compound releases. Benzene reports, mostly from Motiva and Sunoco, have declined from 58,000 pounds in 1995 to 11,742 pounds in 2002. Benzene made up 7% of the known carcinogen air releases.

Water releases on-site of known carcinogens are 2.8% of the known carcinogen total, mostly benzene and nickel compounds.

Probable Carcinogens

Almost all Probable class carcinogens were released to air during this period. The largest air release contributors were 1,3,-butadiene, reported by Dow Reichhold, and trichloroethylene, reported by Camdel Metals. They combined for 84% of the Probable class releases. The trend for 1,3,-butadiene is down 76%, now at 17,369 pounds from a high of 72,439 pounds in 1995. Trichloroethylene release has declined 57%, from 29,332 pounds in 1995 to 12,658 pounds in 2002. The Probable Carcinogen air release high number in 1999 (139,923 pounds) in Table 15 was due to an 83,000-pound reported release of formaldehyde from Motiva.

Possible Carcinogens

The top release in this class is vinyl acetate, primarily released by Formosa Plastics, and accounts for 63% of the total class release. This release was estimated using a higher basis for 2002 and was the primary reason for the upward trend in total carcinogens this year. Although the reported amount is much higher, (115,000 vs. 12,000 pounds for 2001), the actual amount may not be much different from prior years since there was a change in basis. Styrene, 72% of which is released by Justin Tanks, is the second highest on-site release for this class. Styrene

accounts for 24% of the total release for this class. The Justin Tanks' trend has increased 30% since 1995, and total styrene releases have increased by 8% over the 1995-2002 period.

As before, in **Limitations of TRI Data** on Page 6, we urge caution when using this data, as THIS DATA DOES NOT INDICATE AMOUNT OF HUMAN EXPOSURE.

FOR FURTHER INFORMATION

Access to the TRI Files - DNREC is responsible for collecting, processing, and distributing information submitted by Delaware facilities under the TRI program. This 2002 TRI report may be viewed at: www2.state.de.us/serc/reports.htm. Additional information not contained in this report is available to the public through the EPCRA Reporting Program located within DNREC. A second, less technical data summary is available at the same location. A searchable database is located at: <http://www2.state.de.us/serc/search/index.htm>.

The reports submitted by facilities are available for review through the Freedom of Information Act process from DNREC's Air Quality Management Office located at 156 South State Street in Dover. Custom reports can also be generated from the database. For information on placing a request, call the TRI Coordinator at (302) 739-4791 during business hours. An on-line FOIA application is also available at: http://www.dnrec.state.de.us/air/aqm_page/foia.htm.

Chemical Data Fact Sheets - A two-page fact sheet is available for most TRI chemicals reported in Delaware and contains information on chemical characteristics, health hazards, and ecological effects. These fact sheets were prepared by the EPCRA Reporting Program from information obtained through EPA's more lengthy TRI chemical fact sheets. The two-page fact sheets are available upon request. Additional TRI chemical information is available at: www.epa.gov/triinter/chemical/index.htm

EPA's TRI Home Page - The TRI home page provides information on the many facets of the TRI program at EPA, including an Executive Summary, Q&A's, a link now to the 2001 TRI data, and later this year to 2002 data, a current list of reportable chemicals, reporting forms, state and federal program contacts, and various guidance documents available for downloading. This website has many links to other EPA and non-EPA sites associated with TRI. www.epa.gov/tri/

Toxics Release Inventory Public Data Release - EPA's annual TRI report. It covers information nationwide and provides a good perspective on how Delaware compares to other states www.epa.gov/tri/tridata/index.htm. The 2002 edition of this report will be available later this year and will be available for review at the DNREC office at 156 South State Street in Dover. It can also be obtained by calling the federal EPCRA Information Hotline at 1-800-535-0202.

Envirofacts Electronic warehouse - Envirofacts is an EPA-developed website that provides public access to multiple environmental databases, including TRI. Links can be made to data about hazardous waste, water permits, drinking water, Superfund sites, and more. On-line queries allow the user to retrieve data and create reports, as well as generate maps. www.epa.gov/enviro

Right-to-know Network Searchable nationwide TRI data is available through RTKNet. The RTKNet was established by two non-profit organizations to provide access to TRI and chemical data, link TRI with other environmental data, and exchange information among public interest groups. www.rtk.net

Delaware Public Health Cancer Rates and Causes

This site provides data and answers to many cancer-related questions. <http://www.state.de.us/dhss/dph/dpc/cancer.html>

The Office of Pollution Prevention & Toxics is a part of the EPA that:

- Promotes pollution prevention as the guiding principle for controlling industrial pollution;
- Promotes safer chemicals through a combination of regulatory and voluntary efforts;
- Promotes risk reduction so as to minimize exposure to existing substances such as lead, asbestos, dioxin, and polychlorinated biphenyls; and,
- Promotes public understanding of risks by providing understandable, accessible and complete information on chemical risks to the broadest audience possible.

It is also a link to *Risk-Screening Environmental Indicators*. This model was developed by EPA's Office of Pollution Prevention & Toxics as a risk screening tool that provides a relative comparison of TRI releases. This application is available on CD-ROM or through the Internet. Both of these are available through: www.epa.gov/opptintr

Delaware's Pollution Prevention Program can be accessed at:

<http://www.dnrec.state.de.us/dnrec2000/pollutionprevention.asp>

Environmental Defense Fund Scorecard - The EDF Scorecard combines scientific, geographic, technical, and legal information from many databases (with emphasis on TRI) to enable users to produce detailed local reports on toxic chemical pollution. Chemical profiles and a map generator are also available through the Scorecard. www.scorecard.org

2002 Delaware Air Quality Report - The annual air quality report is prepared by the Air Surveillance Branch in the Air Quality Management Section of DNREC. This report presents data gathered from a statewide network of air monitoring stations, and includes analyses, trends, and other information regarding Delaware's ambient air quality. For a copy of the report, or for more information, please call (302) 323-4542. This report is available on-line at:

www.dnrec.state.de.us/air/aqm_page/reports.htm The EPA site for additional air quality information is: <http://www.epa.gov/oar/oaqps/publicat.html>

Delaware's Department Of Natural Resources and Environmental Control has a variety of environmental information available at: www.dnrec.state.de.us/dnrec2000/Elibrary.asp In addition to TRI, there are other provisions of the Emergency Planning and Community Right to Know Act (EPCRA) which provide information to the public as well as to local emergency planning and response organizations. Delaware has its own EPCRA statute, which established these provisions under state law. For additional information, visit the Delaware EPCRA website at <http://www2.state.de.us/serc/>

Questions or comments regarding TRI are welcome. Please direct questions, comments, or requests to:

TRI Coordinator
EPCRA Reporting Program
Air Quality Management Section
Division of Air and Waste Management, DNREC
156 South State Street
Dover, DE 19901
Tel. (302) 739-4791, Fax (302) 739-3106
E-mail: john.parker@state.de.us

Appendices



APPENDIX A



WHAT IS COMMUNITY RIGHT-TO-KNOW ?

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT

A dramatic and fatal accident involving the release of a large quantity of methyl isocyanate gas occurred in Bhopal, India on December 3, 1984. As a result of this release and similar, although less tragic, accidents that occurred in the United States, congress enacted the Emergency Planning and Community Right to Know Act (EPCRA), as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986. The Emergency Planning and Community Right-to-Know Act (EPCRA) requires certain facilities to report information about hazardous chemicals and substances at their facilities to Federal, state, and local authorities. The objective is to improve the ability of the facility and of local emergency response agencies to plan for and respond to chemical emergencies, and to give citizens information about chemicals present in their communities. The President has also issued Executive Orders to Federal agencies which mandate their compliance with certain EPCRA requirements. In 1991 Delaware established its own EPCRA legislation which enhanced the federal requirements.

EMERGENCY PLANNING

Each state was required to establish a State Emergency Response Commission (SERC) to oversee planning efforts. The SERC must appoint Local Emergency Planning Committees (LEPC), which in turn develop emergency response plans for their respective districts. In Delaware, the SERC is chaired by the Secretary of the Department of Public Safety. Emergency planning districts have been established in each county and for the City of Wilmington. Facilities having specifically identified Extremely Hazardous Substances above established threshold quantities are required to notify their LEPC. These facilities are the primary focus of planning activities.

EMERGENCY RELEASE NOTIFICATION

In the event of an accidental chemical release above an established amount, a facility is required to provide immediate notification of the release. A follow up written report is also required to provide details about the sequence of events, the actual response actions, and to identify any known or anticipated health risks associated with the release. The public may receive notification through the Environmental Release Notification System.

In response to Senate Bill 33, which became law in July 2001, the Department of Natural Resources and Environmental Control (DNREC) developed a system to allow Delawareans to learn promptly of releases or discharges of contaminants or pollutants that meet or exceed certain thresholds in their neighborhoods or throughout the state. When you register, you choose to be notified in one of three ways: By phone, by e-mail or by fax. You also can choose to be notified about releases from specific facilities or about all releases that occur in one or more zip codes throughout the state. Interested individuals may register for notification at: <http://www.dnrec.state.de.us/dnrec2000/notification/pub/>

HAZARDOUS CHEMICAL REPORTING

Under U. S. Occupational Health Safety Administration (OSHA) regulations, facilities are required to maintain a Material Safety Data Sheet (MSDS) for each chemical on site. Under EPCRA, facilities are required to submit a list of their MSDS's for hazardous chemicals on site

WHAT IS COMMUNITY RIGHT-TO-KNOW ?



above specific threshold amounts. This list must be updated as new chemicals are brought on site. In addition, facilities having such chemicals are required to file Hazardous Chemical Inventory Reports annually. These reports, also known as Tier II forms, provide information on the identity, hazards, amounts, and locations of reportable chemicals at the facility. These reports are sent to the EPCRA Reporting Program which processes the information for dissemination to emergency planning and response organizations statewide.

TOXICS RELEASE INVENTORY (TRI) REPORTING

Facilities covered under TRI are required to report on-site releases, off-site transfers, and on-site waste management activities related to their use of certain toxic chemicals. This information is compiled and made available to the public through this report and other means. For more information regarding TRI please refer to the Introduction and For Further Information sections contained in this report

RISK MANAGEMENT PLANS

Additional information regarding hazardous chemicals is available to the public due to the requirements contained in Title I, Section 112(r) of the Federal Clean Air Act Amendments of 1990. Section 112(r) requires that facilities handling substances with catastrophic potential submit a Risk Management Plan (RMP) that contains an executive summary, registration, off-site consequence analysis (OCA), five-year accident history, and a summary of their prevention and emergency response programs. The OCA consists of a “worst case” release scenario and an “alternative” release scenario. The “worst case” scenario estimates the area and populations affected by a catastrophic release. The “worst case” scenario is a hypothetical, conservative modeling exercise. Emergency planning uses the “alternative” scenario, a more realistic modeling exercise.

The information contained in the RMP builds upon the right-to-know principles of EPCRA by making all of the information including the OCA and five-year accident history available to local communities, emergency planners, and other stakeholders. Concerned citizens or the media could ask facilities to explain the programs that they use to prevent or minimize the consequence of a catastrophic release by making this information available. EPA encourages this communication to reduce the risk. This is similar to the way public knowledge of chemical releases to the environment through the availability of TRI data has led reporting facilities to reduce their toxic releases. Because of security concerns, the RMP information is restricted. However, this information is available for Delaware facilities by contacting the Accidental Release Prevention Program (ARP).

Within Delaware, the Extremely Hazardous Substances Risk Management Act, originally passed in 1988 and amended in 1998 adopt new federal guidelines that enhance the community right-to-know information. The ARP, who has been granted full authority by the US EPA to administer the program within DNREC, reviews the facility RMP's for accuracy and completeness and inspects facilities to ensure that appropriate accidental release prevention programs have been implemented. For more information on accidental release prevention in Delaware, please refer to the DNREC ARP website at:

http://www.dnrec.state.de.us/air/aqm_page/arp.htm

APPENDIX B



TRI FACILITY ADDRESSES AND PUBLIC CONTACTS

AGILENT TECHNOLOGIES LITTLE FALLS

2850 CENTERVILLE RD.
WILMINGTON, DE 19808
JUDY PORTA
302-633-8111

AGILENT TECHNOLOGIES NEWPORT

538 FIRST STATE BLVD.
NEWPORT, DE 19804
JUDY PORTA
302-633-8111

ALLEN'S HATCHERY

RTE 13A
DELMAR, DE 19940
ROBERT MITCHELL
410-943-3989

AMERICAN MINERALS, INC.

301 PIGEON POINT ROAD
NEW CASTLE, DE 19720
WILLIAM D. HEESTAND, JR.
513-528-1507

AMETEK INC.

900 GREENBANK RD
WILMINGTON, DE 19808-5906
ROSEMARIE M. PABLACIO
302-995-0469

ARLON INC.

1100 GOVERNOR LEA RD.
BEAR, DE 19701
ROBERT M CARINI
302-834-2100

ASTROPOWER PENCADER

231 LAKE DRIVE
NEWARK, DE 19702
COLLEEN GOURLEY
302-366-0400

ASTROPOWER SOLAR PARK

461 WYOMING RD.
NEWARK, DE 19706
COLLEEN GOURLEY
302-366-0400

AVECIA INC

233 CHERRY LANE
NEW CASTLE, DE 19720
KEENA DAUTLICK
302-472-1218

BIRDS EYE FOODS

WESLEY CHURCH RD.
BRIDGEVILLE, DE 19933
STEVE WEST
302-337-8206

BLADES BULK PLANT

SOUTH MARKET ST.
SEAFORD, DE 19973
SCOTT GENSHAW
302-629-3011

CAMDEL METALS CORPORATION

12244 WILLOW GROVE ROAD
CAMDEN, DE 19934-9620
MARK A. SWEITZER
610-539-3900

CARL KING INC

1400 EAST LEBANON RD.
DOVER, DE 19901
RANDY WAYNE
301-322-3111

CHROME DEPOSIT CORP.

9 TYLER WAY
NEWARK, DE 19713
CHARLES BUTLER
302-368-7525

CIBA SPECIALTY CHEMICALS

205 S. JAMES STREET
NEWPORT, DE 19804
DONNA JAKOBOWSKI
302-992-5600

CITISTEEL USA, INC.

4001 PHILADELPHIA PIKE
CLAYMONT, DE 19703-2794
DANA A. LE SAGE, P.E.
302-792-5444

CLARIANT CORP.

745 MCCOLLEY ST.
MILFORD, DE 19963
DENISE RICHARDSON
517-629-9101

CUSTOM DECORATIVE MOLDINGS

12136 SUSSEX HIGHWAY
GREENWOOD, DE 19950
MICHAEL GOETZ
215-699-4800

APPENDIX B

TRI FACILITY ADDRESSES AND PUBLIC CONTACTS



D&B INDUSTRIAL GROUP
2-4 CEDAR CREEK AVE.
GEORGETOWN, DE 19947
BETTY ADKINS
302-855-0585

DIAMLER CHRYSLER
550 SOUTH COLLEGE ST.
NEWARK, DE 19713
VOULA STOUT
302-453-5282

DENTSPLY CAULK MAIN
779 EAST MASTEN CIRCLE
MILFORD, DE 19963
PHIL STEWART
302-422-4511

DENTSPLY CAULK WEST
38 WEST CLARKE AVE.
MILFORD, DE 19963
PHIL STEWART
302-422-4511

DOVER AIR FORCE BASE
436 CES/CC
DOVER AFB, DE 19902-5600
SUSAN WALLS
302-677-3550

DOW REICHHOLD
144 FORKBRANCH ROAD
CHESWOLD, DE 19936
JO-ANNE CAMPBELL
302-736-9236

DU PONT EDGE MOOR
104 HAY ROAD
EDGE MOOR, DE 19809
LEONARD FASULLO
302-761-2298

DU PONT SEAFORD
25876 DUPONT RD.
SEAFORD, DE 19973
RENEE PHILLIPS
302-629-1027

E-A-R SPECIALTY COMPOSITES
650 DAWSON DR.
NEWARK, DE 19713
GEORGE KLETT
302-286-2415

EDGE MOOR/HAY ROAD POWER PLANTS
200 HAY ROAD
WILMINGTON, DE 19809
BILL YINGLING
302-283-5811

FORMOSA PLASTICS CORPORATION
780 SCHOOLHOUSE ROAD
DELAWARE CITY, DE 19706-0320
KIMBERLY BENNETT
302-836-2256

GAC SEAFORD, INC
1100 NANTICOKE AVE
SEAFORD, DE 19973
JOHN ELLIOTT
302-629-3505

GENERAL CHEMICAL CORP.
6300 PHILADELPHIA PIKE
CLAYMONT, DE 19703-2712
DAVID TUSINSKI
302-792-8524

GENERAL MOTORS
810 BOXWOOD ROAD
WILMINGTON, DE 19804
JAMES F. BURKE, II
313-665-3128

GREEN TREE CHEMICAL
105 PARK AVENUE
SEAFORD, DE 19973
DAVID F. VAN DERVEER
732-254-2938

HALKO MANUFACTURING
500 DUCK CREEK ROAD
CLAYTON, DE 19938-0897
ANDREW R. HALKO
302-653-6627

HANOVER FOODS
RT. 6 & DUCK CREEK RD.
CLAYTON, DE 19938
WILLIAL S. GAUHGLER, III
800-888-4646

HARDCORE COMPOSITES
618 LAMBSONS LANE
NEW CASTLE, DE 19720
SCOTT HEMPHILL
302-254-4812

APPENDIX B



TRI FACILITY ADDRESSES AND PUBLIC CONTACTS

HERCULES RESEARCH CENTER

500 HERCULES ROAD
WILMINGTON, DE 19808-1599
RICHARD J. SUJDAK
302-995-4460

HIRSH INDUSTRIES, DOVER

1525 MCKEE ROAD
DOVER, DE 19904
LINDA BURROWS
302-678-3454

HONEYWELL

6100 PHILADELPHIA PIKE
CLAYMONT, DE 19703
TIMOTHY P. LOVE
302-791-6745

IKO PRODUCTION

120 HAY ROAD
WILMINGTON, DE 19809
DAVID FOULKES
302-764-3100

INDIAN RIVER POWER PLANT

ROUTE 332, POWER PLANT ROAD
MILLSBORO, DE 19966-0408
GERRY HOPPER
302-934-3514

INSTEEL WIRE

800 NEW CASTLE AVE.
WILMINGTON, DE 19801
BILL DAVIS
302-656-3121

INTERVET INC.

405 STATE STREET
MILLSBORO, DE 19966
RONALD VEROSKO
302-934-8051

JOHNSON CONTROLS

700 NORTH BROAD STREET
MIDDLETOWN, DE 19709
RICK A. THOMPSON
302-378-9885

JOHNSON POLYMER

100 INDUSTRIAL BLVD.
SEAFORD, DE 19973
STEVEN DANLEY
3025-629-6200

JUSTIN TANKS LLC.

21413 CEDAR CREEK AVE
GEORGETOWN, DE 19947-6306
EDWARD M. SHORT, PRESIDENT
302-856-3521

KANEKA DELAWARE

1685 RIVER ROAD
DELAWARE CITY, DE 19706-0610
GLENN DAVIS
302-836-2100

KRAFT FOODS

1250 WEST NORTH STREET
DOVER, DE 19904
CATHY PERNU
847-646-3946

KUEHNE CHEMICAL

1645 RIVER ROAD
DELAWARE CITY, DE 19706
ROBERT FIELD
800-323-8258

MACDERMID, INC.

701 INDUSTRIAL DRIVE
MIDDLETOWN, DE 19709-1085
ALAN W. BUNTEMAN
302-378-3100

MARBLE WORKS

MENNONITE SCHOOL ROAD
GREENWOOD, DE 19950-0929
MIKE MARVEL
302-349-5445

MCKEE RUN POWER PLANT

880 BUTTNER PLACE
DOVER, DE 19904
DEAN R. BLAHA
302-672-6304

MEDAL

305 WATER ST.
NEWPORT, DE 19804-2410
RALPH SCHWENDEMAN
302-225-2141

METAL MASTERS

100 INDUSTRIAL BLVD.
CLAYTON, DE 19938
RICHARD J. MURPHY
302-653-3000

APPENDIX B

TRI FACILITY ADDRESSES AND PUBLIC CONTACTS

**MOTIVA ENTERPRISES**

2000 WRANGLE HILL ROAD
DELAWARE CITY, DE 19706
RICK STROUSE
302-834-6210

MOUNTAIRE FARMS OF DELAWARE

ROUTE 24 EAST
MILLSBORO, DE 19966
JEFFREY SMITH
302-934-3094

MOUNTAIRE FARMS FEEDMILL

11 DAISEY ST.
FRANKFORD, DE 19945
JEFFREY SMITH
302-934-3094

NORAMCO

500 SWEDES LANDING RD.
WILMINGTON, DE 19801
RONALD PANASIEWICZ
302-888-4444

NRG DOVER

1280 W. NORTH STREET
DOVER, DE 19904-7756
MEREDITH MOORE
612-373-8892

NVF YORKLYN

1166 YORKLYN RD
YORKLYN, DE 19736
JOHN CONTENDO
302-239-5281

OCCIDENTAL CHEMICAL

1657 RIVER ROAD
NEW CASTLE, DE 19720-5194
DAVID J. RYSKOSKI
302-834-3810

ORIENT CORP.

111 PARK AVENUE
SEAFORD, DE 19973
KURT SCHIMMEL
302-628-1300

PERDUE BRIDGEVILLE

RT. 2, BOX 3
BRIDGEVILLE, DE 19933
TITA CHERRIER
410-860-4407

PERDUE GEORGETOWN

200 SAVANNAH ROAD
GEORGETOWN, DE 19947
TITA CHERRIER
410-860-4407

PINNACLE FOODS

RTE. 331 SOUTH
MILLSBORO, DE 19966
LYNN JENKINES
800-554-9458

PLAYTEX PRODUCTS

50 NORTH DUPONT HIGHWAY
DOVER, DE 19901
RON NEAL
302-678-6690

PPG DOVER

1886 LYNNBURY WOODS ROAD
DOVER, DE 19904
TERRY MCGINNIS
302-678-9800

PPG INDUSTRIES

300 RUTHAR DRIVE
NEWARK, DE 19711
WILLIAM HESCOX
302-454-1599

PROCINO PLATING

901 S. MARKET ST.
BLADES, DE 19973
MICHAEL PROCINO
302-629-0331

RODEL, INC.

451 BELLEVUE ROAD
NEWARK, DE 19713
DANA THURESSON
302-366-0500

RODEL TECHNICAL CENTER

351 BELLEVUE ROAD
NEWARK, DE 19713
DANA THURESSON
302-366-0500

ROLLER SERVICE CORP.

1318 E. 12TH STREET
WILMINGTON, DE 19802
JOHN GENTILE
302-737-5000

APPENDIX B



TRI FACILITY ADDRESSES AND PUBLIC CONTACTS

SERVICE ENERGY DOVER

3799 N. DUPONT HWY.
DOVER, DE 19901
DON STEINER
302-734-7433

SUNOCO, INC.

GREEN ST. AND DELAWARE AVE.
MARCUS HOOK, PA 19061-0426
DONALD ZOLADKIEWICZ
610-859-1038

SERVICE ENERGY MILFORD

20141 CEDAR BEACH RD.
MILFORD, DE 19963
DON STEINER
302-734-7433

TFL USA/CANADA

1400 JOHNSON WAY
NEW CASTLE, DE 19720
RICHARD PUGLISI
302-326-6900

SPATZ FIBERGLASS

505 NEW CHURCHMANS ROAD
NEW CASTLE, DE 19720
FREDERICK J. HOEY
302-322-3311

UNIQEMA

213, 315 CHERRY LANE
NEW CASTLE, DE 19720
ALLAN COLETTA
302-574-1510

SPI PHARMA

40 CAPE HENLOPEN DR.
LEWES, DE 19958-1196
STEVE FREEBERRY
302-576-8692

VP RACING FUELS

16 BROOKHILL DRIVE
NEWARK, DE 19714
JIM KELLY
302-368-1500

SPI POLYOLS

321 CHERRY LANE
NEW CASTLE, DE 19720-2780
TOM SCHMIDT
302-576-8583

W. L. GORE OTTS CHAPEL

750 OTTS CHAPEL ROAD
NEWARK, DE 19714
LISA WALTON
410-506-3621

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
AGILENT TECHNOLOGIES LITTLE FALLS							
TOLUENE		1,422	0	0	1,422	29,280	0
	Facility Total	1,422	0	0	1,422	29,280	0
AGILENT TECHNOLOGIES NEWPORT							
METHANOL		854	0	0	854	9,348	0
	Facility Total	854	0	0	854	9,348	0
ALLENS HATCHERY							
COPPER COMPOUNDS	1	0	0	0	0	0	0
MANGANESE COMPOUNDS	1	0	0	0	0	0	0
ZINC COMPOUNDS	1	0	0	0	0	0	0
	Facility Total	0	0	0	0	0	0
AMERICAN MINERALS							
BARIUM		31	79	0	110	0	0
LEAD		4	1	0	5	0	0
MANGANESE COMPOUNDS		5,751	350	0	6,101	0	0
NICKEL COMPOUNDS		11	10	0	21	0	0
ZINC COMPOUNDS		22	15	0	37	0	0
	Facility Total	5,819	455	0	6,274	0	0
AMETEK							
LEAD		0	0	0	0	0	0
	Facility Total	0	0	0	0	0	0
ARLON							
XYLENE (MIXED ISOMERS)		1,500	0	0	1,500	5,215	117,604
	Facility Total	1,500	0	0	1,500	5,215	117,604
ASTROPOWER PENCADER							
HYDROGEN FLUORIDE		255	0	0	255	0	13,760
LEAD COMPOUNDS		3	0	0	3	115	0
	Facility Total	258	0	0	258	115	13,760

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

C -1

APPENDIX C

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND				
ASTROPOWER SOLAR PARK								
		255	0	0	255	0	35,810	
		10	0	0	10	0	15,350	
	Facility Total	265	0	0	265	0	51,160	
AVECIA								
		11	0	0	11	21,109	0	
		1	0	0	1	1,797	0	
		0	0	0	0	772	0	
		15	0	0	15	31,137	0	
		89	0	0	89	184	87,563	
		1,485	0	0	1,485	92,134	0	
		48	0	0	48	843	0	
	Facility Total	1,649	0	0	1,649	147,976	87,563	
BIRDS EYE FOODS								
		560	0	0	560	0	0	
	Facility Total	560	0	0	560	0	0	
BLADES BULK PLANT								
	1	0	0	0	0	0	0	
	1	0	0	0	0	0	0	
	1	0	0	0	0	0	0	
	1	0	0	0	0	0	0	
	1	0	0	0	0	0	0	
	1	0	0	0	0	0	0	
	1	0	0	0	0	0	0	
	Facility Total	0	0	0	0	0	0	
CAMDEN METALS								
		0	0	0	0	20,717	0	
		0	0	0	0	2,504	0	
		0	0	0	0	13,290	0	
		12,623	0	0	12,623	1,331	13,100,000	
	Facility Total	12,623	0	0	12,623	37,842	13,100,000	

APPENDIX C

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
CARL KING							
1,2,4-TRIMETHYLBENZENE	1	0	0	0	0	0	0
BENZENE	1	0	0	0	0	0	0
CYCLOHEXANE	1	0	0	0	0	0	0
ETHYLBENZENE	1	0	0	0	0	0	0
METHYL TERT-BUTYL ETHER	1	0	0	0	0	0	0
N-HEXANE	1	0	0	0	0	0	0
TOLUENE	1	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	1	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0
CHROME DEPOSIT							
LEAD		0	0	0	0	3,720	0
Facility Total		0	0	0	0	3,720	0
CIBA SPECIALTY CHEMICALS							
ANILINE		41	0	0	41	87,736	0
BIPHENYL		123	0	0	123	198,411	2,321
CYCLOHEXANE		83	0	0	83	7,331	5,090
LEAD COMPOUNDS		341	0	0	341	0	0
METHANOL		25,792	0	0	25,792	2,057,514	413,778
P-CHLOROANILINE		17	0	0	17	57,370	0
XYLENE (MIXED ISOMERS)		1,754	0	0	1,754	6,134	100
Facility Total		28,151	0	0	28,151	2,414,496	421,289
CITISTEEL							
CHROMIUM COMPOUNDS		118	2	53	173	32,947	0
COPPER COMPOUNDS		99	5	17	121	31,146	0
LEAD COMPOUNDS		524	3	30	557	253,638	0
MANGANESE COMPOUNDS		366	11	342	719	172,203	0
MERCURY COMPOUNDS		28	0	0	28	27	0
NICKEL COMPOUNDS		19	3	21	43	3,416	0
ZINC COMPOUNDS		2,774	16	113	2,903	1,907,249	0
Facility Total		3,928	40	576	4,544	2,400,626	0

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
CLARIANT							
ZINC COMPOUNDS	1	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0
CUSTOM DECORATIVE MOULDINGS							
DIISOCYANATES	1	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0
D & B INDUSTRIAL GROUP							
METHYL ETHYL KETONE		26,224	0	0	26,224	11,745	0
Facility Total		26,224	0	0	26,224	11,745	0
DAIMLER CHRYSLER							
1,2,4-TRIMETHYLBENZENE		62,200	0	0	62,200	11,200	4,600
BENZENE	1	0	0	0	0	0	0
CERTAIN GLYCOL ETHERS		134,000	0	0	134,000	193,507	24,000
CYCLOHEXANE		533	0	0	533	0	0
ETHYLBENZENE		12,300	0	0	12,300	16,470	74
ETHYLENE GLYCOL		101	0	0	101	12,260	0
MANGANESE COMPOUNDS		0	0	0	0	4,590	0
METHANOL		1,180	0	0	1,180	380	0
METHYL ISOBUTYL KETONE		28,000	0	0	28,000	47,600	0
METHYL TERT-BUTYL ETHER		1,283	0	0	1,283	0	0
N-BUTYL ALCOHOL		51,200	0	0	51,200	4,300	6,900
N-HEXANE		533	0	0	533	0	0
NITRATE COMPOUNDS		0	0	0	0	29,018	0
NITRIC ACID		29	0	0	29	0	2,900
N-METHYL-2-PYRROLIDONE		37,000	0	0	37,000	722	4,200
SODIUM NITRITE		1,400	0	0	1,400	0	4,500
TOLUENE		4,200	0	0	4,200	130	0
XYLENE (MIXED ISOMERS)		37,500	0	0	37,500	48,060	360
ZINC COMPOUNDS		0	0	0	0	14,081	0
Facility Total		371,459	0	0	371,459	382,318	47,534

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

C -4

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
DENTSPLY CAULK MAIN							
COPPER		0	0	0	0	0	0
LEAD COMPOUNDS		0	0	0	0	0	270
MERCURY		0	0	0	0	28,100	0
METHANOL		165	0	0	165	3,303	0
SILVER		0	0	0	0	4,917	0
Facility Total		165	0	0	165	36,320	270
DENTSPLY CAULK WEST							
METHANOL		250	0	0	250	10,275	0
METHYL METHACRYLATE		250	0	0	250	3,002	0
Facility Total		500	0	0	500	13,277	0
DOVER AFB							
NAPHTHALENE	1	1	0	0	1	0	0
Facility Total		1	0	0	1	0	0
DOW REICHHOLD							
1,3-BUTADIENE		16,599	0	0	16,599	0	1,159,617
ACRYLIC ACID		1,125	0	0	1,125	155	0
ACRYLONITRILE		3,587	0	0	3,587	151	501,672
BUTYL ACRYLATE		586	0	0	586	8	115
ETHYL ACRYLATE		499	0	0	499	0	617
FORMALDEHYDE		1,965	0	0	1,965	0	0
METHANOL		6	0	0	6	10	296
METHYL METHACRYLATE		1,941	0	0	1,941	55	719
N-METHYLOLACRYLAMIDE		268	0	0	268	0	0
STYRENE		4,561	0	0	4,561	657	136,990
VINYL ACETATE		2,373	0	0	2,373	8	10,755
Facility Total		33,510	0	0	33,510	1,044	1,810,781

APPENDIX C

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
DUPONT EDGE MOOR							
BARIUM COMPOUNDS		2	656	0	658	27,753	0
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0
CARBONYL SULFIDE		163,000	0	0	163,000	0	0
CHLORINE		1,360	0	0	1,360	0	2,908,000
CHROMIUM COMPOUNDS	1	63	0	0	64	224,024	0
COBALT COMPOUNDS	2	53	0	0	55	9,901	0
COPPER COMPOUNDS	1	317	0	0	318	3,629	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	153	0
HEXACHLOROBENZENE		0	53	0	53	2,747	0
HYDROCHLORIC ACID AEROSOLS		4,805	0	0	4,805	0	17,820,000
LEAD COMPOUNDS	1	43	0	0	44	51,222	0
MANGANESE COMPOUNDS	2	34,910	0	0	34,912	3,348,690	0
NICKEL COMPOUNDS	33	147	0	0	180	27,388	0
OCTACHLOROSTYRENE		0	0	0	0	470	0
PENTACHLOROBENZENE		0	16	0	16	824	0
PHOSGENE		806	0	0	806	0	48,000
POLYCHLORINATED BIPHENYLS (PCB)		0	0	0	0	39	0
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0
TITANIUM TETRACHLORIDE		28	0	0	28	0	1,670,000
TOLUENE		1,398	0	0	1,398	157	0
VANADIUM COMPOUNDS		13	783	0	796	56,373	0
ZINC COMPOUNDS		20	529	0	549	43,858	0
Facility Total		171,472	37,570	0	209,042	3,797,227	22,446,000
DUPONT SEAFORD							
ANTIMONY COMPOUNDS		14	0	0	14	0	0
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0
BIPHENYL		4,700	0	0	4,700	7,000	0
CHROMIUM COMPOUNDS		3,576	0	0	3,576	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0
HYDROCHLORIC ACID AEROSOLS		284,443	0	0	284,443	0	0
LEAD COMPOUNDS		53	0	2,018	2,071	0	0
MERCURY COMPOUNDS		117	0	102	219	0	0
NITRATE COMPOUNDS		0	145,100	0	145,100	7	0

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

C -6

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
DUPONT SEAFORD, CONTINUED							
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0
SODIUM NITRITE		0	0	0	0	0	134,979
SULFURIC ACID AEROSOLS		76,726	0	0	76,726	0	0
ZINC COMPOUNDS		3,964	908	0	4,872	0	0
Facility Total		373,593	146,008	2,120	521,721	7,007	134,979
E-A-R							
DIISOCYANATES		2	0	0	2	920	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)		4	0	0	4	2,750	0
Facility Total		6	0	0	6	3,670	0
EDGE MOOR/HAY ROAD POWER PLANTS							
AMMONIA		29,054	5	0	29,059	0	0
BARIUM COMPOUNDS		5,676	1,201	0	6,877	116,686	0
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0
CHROMIUM COMPOUNDS		993	750	0	1,743	29,374	0
COBALT COMPOUNDS		857	0	0	857	24,334	0
COPPER COMPOUNDS		1,400	11,787	0	13,187	23,572	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0
ETHYLENE GLYCOL	1	0	0	0	0	0	0
HYDROCHLORIC ACID AEROSOLS		1,718,743	0	0	1,718,743	0	0
HYDROGEN FLUORIDE		83,709	0	0	83,709	0	8,890
LEAD COMPOUNDS		1,148	637	0	1,784	10,299	0
MANGANESE COMPOUNDS		1,019	750	0	1,769	26,816	0
MERCURY COMPOUNDS		148	0	0	148	58	0
NICKEL COMPOUNDS		9,272	1,196	0	10,468	23,839	0
NITRATE COMPOUNDS	1	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS		42	0	0	42	0	0
SULFURIC ACID AEROSOLS		109,779	0	0	109,779	0	137,804
VANADIUM COMPOUNDS		1,912	0	0	1,912	53,091	0
Facility Total		1,963,752	16,326	0	1,980,078	308,070	146,694

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

C -7

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
FORMOSA PLASTICS							
AMMONIA		7,903	0	0	7,903	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0
VINYL ACETATE		115,180	0	0	115,180	0	0
VINYL CHLORIDE		103,319	0	0	103,319	0	167,000
Facility Total		226,402	0	0	226,402	0	167,000
GAC							
1,2,4-TRIMETHYLBENZENE	1	0	0	0	0	0	0
ANTHRACENE	1	0	0	0	0	0	0
ASBESTOS (FRIABLE)	1	0	0	0	0	0	0
PHENANTHRENE	1	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS		1	0	0	1	0	0
Facility Total		1	0	0	1	0	0
GENERAL CHEMICAL							
AMMONIA		500	1,068	0	1,568	2,183	0
HYDROGEN FLUORIDE		1,154	0	0	1,154	0	72,050
LEAD COMPOUNDS		42	0	0	42	1,709	0
SULFURIC ACID AEROSOLS		12,760	0	0	12,760	0	0
Facility Total		14,456	1,068	0	15,524	3,892	72,050
GENERAL MOTORS							
1,2,4-TRIMETHYLBENZENE		8,190	0	0	8,190	26,096	8,500
BENZENE		250	0	0	250	4	0
CERTAIN GLYCOL ETHERS		83,400	0	0	83,400	62,960	40,000
ETHYLBENZENE		127	0	0	127	9	460
ETHYLENE GLYCOL		0	0	0	0	880	0
METHANOL		11,200	0	0	11,200	26,017	1,500
METHYL TERT-BUTYL ETHER		754	0	0	754	43	0
N-BUTYL ALCOHOL		36,120	0	0	36,120	620	17,000
N-METHYL-2-PYRROLIDONE		19,300	0	0	19,300	15	200
POTASSIUM DIMETHYLDITHIOCARBAMATE		0	0	0	0	81	0
SODIUM NITRITE		0	0	0	0	14,230	0
TOLUENE		1,930	0	0	1,930	73	0
XYLENE (MIXED ISOMERS)		123,000	0	0	123,000	320,430	10,000
ZINC COMPOUNDS		330	200	0	530	10,150	0
Facility Total		284,601	200	0	284,801	461,608	77,660

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND				
GREEN TREE CHEMICAL								
1,1-DICHLORO-1-FLUOROETHANE		238	0	0	238	3,365	0	
CERTAIN GLYCOL ETHERS		0	0	0	0	1,629	0	
TOLUENE		86	0	0	86	2,793	0	
TRICHLOROETHYLENE		25	0	0	25	1,956	0	
Facility Total		349	0	0	349	9,743	0	
HALKO MFG.								
ANTIMONY		0	0	0	0	0	0	
LEAD		0	0	0	0	208,000	0	
Facility Total		0	0	0	0	208,000	0	
HANOVER FOODS								
AMMONIA		10,240	0	0	10,240	0	0	
Facility Total		10,240	0	0	10,240	0	0	
HARDCORE COMPOSITES								
STYRENE		463	0	0	463	0	0	
Facility Total		463	0	0	463	0	0	
HERCULES RESEARCH CENTER								
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0	
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0	
Facility Total		0	0	0	0	0	0	
HIRSH INDUSTRIES								
CERTAIN GLYCOL ETHERS		12,612	0	0	12,612	0	0	
Facility Total		12,612	0	0	12,612	0	0	

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

C -9

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND				
HONEYWELL								
1,3-DICHLOROPROPYLENE		27	0	0	27	13,711	0	
AMMONIA		5,160	0	0	5,160	2,895	0	
BORON TRIFLUORIDE		215	0	0	215	13,780	0	
CHLOROETHANE	1	0	0	0	0	0	0	
N-HEXANE		7,050	0	0	7,050	66,089	0	
TOLUENE		660	0	0	660	8,234	0	
Facility Total		13,112	0	0	13,112	104,709	0	
IKO PRODUCTION								
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	102	15	
Facility Total		0	0	0	0	102	15	
INDIAN RIVER POWER PLANT								
AMMONIA		18,000	0	0	18,000	0	400,000	
BARIUM COMPOUNDS		1,705	0	270,000	271,705	0	0	
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0	
CHROMIUM COMPOUNDS		715	0	36,000	36,715	0	0	
COPPER COMPOUNDS		195	120	23,000	23,315	0	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0	
HYDROCHLORIC ACID AEROSOLS		1,300,000	0	0	1,300,000	0	0	
HYDROGEN FLUORIDE		120,000	0	0	120,000	0	13,000	
LEAD COMPOUNDS		773	0	14,895	15,668	0	0	
MANGANESE COMPOUNDS		945	0	45,000	45,945	0	0	
MERCURY COMPOUNDS		73	0	92	165	0	0	
NICKEL COMPOUNDS		545	0	27,000	27,545	0	0	
POLYCYCLIC AROMATIC COMPOUNDS		1	0	0	1	0	0	
SULFURIC ACID AEROSOLS		98,000	0	0	98,000	0	390,000	
VANADIUM COMPOUNDS		585	0	51,000	51,585	0	0	
ZINC COMPOUNDS		365	0	38,000	38,365	0	0	
Facility Total		1,541,902	120	504,987	2,047,009	0	803,000	
INSTEEL WIRE								
LEAD COMPOUNDS		0	0	0	0	2,286	0	
Facility Total		0	0	0	0	2,286	0	

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

C -10

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
INTERVET							
MERCURY COMPOUNDS		0	0	0	0	2	0
Facility Total		0	0	0	0	2	0
JOHNSON CONTROLS							
ANTIMONY COMPOUNDS		0	0	0	0	14,044	0
LEAD COMPOUNDS		202	5	0	207	4,557,629	0
Facility Total		202	5	0	207	4,571,673	0
JOHNSON POLYMER							
AMMONIA		3,399	0	0	3,399	3,810	0
BUTYL ACRYLATE		156	0	0	156	30	39
CERTAIN GLYCOL ETHERS		10	0	0	10	1,699	0
ETHYL ACRYLATE	1	0	0	0	0	0	0
METHYL METHACRYLATE		376	0	0	376	35	1,178
STYRENE		341	0	0	341	39	889
Facility Total		4,282	0	0	4,282	5,613	2,106
JUSTIN TANKS							
STYRENE		32,151	0	0	32,151	330	0
Facility Total		32,151	0	0	32,151	330	0
KANEKA							
HYDROCHLORIC ACID AEROSOLS		322	0	0	322	0	99,046
VINYL CHLORIDE		36,337	1	0	36,338	5	167,905
Facility Total		36,659	1	0	36,660	5	266,951
KRAFT FOODS							
AMMONIA		5	0	0	5	1,120	10,000
Facility Total		5	0	0	5	1,120	10,000
KUEHNE CHEMICAL							
CHLORINE		5	0	0	5	0	0
Facility Total		5	0	0	5	0	0

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

C -11

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
MACDERMID							
		11,367	0	0	11,367	66,804	884,005
		20	0	0	20	0	868
	Facility Total	11,387	0	0	11,387	66,804	884,872
MARBLE WORKS							
		2,371	0	0	2,371	0	0
	Facility Total	2,371	0	0	2,371	0	0
MCKEE RUN POWER PLANT							
		0	0	0	0	0	0
		0	0	0	0	0	0
	Facility Total	0	0	0	0	0	0
MEDAL							
		250	0	0	250	10,710	873,259
		250	0	0	250	0	756,824
		250	0	0	250	35,420	0
	Facility Total	750	0	0	750	46,130	1,630,083
METAL MASTERS							
		5	0	0	5	100,777	0
		5	0	0	5	4,306	0
		10	0	0	10	0	18,720
	Facility Total	20	0	0	20	105,083	18,720
MOTIVA							
		1,920	0	0	1,920	44	370,000
		770	0	0	770	0	0
		0	550	0	550	0	54,000
		18,018	1,800	0	19,818	0	13,015,000
		0	0	0	0	0	3
		4,300	6,100	0	10,400	53	227,000
		1	3	0	3	0	250
		33	0	0	33	0	31,000
		350	0	0	350	0	1,077,000

APPENDIX C

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
<i>MOTIVA, CONTINUED</i>							
CHROMIUM COMPOUNDS		351	10	37,000	37,361	750	0
COBALT COMPOUNDS		410	12	500	922	11,100	0
COPPER COMPOUNDS		2,500	68	130	2,698	64,000	0
CRESOL (MIXED ISOMERS)		0	56,000	0	56,000	4	282,000
CUMENE		141	0	0	141	0	110
CYANIDE COMPOUNDS		2,200	1,100	0	3,300	0	290,000
CYCLOHEXANE		14,200	0	0	14,200	186	3,000
DIETHANOLAMINE		1	890	0	891	34	89,000
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0
ETHYLBENZENE		4,170	1,300	3	5,473	159	12,000
ETHYLENE		142	0	0	142	0	6,300
ETHYLENE GLYCOL		0	330	0	330	34	33,000
FORMIC ACID		0	0	0	0	0	74,000
HYDROCHLORIC ACID AEROSOLS		200,000	0	0	200,000	0	240,000
HYDROGEN CYANIDE		2,200	1,100	0	3,300	0	290,000
LEAD COMPOUNDS		600	1	29	630	78	0
MANGANESE COMPOUNDS		1,614	2,900	5,500	10,014	0	0
MERCURY COMPOUNDS		38	0	0	38	20	0
METHANOL		34,960	140	0	35,100	33	137,000
METHYL TERT-BUTYL ETHER		22,400	470	0	22,870	210	150,000
MOLYBDENUM TRIOXIDE		400	2,000	2,900	5,300	3,900	0
NAPHTHALENE		720	0	0	720	14	790
N-BUTYL ALCOHOL		570	11	0	581	0	1,100
N-HEXANE		58,810	0	0	58,810	0	8,100
NICKEL COMPOUNDS		9,401	1,400	70,000	80,801	29,500	0
NITRATE COMPOUNDS		0	580	0	580	0	620,000
PHENANTHRENE		2	0	0	2	0	3
PHENOL		52	47,000	0	47,052	0	268,000
POLYCYCLIC AROMATIC COMPOUNDS		5	1	0	7	4	140
PROPYLENE		4,600	0	0	4,600	0	520,000
SODIUM NITRITE		0	13,000	0	13,000	0	990,000
STYRENE		25	0	0	25	0	46
SULFURIC ACID AEROSOLS		510,000	0	0	510,000	0	0
TETRACHLOROETHYLENE		124	0	0	124	0	0
TOLUENE		6,200	4,800	0	11,000	690	140,000
VANADIUM COMPOUNDS		4,200	27,000	190,000	221,200	1,300	0
XYLENE (MIXED ISOMERS)		10,600	0	0	10,600	640	90,000
ZINC COMPOUNDS		2,500	420	480	3,400	55,000	0
Facility Total		919,528	168,986	306,542	1,395,057	167,753	19,018,842

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

C -13

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
MOUNTAIRE FARMS OF DELAWARE							
COPPER COMPOUNDS	1	0	0	0	0	0	0
MANGANESE	1	0	0	0	0	0	0
ZINC (FUME OR DUST)	1	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0
MOUNTAIRE FARMS OF DLEMARVA - FEEDMILL							
COPPER COMPOUNDS	1	0	0	0	0	0	0
MANGANESE COMPOUNDS	1	0	0	0	0	0	0
ZINC COMPOUNDS	1	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0
NORAMCO							
DICHLOROMETHANE		2,757	0	0	2,757	113,686	1,745,826
METHANOL		1,464	0	0	1,464	419,205	376,241
N-BUTYL ALCOHOL		1	0	0	1	20,139	0
TOLUENE		1,023	0	0	1,023	687,451	683,050
Facility Total		5,245	0	0	5,245	1,240,481	2,805,117
NRG DOVER							
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0
HYDROCHLORIC ACID AEROSOLS		33,400	0	0	33,400	0	0
LEAD COMPOUNDS		11	0	0	11	896	0
MERCURY COMPOUNDS		45	0	0	45	6	0
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0
SULFURIC ACID AEROSOLS		22,500	0	0	22,500	0	22,500
Facility Total		55,956	0	0	55,956	902	22,500
NVF YORKLYN							
ZINC COMPOUNDS		0	8,013	0	8,013	11,914	4,270,402
Facility Total		0	8,013	0	8,013	11,914	4,270,402
OCCIDENTAL CHEMICAL							
CHLORINE		1,079	0	0	1,079	565	2,461,800
CHLOROFORM		223	0	0	223	10,791	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0
MERCURY		1,074	21	0	1,095	1,144	3,675
Facility Total		2,376	21	0	2,397	12,500	2,465,475

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND				
ORIENT								
ANILINE		2,608	0	0	2,608	603	10,171	
CHROMIUM COMPOUNDS		0	0	0	0	500	0	
NITROBENZENE		214	0	0	214	361	0	
	Facility Total	2,822	0	0	2,822	1,464	10,171	
PERDUE AGRIRECYCLE								
AMMONIA		14,000	0	0	14,000	0	0	
	Facility Total	14,000	0	0	14,000	0	0	
PERDUE BRIDGEVILLE								
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0	
COPPER COMPOUNDS	1	0	0	0	0	0	0	
MANGANESE COMPOUNDS	1	0	0	0	0	0	0	
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0	
ZINC COMPOUNDS	1	0	0	0	0	0	0	
	Facility Total	0	0	0	0	0	0	
PERDUE GEORGETOWN								
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0	
NITRATE COMPOUNDS		0	550,000	160	550,160	0	0	
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0	
	Facility Total	0	550,000	160	550,160	0	0	
PINNACLE FOODS								
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0	
POLYCYCLIC AROMATIC COMPOUNDS		2	0	0	2	0	0	
	Facility Total	2	0	0	2	0	0	
PLAYTEX PRODUCTS								
CHLORINE		4	0	0	4	0	3,500	
NITRIC ACID		34	0	0	34	19,800	2,000	
	Facility Total	38	0	0	38	19,800	5,500	

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.

Form A does not report amounts.

C -15

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND				
PPG DOVER								
CERTAIN GLYCOL ETHERS		34	0	0	34	2,320	0	
DIBUTYL PHTHALATE	1	0	0	0	0	0	0	
ETHYLENE GLYCOL		10	0	0	10	30,166	0	
LEAD		0	0	0	0	0	0	
ZINC COMPOUNDS		45	0	0	45	17,708	0	
Facility Total		89	0	0	89	50,194	0	
PPG INDUSTRIES WORKS 32								
DIISOCYANATES		0	0	0	0	750	0	
Facility Total		0	0	0	0	750	0	
PROCINO PLATING								
LEAD		0	0	0	0	0	0	
Facility Total		0	0	0	0	0	0	
RODEL								
DIISOCYANATES		2	0	0	2	920	0	
METHYL ETHYL KETONE		10,877	0	0	10,877	7,954	166,947	
N,N-DIMETHYLFORMAMIDE		23,213	0	0	23,213	780,111	3,068,353	
PHTHALIC ANHYDRIDE		2	0	0	2	790	0	
Facility Total		34,094	0	0	34,094	789,775	3,235,300	
RODEL TECHNICAL CENTER								
4,4'-METHYLENEBIS(2-CHLOROANILINE)		2	0	0	2	2,881	0	
N-METHYL-2-PYRROLIDONE		2,974	0	0	2,974	32,528	0	
Facility Total		2,976	0	0	2,976	35,409	0	
ROLLER SERVICE								
DI(2-ETHYLHEXYL) PHTHALATE	1	0	0	0	0	0	0	
Facility Total		0	0	0	0	0	0	
SERVICE ENERGY DOVER								
1,2,4-TRIMETHYLBENZENE	1	0	0	0	0	0	0	
TOLUENE	1	0	0	0	0	0	0	
Facility Total		0	0	0	0	0	0	

APPENDIX C

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND			
SERVICE ENERGY MILFORD							
1,2,4-TRIMETHYLBENZENE	1	0	0	0	0	0	0
TOLUENE	1	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0
SPATZ FIBERGLASS							
STYRENE		4,474	0	0	4,474	0	0
Facility Total		4,474	0	0	4,474	0	0
SPI PHARMA							
CHLORINE	1	0	0	0	0	0	0
NITRIC ACID	1	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0
SPI POLYOLS							
NICKEL COMPOUNDS		10	0	0	10	36,044	6,100
NITRATE COMPOUNDS	1	0	0	0	0	0	0
NITRIC ACID	1	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0
Facility Total		10	0	0	10	36,044	6,100
SUNOCO							
BENZENE		1,092	0	0	1,092	0	0
ETHYLENE		52,380	0	0	52,380	0	0
ETHYLENE OXIDE		3,440	0	0	3,440	0	0
TOLUENE		137	0	0	137	0	0
XYLENE (MIXED ISOMERS)		14	0	0	14	0	0
Facility Total		57,063	0	0	57,063	0	0
SUNROC							
CHROMIUM		0	0	0	0	2,513	0
COPPER		0	0	0	0	8,525	0
Facility Total		0	0	0	0	11,038	0
TFL USA/CANADA							
DIISOCYANATES	1	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0

APPENDIX C

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX C

2002 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT
		AIR	WATER	LAND				
UNIQEMA								
4,4'-ISOPROPYLIDENEDIPHENOL		1,194	0	0	1,194	1,737	0	
BIS(2-CHLOROETHYL) ETHER		255	0	0	255	2,745	0	
CERTAIN GLYCOL ETHERS		255	0	0	255	3,456	1,480	
DIETHYL SULFATE	1	0	0	0	0	0	0	
ETHYLENE OXIDE		3,690	0	0	3,690	0	0	
PHENOL		255	0	0	255	448	192	
PROPYLENE OXIDE		1,842	0	0	1,842	0	0	
Facility Total		7,491	0	0	7,491	8,386	1,672	
VP RACING FUELS								
BENZENE	1	0	0	0	0	0	0	
LEAD COMPOUNDS		4	0	0	4	0	0	
METHANOL	1	0	0	0	0	0	0	
METHYL TERT-BUTYL ETHER	1	0	0	0	0	0	0	
TOLUENE	1	0	0	0	0	0	0	
XYLENE (MIXED ISOMERS)	1	0	0	0	0	0	0	
Facility Total		4	0	0	4	0	0	
W.L. GORE OTTS CHAPEL SITE								
LEAD		0	0	0	0	439	0	
Facility Total		0	0	0	0	439	0	
State On-Site Release Totals		55	6,295,850	928,813	814,385	8,039,048	17,583,245	74,151,170

APPENDIX C

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
AGILENT TECHNOLOGIES LITTLE FALLS											
TOLUENE	0	0	29,280	0	0	29,280	0	0	0	0	
Facility Total	0	0	29,280	0	0	29,280	0	0	0	0	
AGILENT TECHNOLOGIES NEWPORT											
METHANOL	0	0	9,348	0	0	9,348	0	0	0	0	
Facility Total	0	0	9,348	0	0	9,348	0	0	0	0	
ALLENS HATCHERY											
COPPER COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
MANGANESE COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
Facility Total	0	0	0	0	0	0	0	0	0	0	
AMERICAN MINERALS											
BARIUM	0	0	0	0	0	0	0	0	0	0	
LEAD	0	0	0	0	0	0	0	0	0	0	
MANGANESE COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
NICKEL COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
Facility Total	0	0	0	0	0	0	0	0	0	0	
AMETEK											
LEAD	0	0	0	0	0	0	0	0	0	0	
Facility Total	0	0	0	0	0	0	0	0	0	0	
ARLON											
XYLENE (MIXED ISOMERS)	0	0	0	5,215	0	5,215	0	117,604	0	117,604	
Facility Total	0	0	0	5,215	0	5,215	0	117,604	0	117,604	
ASTROPOWER PENCADER											
HYDROGEN FLUORIDE	0	0	0	0	0	0	0	0	13,760	13,760	
LEAD COMPOUNDS	2	74	0	0	40	115	0	0	0	0	
Facility Total	2	74	0	0	40	115	0	0	13,760	13,760	
ASTROPOWER SOLAR PARK											
HYDROGEN FLUORIDE	0	0	0	0	0	0	0	0	35,810	35,810	
NITRIC ACID	0	0	0	0	0	0	0	0	15,350	15,350	
Facility Total	0	0	0	0	0	0	0	0	51,160	51,160	

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS					ON SITE WASTE MANAGEMENT				
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
AVECIA										
AMMONIA	20,805	0	304	0	0	21,109	0	0	0	0
CERTAIN GLYCOL ETHERS	1,348	0	449	0	0	1,797	0	0	0	0
COPPER COMPOUNDS	379	0	0	0	393	772	0	0	0	0
ETHYLENE GLYCOL	23,497	0	7,640	0	0	31,137	0	0	0	0
FORMIC ACID	184	0	0	0	0	184	0	0	87,563	87,563
METHANOL	48,352	0	43,782	0	0	92,134	0	0	0	0
TOLUENE	164	0	679	0	0	843	0	0	0	0
Facility Total	94,729	0	52,854	0	393	147,976	0	0	87,563	87,563
BIRDS EYE FOODS										
AMMONIA	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
BLADES BULK PLANT										
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
BENZENE	0	0	0	0	0	0	0	0	0	0
ETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0	0	0	0	0
N-HEXANE	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
CAMDEL METALS										
CHROMIUM	0	20,467	0	0	250	20,717	0	0	0	0
MANGANESE	0	2,499	0	0	5	2,504	0	0	0	0
NICKEL	0	13,040	0	0	250	13,290	0	0	0	0
TRICHLOROETHYLENE	0	0	0	1,331	0	1,331	13,100,000	0	0	13,100,000
Facility Total	0	36,006	0	1,331	505	37,842	13,100,000	0	0	13,100,000
CARL KING										
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
BENZENE	0	0	0	0	0	0	0	0	0	0
CYCLOHEXANE	0	0	0	0	0	0	0	0	0	0
ETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0	0	0	0	0
N-HEXANE	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0

APPENDIX D

1 All values are in pounds
 2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
CHROME DEPOSIT										
LEAD	0	3,720	0	0	0	3,720	0	0	0	0
Facility Total	0	3,720	0	0	0	3,720	0	0	0	0
CIBA SPECIALTY CHEMICALS										
ANILINE	17,364	13	69,673	686	0	87,736	0	0	0	0
BIPHENYL	52,671	19	143,601	2,120	0	198,411	0	0	2,321	2,321
CYCLOHEXANE	0	4,334	2,997	0	0	7,331	0	0	5,090	5,090
LEAD COMPOUNDS	0	0	0	0	0	0	0	0	0	0
METHANOL	439,243	1,552,007	63,040	3,224	0	2,057,514	108,212	0	305,566	413,778
P-CHLOROANILINE	2,737	0	54,172	461	0	57,370	0	0	0	0
XYLENE (MIXED ISOMERS)	170	0	4,954	1,010	0	6,134	0	0	100	100
Facility Total	512,185	1,556,373	338,437	7,501	0	2,414,496	108,212	0	313,077	421,289
CITISTEEL										
CHROMIUM COMPOUNDS	0	32,267	0	0	680	32,947	0	0	0	0
COPPER COMPOUNDS	0	29,896	0	0	1,250	31,146	0	0	0	0
LEAD COMPOUNDS	0	253,602	0	0	36	253,638	0	0	0	0
MANGANESE COMPOUNDS	0	169,068	0	0	3,135	172,203	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	27	27	0	0	0	0
NICKEL COMPOUNDS	0	2,814	0	0	602	3,416	0	0	0	0
ZINC COMPOUNDS	0	1,907,166	0	0	83	1,907,249	0	0	0	0
Facility Total	0	2,394,840	0	0	5,786	2,400,626	0	0	0	0
CLARIANT										
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
CUSTOM DECORATIVE MOULDINGS										
DIISOCYANATES	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
D & B INDUSTRIAL GROUP										
METHYL ETHYL KETONE	0	0	11,745	0	0	11,745	0	0	0	0
Facility Total	0	0	11,745	0	0	11,745	0	0	0	0

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
DAIMLER CHRYSLER										
1,2,4-TRIMETHYLBENZENE	0	3,100	8,100	0	0	11,200	0	0	4,600	4,600
BENZENE	0	0	0	0	0	0	0	0	0	0
CERTAIN GLYCOL ETHERS	190,000	160	3,300	46	1	193,507	0	0	24,000	24,000
CYCLOHEXANE	0	0	0	0	0	0	0	0	0	0
ETHYLBENZENE	0	16,000	470	0	0	16,470	0	0	74	74
ETHYLENE GLYCOL	260	12,000	0	0	0	12,260	0	0	0	0
MANGANESE COMPOUNDS	190	1,300	0	0	3,100	4,590	0	0	0	0
METHANOL	0	0	380	0	0	380	0	0	0	0
METHYL ISOBUTYL KETONE	0	45,000	2,600	0	0	47,600	0	0	0	0
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0	0	0	0	0
N-BUTYL ALCOHOL	0	4,300	0	0	0	4,300	0	0	6,900	6,900
N-HEXANE	0	0	0	0	0	0	0	0	0	0
NITRATE COMPOUNDS	29,000	18	0	0	0	29,018	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	2,900	2,900
N-METHYL-2-PYRROLIDONE	0	42	550	130	0	722	0	0	4,200	4,200
SODIUM NITRITE	0	0	0	0	0	0	0	0	4,500	4,500
TOLUENE	0	0	130	0	0	130	0	0	0	0
XYLENE (MIXED ISOMERS)	0	46,000	1,900	160	0	48,060	0	0	360	360
ZINC COMPOUNDS	280	3,800	0	0	10,001	14,081	0	0	0	0
Facility Total	219,730	131,720	17,430	336	13,102	382,318	0	0	47,534	47,534
DENTSPLY CAULK MAIN										
COPPER	0	0	0	0	0	0	0	0	0	0
LEAD COMPOUNDS	0	0	0	0	0	0	270	0	0	270
MERCURY	0	28,100	0	0	0	28,100	0	0	0	0
METHANOL	0	3,303	0	0	0	3,303	0	0	0	0
SILVER	0	4,917	0	0	0	4,917	0	0	0	0
Facility Total	0	36,320	0	0	0	36,320	270	0	0	270
DENTSPLY CAULK WEST										
METHANOL	0	10,275	0	0	0	10,275	0	0	0	0
METHYL METHACRYLATE	0	3,002	0	0	0	3,002	0	0	0	0
Facility Total	0	13,277	0	0	0	13,277	0	0	0	0
DOVER AFB										
NAPHTHALENE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds Alphabetical By Facility	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
DOW REICHHOLD										
1,3-BUTADIENE	0	0	0	0	0	0	0	0	1,159,617	1,159,617
ACRYLIC ACID	0	0	155	0	0	155	0	0	0	0
ACRYLONITRILE	4	0	113	0	34	151	0	0	501,672	501,672
BUTYL ACRYLATE	0	0	8	0	0	8	0	0	115	115
ETHYL ACRYLATE	0	0	0	0	0	0	0	0	617	617
FORMALDEHYDE	0	0	0	0	0	0	0	0	0	0
METHANOL	10	0	0	0	0	10	0	0	296	296
METHYL METHACRYLATE	0	0	55	0	0	55	0	0	719	719
N-METHYLOLACRYLAMIDE	0	0	0	0	0	0	0	0	0	0
STYRENE	358	0	173	0	126	657	0	0	136,990	136,990
VINYL ACETATE	0	0	8	0	0	8	0	0	10,755	10,755
Facility Total	372	0	512	0	160	1,044	0	0	1,810,781	1,810,781
DUPONT EDGE MOOR										
BARIUM COMPOUNDS	0	0	0	0	27,753	27,753	0	0	0	0
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
CARBONYL SULFIDE	0	0	0	0	0	0	0	0	0	0
CHLORINE	0	0	0	0	0	0	0	0	2,908,000	2,908,000
CHROMIUM COMPOUNDS	0	0	0	0	224,024	224,024	0	0	0	0
COBALT COMPOUNDS	0	0	0	0	9,901	9,901	0	0	0	0
COPPER COMPOUNDS	0	0	0	0	3,629	3,629	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	153	153	0	0	0	0
HEXACHLOROBENZENE	0	0	0	0	2,747	2,747	0	0	0	0
HYDROCHLORIC ACID AEROSOLS	0	0	0	0	0	0	0	0	17,820,000	17,820,000
LEAD COMPOUNDS	0	20	0	0	51,202	51,222	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	3,348,690	3,348,690	0	0	0	0
NICKEL COMPOUNDS	0	0	0	0	27,388	27,388	0	0	0	0
OCTACHLOROSTYRENE	0	0	0	1	469	470	0	0	0	0
PENTACHLOROBENZENE	0	0	0	0	824	824	0	0	0	0
PHOSGENE	0	0	0	0	0	0	0	0	48,000	48,000
POLYCHLORINATED BIPHENYLS (PCB)	0	0	0	0	39	39	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
TITANIUM TETRACHLORIDE	0	0	0	0	0	0	0	0	1,670,000	1,670,000
TOLUENE	0	0	0	157	0	157	0	0	0	0
VANADIUM COMPOUNDS	0	0	0	0	56,373	56,373	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	43,858	43,858	0	0	0	0
Facility Total	0	20	0	158	3,797,049	3,797,227	0	0	22,446,000	22,446,000

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
DUPONT SEAFORD										
ANTIMONY COMPOUNDS	0	0	0	0	0	0	0	0	0	0
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
BIPHENYL	0	0	0	7,000	0	7,000	0	0	0	0
CHROMIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID AEROSOLS	0	0	0	0	0	0	0	0	0	0
LEAD COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0
NITRATE COMPOUNDS	0	0	0	7	0	7	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
SODIUM NITRITE	0	0	0	0	0	0	0	0	134,979	134,979
SULFURIC ACID AEROSOLS	0	0	0	0	0	0	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	7,007	0	7,007	0	0	134,979	134,979
E-A-R										
DIISOCYANATES	0	0	0	920	0	920	0	0	0	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)	0	0	0	2,750	0	2,750	0	0	0	0
Facility Total	0	0	0	3,670	0	3,670	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS										
AMMONIA	0	0	0	0	0	0	0	0	0	0
BARIUM COMPOUNDS	0	0	0	0	116,686	116,686	0	0	0	0
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
CHROMIUM COMPOUNDS	5	0	0	0	29,369	29,374	0	0	0	0
COBALT COMPOUNDS	0	0	0	0	24,334	24,334	0	0	0	0
COPPER COMPOUNDS	250	0	0	0	23,322	23,572	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
ETHYLENE GLYCOL	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID AEROSOLS	0	0	0	0	0	0	0	0	0	0
HYDROGEN FLUORIDE	0	0	0	0	0	0	0	0	8,890	8,890
LEAD COMPOUNDS	2	0	0	0	10,297	10,299	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	26,816	26,816	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	58	58	0	0	0	0

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS					ON SITE WASTE MANAGEMENT				
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
EDGE MOOR/HAY ROAD POWER PLANTS, CONTINUED										
NICKEL COMPOUNDS	44	0	0	0	23,795	23,839	0	0	0	0
NITRATE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
SULFURIC ACID AEROSOLS	0	0	0	0	0	0	0	0	137,804	137,804
VANADIUM COMPOUNDS	0	0	0	0	53,091	53,091	0	0	0	0
Facility Total	302	0	0	0	307,768	308,070	0	0	146,694	146,694
FORMOSA PLASTICS										
AMMONIA	0	0	0	0	0	0	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
VINYL ACETATE	0	0	0	0	0	0	0	0	0	0
VINYL CHLORIDE	0	0	0	0	0	0	0	0	167,000	167,000
Facility Total	0	0	0	0	0	0	0	0	167,000	167,000
GAC										
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
ANTHRACENE	0	0	0	0	0	0	0	0	0	0
ASBESTOS (FRIABLE)	0	0	0	0	0	0	0	0	0	0
PHENANTHRENE	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
GENERAL CHEMICAL										
AMMONIA	2,183	0	0	0	0	2,183	0	0	0	0
HYDROGEN FLUORIDE	0	0	0	0	0	0	0	0	72,050	72,050
LEAD COMPOUNDS	808	0	0	0	901	1,709	0	0	0	0
SULFURIC ACID AEROSOLS	0	0	0	0	0	0	0	0	0	0
Facility Total	2,991	0	0	0	901	3,892	0	0	72,050	72,050
GENERAL MOTORS										
1,2,4-TRIMETHYLBENZENE	0	0	26,000	0	96	26,096	0	0	8,500	8,500
BENZENE	0	0	4	0	0	4	0	0	0	0
CERTAIN GLYCOL ETHERS	62,000	0	0	0	960	62,960	0	0	40,000	40,000
ETHYLBENZENE	0	0	3	0	6	9	0	0	460	460
ETHYLENE GLYCOL	880	0	0	0	0	880	0	0	0	0
METHANOL	0	0	26,000	0	17	26,017	0	0	1,500	1,500
METHYL TERT-BUTYL ETHER	0	0	43	0	0	43	0	0	0	0

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
GENERAL MOTORS, CONTINUED										
N-BUTYL ALCOHOL	0	0	120	0	500	620	0	0	17,000	17,000
N-METHYL-2-PYRROLIDONE	0	0	0	0	15	15	0	0	200	200
POTASSIUM DIMETHYLDITHIOCARBAMATE	81	0	0	0	0	81	0	0	0	0
SODIUM NITRITE	14,000	0	230	0	0	14,230	0	0	0	0
TOLUENE	0	0	72	0	1	73	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	320,000	0	430	320,430	0	0	10,000	10,000
ZINC COMPOUNDS	250	0	0	0	9,900	10,150	0	0	0	0
Facility Total	77,211	0	372,472	0	11,925	461,608	0	0	77,660	77,660
GREEN TREE CHEMICAL										
1,1-DICHLORO-1-FLUOROETHANE	0	0	3,365	0	0	3,365	0	0	0	0
CERTAIN GLYCOL ETHERS	0	0	1,629	0	0	1,629	0	0	0	0
TOLUENE	0	0	2,793	0	0	2,793	0	0	0	0
TRICHLOROETHYLENE	0	0	1,956	0	0	1,956	0	0	0	0
Facility Total	0	0	9,743	0	0	9,743	0	0	0	0
HALKO MFG.										
ANTIMONY	0	0	0	0	0	0	0	0	0	0
LEAD	0	208,000	0	0	0	208,000	0	0	0	0
Facility Total	0	208,000	0	0	0	208,000	0	0	0	0
HANOVER FOODS										
AMMONIA	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
HARDCORE COMPOSITES										
STYRENE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
HERCULES RESEARCH CENTER										
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
HIRSH INDUSTRIES										
CERTAIN GLYCOL ETHERS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
HONEYWELL										
1,3-DICHLOROPROPYLENE	0	0	13,710	1	0	13,711	0	0	0	0
AMMONIA	0	0	0	2,895	0	2,895	0	0	0	0
BORON TRIFLUORIDE	0	0	104	13,676	0	13,780	0	0	0	0
CHLOROETHANE	0	0	0	0	0	0	0	0	0	0
N-HEXANE	0	0	1,355	64,734	0	66,089	0	0	0	0
TOLUENE	0	0	1,355	6,879	0	8,234	0	0	0	0
Facility Total	0	0	16,524	88,185	0	104,709	0	0	0	0
IKO PRODUCTION										
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	102	102	15	0	0	15
Facility Total	0	0	0	0	102	102	15	0	0	15
INDIAN RIVER POWER PLANT										
AMMONIA	0	0	0	0	0	0	0	0	400,000	400,000
BARIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
CHROMIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
COPPER COMPOUNDS	0	0	0	0	0	0	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS.	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID AEROSOLS	0	0	0	0	0	0	0	0	0	0
HYDROGEN FLUORIDE	0	0	0	0	0	0	0	0	13,000	13,000
LEAD COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0
NICKEL COMPOUNDS	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
SULFURIC ACID AEROSOLS	0	0	0	0	0	0	0	0	390,000	390,000
VANADIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	803,000	803,000
INSTEEL WIRE										
LEAD COMPOUNDS	0	2,286	0	0	0	2,286	0	0	0	0
Facility Total	0	2,286	0	0	0	2,286	0	0	0	0

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds Alphabetical By Facility	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
INTERVET										
MERCURY COMPOUNDS	0	1	0	0	0	2	0	0	0	0
Facility Total	0	1	0	0	0	2	0	0	0	0
JOHNSON CONTROLS										
ANTIMONY COMPOUNDS	0	14,044	0	0	0	14,044	0	0	0	0
LEAD COMPOUNDS	6	4,557,496	0	0	127	4,557,629	0	0	0	0
Facility Total	6	4,571,540	0	0	127	4,571,673	0	0	0	0
JOHNSON POLYMER										
AMMONIA	3,706	0	0	104	0	3,810	0	0	0	0
BUTYL ACRYLATE	5	0	0	25	0	30	0	0	39	39
CERTAIN GLYCOL ETHERS	943	0	0	756	0	1,699	0	0	0	0
ETHYL ACRYLATE	0	0	0	0	0	0	0	0	0	0
METHYL METHACRYLATE	5	0	0	30	0	35	0	0	1,178	1,178
STYRENE	9	0	0	30	0	39	0	0	889	889
Facility Total	4,668	0	0	945	0	5,613	0	0	2,106	2,106
JUSTIN TANKS										
STYRENE	0	0	0	330	0	330	0	0	0	0
Facility Total	0	0	0	330	0	330	0	0	0	0
KANEKA										
HYDROCHLORIC ACID AEROSOLS	0	0	0	0	0	0	0	0	99,046	99,046
VINYL CHLORIDE	0	0	0	0	5	5	0	0	167,905	167,905
Facility Total	0	0	0	0	5	5	0	0	266,951	266,951
KRAFT FOODS										
AMMONIA	1,120	0	0	0	0	1,120	0	0	10,000	10,000
Facility Total	1,120	0	0	0	0	1,120	0	0	10,000	10,000
KUEHNE CHEMICAL										
CHLORINE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
MACDERMID										
METHYL ETHYL KETONE	269	0	65,683	852	0	66,804	24,140	859,865	0	884,005
TOLUENE DIISOCYANATE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	868	868
Facility Total	269	0	65,683	852	0	66,804	24,140	859,865	868	884,872

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS					ON SITE WASTE MANAGEMENT				
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
MARBLE WORKS										
STYRENE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
MCKEE RUN POWER PLANT										
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
MEDAL										
METHANOL	0	0	0	10,710	0	10,710	873,259	0	0	873,259
N-HEXANE	0	0	0	0	0	0	756,824	0	0	756,824
N-METHYL-2-PYRROLIDONE	27,680	7,740	0	0	0	35,420	0	0	0	0
Facility Total	27,680	7,740	0	10,710	0	46,130	1,630,083	0	0	1,630,083
METAL MASTERS										
CHROMIUM	0	100,027	0	0	750	100,777	0	0	0	0
NICKEL	0	3,556	0	0	750	4,306	0	0	0	0
TRICHLOROETHYLENE	0	0	0	0	0	0	18,720	0	0	18,720
Facility Total	0	103,583	0	0	1,500	105,083	18,720	0	0	18,720
MOTIVA										
1,2,4-TRIMETHYLBENZENE	0	34	10	0	0	44	0	0	370,000	370,000
1,3-BUTADIENE	0	0	0	0	0	0	0	0	0	0
2,4-DIMETHYLPHENOL	0	0	0	0	0	0	0	0	54,000	54,000
AMMONIA	0	0	0	0	0	0	0	13,000,000	15,000	13,015,000
ANTHRACENE	0	0	0	0	0	0	0	0	3	3
BENZENE	0	9	44	0	0	53	0	190,000	37,000	227,000
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	250	250
CARBON DISULFIDE	0	0	0	0	0	0	0	3,000	28,000	31,000
CARBONYL SULFIDE	0	0	0	0	0	0	0	1,000,000	77,000	1,077,000
CHROMIUM COMPOUNDS	0	640	0	0	110	750	0	0	0	0
COBALT COMPOUNDS	0	4,500	0	0	6,600	11,100	0	0	0	0
COPPER COMPOUNDS	0	64,000	0	0	0	64,000	0	0	0	0
CRESOL (MIXED ISOMERS)	0	4	0	0	0	4	0	22,000	260,000	282,000
CUMENE	0	0	0	0	0	0	0	0	110	110
CYANIDE COMPOUNDS	0	0	0	0	0	0	0	190,000	100,000	290,000
CYCLOHEXANE	0	150	36	0	0	186	0	0	3,000	3,000
DIETHANOLAMINE	0	34	0	0	0	34	0	0	89,000	89,000
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0

APPENDIX D

1. All values are in pounds

2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
MOTIVA, CONTINUED										
ETHYLBENZENE	0	100	59	0	0	159	0	0	12,000	12,000
ETHYLENE	0	0	0	0	0	0	0	0	6,300	6,300
ETHYLENE GLYCOL	0	34	0	0	0	34	0	0	33,000	33,000
FORMIC ACID	0	0	0	0	0	0	0	0	74,000	74,000
HYDROCHLORIC ACID AEROSOLS	0	0	0	0	0	0	0	0	240,000	240,000
HYDROGEN CYANIDE	0	0	0	0	0	0	0	190,000	100,000	290,000
LEAD COMPOUNDS	0	0	0	0	78	78	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MERCURY COMPOUNDS	0	9	0	0	11	20	0	0	0	0
METHANOL	0	33	0	0	0	33	0	120,000	17,000	137,000
METHYL TERT-BUTYL ETHER	0	210	0	0	0	210	0	0	150,000	150,000
MOLYBDENUM TRIOXIDE	0	3,900	0	0	0	3,900	0	0	0	0
NAPHTHALENE	0	4	10	0	0	14	0	0	790	790
N-BUTYL ALCOHOL	0	0	0	0	0	0	0	0	1,100	1,100
N-HEXANE	0	0	0	0	0	0	0	0	8,100	8,100
NICKEL COMPOUNDS	0	29,000	0	0	500	29,500	0	0	0	0
NITRATE COMPOUNDS	0	0	0	0	0	0	0	0	620,000	620,000
PHENANTHRENE	0	0	0	0	0	0	0	0	3	3
PHENOL	0	0	0	0	0	0	0	48,000	220,000	268,000
POLYCYCLIC AROMATIC COMPOUNDS	0	4	0	0	0	4	0	0	140	140
PROPYLENE	0	0	0	0	0	0	0	0	520,000	520,000
SODIUM NITRITE	0	0	0	0	0	0	0	0	990,000	990,000
STYRENE	0	0	0	0	0	0	0	0	46	46
SULFURIC ACID AEROSOLS	0	0	0	0	0	0	0	0	0	0
TETRACHLOROETHYLENE	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	430	260	0	0	690	0	0	140,000	140,000
VANADIUM COMPOUNDS	0	0	0	0	1,300	1,300	0	0	0	0
XYLENE (MIXED ISOMERS)	0	390	250	0	0	640	0	0	90,000	90,000
ZINC COMPOUNDS	0	54,000	0	0	1,000	55,000	0	0	0	0
Facility Total	0	157,485	669	0	9,599	167,753	0	14,763,000	4,255,842	19,018,842
MOUNTAIRE FARMS OF DELAWARE										
COPPER COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MANGANESE	0	0	0	0	0	0	0	0	0	0
ZINC (FUME OR DUST)	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
MOUNTAIRE FARMS OF DLEMARVA - FEEDMILL										
COPPER COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
NORAMCO										
DICHLOROMETHANE	0	0	94,966	18,720	0	113,686	1,745,826	0	0	1,745,826
METHANOL	3,467	0	347,280	68,458	0	419,205	376,241	0	0	376,241
N-BUTYL ALCOHOL	2,805	0	14,480	2,854	0	20,139	0	0	0	0
TOLUENE	0	0	574,251	113,200	0	687,451	683,050	0	0	683,050
Facility Total	6,272	0	1,030,977	203,232	0	1,240,481	2,805,117	0	0	2,805,117
NRG DOVER										
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID AEROSOLS	0	0	0	0	0	0	0	0	0	0
LEAD COMPOUNDS	0	0	0	0	896	896	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	6	6	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
SULFURIC ACID AEROSOLS	0	0	0	0	0	0	0	0	22,500	22,500
Facility Total	0	0	0	0	902	902	0	0	22,500	22,500
NVF YORKLYN										
ZINC COMPOUNDS	7,290	0	0	0	4,624	11,914	4,270,402	0	0	4,270,402
Facility Total	7,290	0	0	0	4,624	11,914	4,270,402	0	0	4,270,402
OCCIDENTAL CHEMICAL										
CHLORINE	0	0	0	565	0	565	0	0	2,461,800	2,461,800
CHLOROFORM	0	0	0	10,791	0	10,791	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MERCURY	0	0	0	0	1,144	1,144	3,675	0	0	3,675
Facility Total	0	0	0	11,356	1,144	12,500	3,675	0	2,461,800	2,465,475
ORIENT										
ANILINE	63	0	0	0	540	603	0	0	10,171	10,171
CHROMIUM COMPOUNDS	0	0	0	0	500	500	0	0	0	0
NITROBENZENE	1	0	0	0	360	361	0	0	0	0
Facility Total	64	0	0	0	1,400	1,464	0	0	10,171	10,171

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
PERDUE AGRIRECYCLE										
AMMONIA	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
PERDUE BRIDGEVILLE										
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
COPPER COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
PERDUE GEORGETOWN										
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
NITRATE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
PINNACLE FOODS										
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
PLAYTEX PRODUCTS										
CHLORINE	0	0	0	0	0	0	0	0	3,500	3,500
NITRIC ACID	0	0	0	19,800	0	19,800	0	0	2,000	2,000
Facility Total	0	0	0	19,800	0	19,800	0	0	5,500	5,500
PPG DOVER										
CERTAIN GLYCOL ETHERS	0	0	0	2,320	0	2,320	0	0	0	0
DIBUTYL PHTHALATE	0	0	0	0	0	0	0	0	0	0
ETHYLENE GLYCOL	0	0	0	30,166	0	30,166	0	0	0	0
LEAD	0	0	0	0	0	0	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	17,708	17,708	0	0	0	0
Facility Total	0	0	0	32,486	17,708	50,194	0	0	0	0
PPG INDUSTRIES WORKS 32										
DIISOCYANATES	0	0	500	0	250	750	0	0	0	0
Facility Total	0	0	500	0	250	750	0	0	0	0
PROCINO PLATING										
LEAD	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0

APPENDIX D

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	Alphabetical By Facility	POTW	RECYCLE	ENERGY	TREAT-	DISPOSAL	TOTAL	RECYCLE	ENERGY	TREAT-	TOTAL
				RECOVERY	MENT				RECOVERY	MENT	
RODEL											
DIISOCYANATES	0	0	0	920	0	920	0	0	0	0	0
METHYL ETHYL KETONE	0	0	7,877	77	0	7,954	0	0	166,947	166,947	166,947
N,N-DIMETHYLFORMAMIDE	237,774	0	540,431	1,870	36	780,111	3,067,083	0	1,270	3,068,353	3,068,353
PHTHALIC ANHYDRIDE	0	0	0	790	0	790	0	0	0	0	0
Facility Total	237,774	0	548,308	3,657	36	789,775	3,067,083	0	168,217	3,235,300	3,235,300
RODEL TECHNICAL CENTER											
4,4'-METHYLENEBIS(2-CHLOROANILINE)	0	0	1,080	1,801	0	2,881	0	0	0	0	0
N-METHYL-2-PYRROLIDONE	0	0	32,528	0	0	32,528	0	0	0	0	0
Facility Total	0	0	33,608	1,801	0	35,409	0	0	0	0	0
ROLLER SERVICE											
DI(2-ETHYLHEXYL) PHTHALATE	0	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0	0
SERVICE ENERGY DOVER											
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0	0
SERVICE ENERGY MILFORD											
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0	0
SPATZ FIBERGLASS											
STYRENE	0	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0	0
SPI PHARMA											
CHLORINE	0	0	0	0	0	0	0	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0	0
SPI POLYOLS											
NICKEL COMPOUNDS	111	14,317	0	0	21,616	36,044	6,100	0	0	6,100	6,100
NITRATE COMPOUNDS	0	0	0	0	0	0	0	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0	0
Facility Total	111	14,317	0	0	21,616	36,044	6,100	0	0	6,100	6,100

APPENDIX D

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

APPENDIX D

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY FACILITY

All amounts are in pounds	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
Alphabetical By Facility	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
SUNOCO										
BENZENE	0	0	0	0	0	0	0	0	0	0
ETHYLENE	0	0	0	0	0	0	0	0	0	0
ETHYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
SUNROC										
CHROMIUM	0	2,513	0	0	0	2,513	0	0	0	0
COPPER	0	8,525	0	0	0	8,525	0	0	0	0
Facility Total	0	11,038	0	0	0	11,038	0	0	0	0
TFL USA/CANADA										
DIISOCYANATES	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
UNIQEMA										
4,4'-ISOPROPYLIDENEDIPHENOL	1,737	0	0	0	0	1,737	0	0	0	0
BIS(2-CHLOROETHYL) ETHER	2,745	0	0	0	0	2,745	0	0	0	0
CERTAIN GLYCOL ETHERS	3,456	0	0	0	0	3,456	0	1,480	1,480	0
DIETHYL SULFATE	0	0	0	0	0	0	0	0	0	0
ETHYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
PHENOL	448	0	0	0	0	448	0	192	192	0
PROPYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
Facility Total	8,386	0	0	0	0	8,386	0	0	1,672	1,672
VP RACING FUELS										
BENZENE	0	0	0	0	0	0	0	0	0	0
LEAD COMPOUNDS	0	0	0	0	0	0	0	0	0	0
METHANOL	0	0	0	0	0	0	0	0	0	0
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
W.L. GORE OTTS CHAPEL										
LEAD	0	417	0	0	22	439	0	0	0	0
Facility Total	0	417	0	0	22	439	0	0	0	0
STATE TOTALS	1,201,161	9,248,730	2,538,090	398,572	4,196,691	17,583,245	25,033,817	15,740,469	33,376,885	74,151,170

APPENDIX D

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

APPENDIX E

2002 ON-SITE RELEASE SUMMARY BY FACILITY

RANKED BY ON-SITE RELEASES (in pounds)

FACILITY	AIR	WATER	LAND	ON-SITE RELEASES	OFF SITE TRANSFERS	ON-SITE WASTE MGMT.
INDIAN RIVER POWER PLANT	1,541,902	120	504,987	2,047,009	0	803,000
EDGE MOOR/HAY ROAD POWER PLANTS	1,963,752	16,326	0	1,980,078	308,070	146,694
MOTIVA	919,528	168,986	306,542	1,395,057	167,753	19,018,842
PERDUE GEORGETOWN	0	550,000	160	550,160	0	0
DUPONT SEAFORD	373,593	146,008	2,120	521,721	7,007	134,979
DAIMLER CHRYSLER	371,459	0	0	371,459	382,318	47,534
GENERAL MOTORS	284,601	200	0	284,801	461,608	77,660
FORMOSA PLASTICS	226,402	0	0	226,402	0	167,000
DUPONT EDGE MOOR	171,472	37,570	0	209,042	3,797,227	22,446,000
SUNOCO	57,063	0	0	57,063	0	0
NRG DOVER	55,956	0	0	55,956	902	22,500
KANEKA	36,659	1	0	36,660	5	266,951
RODEL	34,094	0	0	34,094	789,775	3,235,300
DOW REICHHOLD	33,510	0	0	33,510	1,044	1,810,781
JUSTIN TANKS	32,151	0	0	32,151	330	0
CIBA SPECIALTY CHEMICALS	28,151	0	0	28,151	2,414,496	421,289
D & B INDUSTRIAL GROUP	26,224	0	0	26,224	11,745	0
GENERAL CHEMICAL	14,456	1,068	0	15,524	3,892	72,050
PERDUE AGRIRECYCLE	14,000	0	0	14,000	0	0
HONEYWELL	13,112	0	0	13,112	104,709	0
CAMDEL METALS	12,623	0	0	12,623	37,842	13,100,000
HIRSH INDUSTRIES	12,612	0	0	12,612	0	0
MACDERMID	11,387	0	0	11,387	66,804	884,872
HANOVER FOODS	10,240	0	0	10,240	0	0
NVF YORKLYN	0	8,013	0	8,013	11,914	4,270,402
UNIQEMA	7,491	0	0	7,491	8,386	1,672
AMERICAN MINERALS	5,819	455	0	6,274	0	0
NORAMCO	5,245	0	0	5,245	1,240,481	2,805,117
CITISTEEL	3,929	40	576	4,544	2,400,626	0
SPATZ FIBERGLASS	4,474	0	0	4,474	0	0
JOHNSON POLYMER	4,282	0	0	4,282	5,613	2,106
RODEL TECHNICAL CENTER	2,976	0	0	2,976	35,409	0
ORIENT	2,822	0	0	2,822	1,464	10,171
OCCIDENTAL CHEMICAL	2,376	21	0	2,397	12,500	2,465,475
MARBLE WORKS	2,371	0	0	2,371	0	0
AVECIA	1,649	0	0	1,649	147,976	87,563
ARLON	1,500	0	0	1,500	5,215	117,604
AGILENT TECHNOLOGIES LITTLE FALLS	1,422	0	0	1,422	29,280	0
AGILENT TECHNOLOGIES NEWPORT	854	0	0	854	9,348	0
MEDAL	750	0	0	750	46,130	1,630,083
BIRDS EYE FOODS	560	0	0	560	0	0
DENTSPLY CAULK WEST	500	0	0	500	13,277	0
HARDCORE COMPOSITES	463	0	0	463	0	0
GREEN TREE CHEMICAL	349	0	0	349	9,743	0
ASTROPOWER SOLAR PARK	265	0	0	265	0	51,160
ASTROPOWER PENCADER	258	0	0	258	115	13,760
JOHNSON CONTROLS	202	5	0	207	4,571,673	0
DENTSPLY CAULK MAIN	165	0	0	165	36,320	270

All values are in pounds
Source: DNREC 2002 Database, February 2004

APPENDIX E

2002 ON-SITE RELEASE SUMMARY BY FACILITY

RANKED BY ON-SITE RELEASES (in pounds)

FACILITY	AIR	WATER	LAND	ON-SITE RELEASES	OFF SITE TRANSFERS	ON-SITE WASTE MGMT.
PPG DOVER	89	0	0	89	50,194	0
PLAYTEX PRODUCTS	38	0	0	38	19,800	5,500
METAL MASTERS	20	0	0	20	105,083	18,720
SPI POLYOLS	10	0	0	10	36,044	6,100
E-A-R	6	0	0	6	3,670	0
KRAFT FOODS	5	0	0	5	1,120	10,000
KUEHNE CHEMICAL	5	0	0	5	0	0
VP RACING FUELS	4	0	0	4	0	0
PINNACLE FOODS	2	0	0	2	0	0
GAC	1	0	0	1	0	0
DOVER AFB	1	0	0	1	0	0
W.L. GORE OTTS CHAPEL SITE	0.34	0.00	0.00	0.34	439	0
MCKEE RUN POWER PLANT	0.18	0.00	0.00	0.18	0	0
INSTEEL WIRE	0.003	0.000	0.000	0.003	2,286	0
ALLENS HATCHERY	0	0	0	0	0	0
AMETEK	0	0	0	0	0	0
BLADES BULK PLANT	0	0	0	0	0	0
CARL KING	0	0	0	0	0	0
CHROME DEPOSIT	0	0	0	0	3,720	0
CLARIANT	0	0	0	0	0	0
CUSTOM DECORATIVE MOULDINGS	0	0	0	0	0	0
HALKO MFG.	0	0	0	0	208,000	0
HERCULES RESEARCH CENTER	0	0	0	0	0	0
IKO PRODUCTION	0	0	0	0	102	15
INTERVET	0	0	0	0	2	0
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0
MOUNTAIRE FARMS OF DLEMARVA - FEEDMILL	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0
PPG INDUSTRIES WORKS 32	0	0	0	0	750	0
PROCINO PLATING	0	0	0	0	0	0
ROLLER SERVICE	0	0	0	0	0	0
SERVICE ENERGY DOVER	0	0	0	0	0	0
SERVICE ENERGY MILFORD	0	0	0	0	0	0
SPI PHARMA	0	0	0	0	0	0
SUNROC	0	0	0	0	11,038	0
TFL USA/CANADA	0	0	0	0	0	0
FACILITY TOTALS	6,295,850	928,813	814,385	8,039,048	17,583,245	74,151,170

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
1,1-DICHLORO-1-FLUOROETHANE							
GREEN TREE CHEMICAL		238	0	0	238	3,365	0
CHEMICAL TOTAL		238	0	0	238	3,365	0
1,2,4-TRIMETHYLBENZENE							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		62,200	0	0	62,200	11,200	4,600
GAC	1	0	0	0	0	0	0
GENERAL MOTORS		8,190	0	0	8,190	26,096	8,500
MOTIVA		1,920	0	0	1,920	44	370,000
SERVICE ENERGY DOVER	1	0	0	0	0	0	0
SERVICE ENERGY MILFORD	1	0	0	0	0	0	0
CHEMICAL TOTAL		72,310	0	0	72,310	37,340	383,100
1,3-BUTADIENE							
DOW REICHOLD		16,599	0	0	16,599	0	1,159,617
MOTIVA		770	0	0	770	0	0
CHEMICAL TOTAL		17,369	0	0	17,369	0	1,159,617
1,3-DICHLOROPROPYLENE							
HONEYWELL		27	0	0	27	13,711	0
CHEMICAL TOTAL		27	0	0	27	13,711	0
2,4-DIMETHYLPHENOL							
MOTIVA		0	550	0	550	0	54,000
CHEMICAL TOTAL		0	550	0	550	0	54,000
4,4'-ISOPROPYLIDENEDIPHENOL							
UNIQEMA		1,194	0	0	1,194	1,737	0
CHEMICAL TOTAL		1,194	0	0	1,194	1,737	0

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

F -1

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
4,4'-METHYLENEBIS(2-CHLOROANILINE)							
RODEL TECHNICAL CENTER		2	0	0	2	2,881	0
CHEMICAL TOTAL		2	0	0	2	2,881	0
ACRYLIC ACID							
DOW REICHHOLD		1,125	0	0	1,125	155	0
CHEMICAL TOTAL		1,125	0	0	1,125	155	0
ACRYLONITRILE							
DOW REICHHOLD		3,587	0	0	3,587	151	501,672
CHEMICAL TOTAL		3,587	0	0	3,587	151	501,672
AMMONIA							
AVECIA		11	0	0	11	21,109	0
BIRDS EYE FOODS		560	0	0	560	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		29,054	5	0	29,059	0	0
FORMOSA PLASTICS		7,903	0	0	7,903	0	0
GENERAL CHEMICAL		500	1,068	0	1,568	2,183	0
HANOVER FOODS		10,240	0	0	10,240	0	0
HONEYWELL		5,160	0	0	5,160	2,895	0
INDIAN RIVER POWER PLANT		18,000	0	0	18,000	0	400,000
JOHNSON POLYMER		3,399	0	0	3,399	3,810	0
KRAFT FOODS		5	0	0	5	1,120	10,000
MOTIVA		18,018	1,800	0	19,818	0	13,015,000
PERDUE AGRIRECYCLE		14,000	0	0	14,000	0	0
CHEMICAL TOTAL		106,850	2,873	0	109,723	31,117	13,425,000
ANILINE							
CIBA SPECIALTY CHEMICALS		41	0	0	41	87,736	0
ORIENT		2,608	0	0	2,608	603	10,171
CHEMICAL TOTAL		2,649	0	0	2,649	88,339	10,171

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
ANTHRACENE							
GAC	1	0	0	0	0	0	0
MOTIVA		0	0	0	0	0	3
CHEMICAL TOTAL		0	0	0	0	0	3
ANTIMONY							
HALKO MFG.		0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0
ANTIMONY COMPOUNDS							
DUPONT SEAFORD		14	0	0	14	0	0
JOHNSON CONTROLS		0	0	0	0	14,044	0
CHEMICAL TOTAL		14	0	0	14	14,044	0
ASBESTOS (FRIABLE)							
GAC	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0
BARIUM							
AMERICAN MINERALS		31	79	0	110	0	0
CHEMICAL TOTAL		31	79	0	110	0	0
BARIUM COMPOUNDS							
DUPONT EDGE MOOR		2	656	0	658	27,753	0
EDGE MOOR/HAY ROAD POWER PLANTS		5,676	1,201	0	6,877	116,686	0
INDIAN RIVER POWER PLANT		1,705	0	270,000	271,705	0	0
CHEMICAL TOTAL		7,383	1,857	270,000	279,240	144,439	0

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
BENZENE							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER	1	0	0	0	0	0	0
GENERAL MOTORS		250	0	0	250	4	0
MOTIVA		4,300	6,100	0	10,400	53	227,000
SUNOCO		1,092	0	0	1,092	0	0
VP RACING FUELS	1	0	0	0	0	0	0
CHEMICAL TOTAL		5,642	6,100	0	11,742	57	227,000
BENZO(G,H,I)PERYLENE							
DUPONT EDGE MOOR		0	0	0	0	0	0
DUPONT SEAFORD		0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		0	0	0	0	0	0
HERCULES RESEARCH CENTER		0	0	0	0	0	0
INDIAN RIVER POWER PLANT		0	0	0	0	0	0
MCKEE RUN POWER PLANT		0	0	0	0	0	0
MOTIVA		1	3	0	3	0	250
NRG DOVER		0	0	0	0	0	0
PERDUE BRIDGEVILLE		0	0	0	0	0	0
PERDUE GEORGETOWN		0	0	0	0	0	0
PINNACLE FOODS		0	0	0	0	0	0
CHEMICAL TOTAL		1	3	0	3	0	250
BIPHENYL							
CIBA SPECIALTY CHEMICALS		123	0	0	123	198,411	2,321
DUPONT SEAFORD		4,700	0	0	4,700	7,000	0
CHEMICAL TOTAL		4,823	0	0	4,823	205,411	2,321
BIS(2-CHLOROETHYL) ETHER							
UNIQEMA		255	0	0	255	2,745	0
CHEMICAL TOTAL		255	0	0	255	2,745	0

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
BORON TRIFLUORIDE							
HONEYWELL		215	0	0	215	13,780	0
CHEMICAL TOTAL		215	0	0	215	13,780	0
BUTYL ACRYLATE							
DOW REICHHOLD		586	0	0	586	8	115
JOHNSON POLYMER		156	0	0	156	30	39
CHEMICAL TOTAL		742	0	0	742	38	154
CARBON DISULFIDE							
MOTIVA		33	0	0	33	0	31,000
CHEMICAL TOTAL		33	0	0	33	0	31,000
CARBONYL SULFIDE							
DUPONT EDGE MOOR		163,000	0	0	163,000	0	0
MOTIVA		350	0	0	350	0	1,077,000
CHEMICAL TOTAL		163,350	0	0	163,350	0	1,077,000
CERTAIN GLYCOL ETHERS							
AVECIA		1	0	0	1	1,797	0
DAIMLER CHRYSLER		134,000	0	0	134,000	193,507	24,000
GENERAL MOTORS		83,400	0	0	83,400	62,960	40,000
GREEN TREE CHEMICAL		0	0	0	0	1,629	0
HIRSH INDUSTRIES		12,612	0	0	12,612	0	0
JOHNSON POLYMER		10	0	0	10	1,699	0
PPG DOVER		34	0	0	34	2,320	0
UNIQEMA		255	0	0	255	3,456	1,480
CHEMICAL TOTAL		230,312	0	0	230,312	267,368	65,480

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
CHLORINE							
DUPONT EDGE MOOR		1,360	0	0	1,360	0	2,908,000
KUEHNE CHEMICAL		5	0	0	5	0	0
OCCIDENTAL CHEMICAL		1,079	0	0	1,079	565	2,461,800
PLAYTEX PRODUCTS		4	0	0	4	0	3,500
SPI PHARMA	1	0	0	0	0	0	0
CHEMICAL TOTAL		2,448	0	0	2,448	565	5,373,300
CHLOROETHANE							
HONEYWELL	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0
CHLOROFORM							
OCCIDENTAL CHEMICAL		223	0	0	223	10,791	0
CHEMICAL TOTAL		223	0	0	223	10,791	0
CHROMIUM							
CAMDEL METALS		0	0	0	0	20,717	0
METAL MASTERS		5	0	0	5	100,777	0
SUNROC		0	0	0	0	2,513	0
CHEMICAL TOTAL		5	0	0	5	124,007	0
CHROMIUM COMPOUNDS							
CITISTEEL		118	2	53	173	32,947	0
DUPONT EDGE MOOR		1	63	0	64	224,024	0
DUPONT SEAFORD		3,576	0	0	3,576	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		993	750	0	1,743	29,374	0
INDIAN RIVER POWER PLANT		715	0	36,000	36,715	0	0
MOTIVA		351	10	37,000	37,361	750	0
ORIENT		0	0	0	0	500	0
CHEMICAL TOTAL		5,754	825	73,053	79,632	287,595	0

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
COBALT COMPOUNDS							
DUPONT EDGE MOOR		2	53	0	55	9,901	0
EDGE MOOR/HAY ROAD POWER PLANTS		857	0	0	857	24,334	0
MOTIVA		410	12	500	922	11,100	0
CHEMICAL TOTAL		1,269	65	500	1,834	45,335	0
COPPER							
DENTSPLY CAULK MAIN		0	0	0	0	0	0
SUNROC		0	0	0	0	8,525	0
CHEMICAL TOTAL		0	0	0	0	8,525	0
COPPER COMPOUNDS							
ALLENS HATCHERY	1	0	0	0	0	0	0
AVECIA		0	0	0	0	772	0
CITISTEEL		99	5	17	121	31,146	0
DUPONT EDGE MOOR		1	317	0	318	3,629	0
EDGE MOOR/HAY ROAD POWER PLANTS		1,400	11,787	0	13,187	23,572	0
INDIAN RIVER POWER PLANT		195	120	23,000	23,315	0	0
MOTIVA		2,500	68	130	2,698	64,000	0
MOUNTAIRE FARMS OF DELAWARE	1	0	0	0	0	0	0
MOUNTAIRE FARMS FEEDMILL	1	0	0	0	0	0	0
PERDUE BRIDGEVILLE	1	0	0	0	0	0	0
CHEMICAL TOTAL		4,195	12,297	23,147	39,639	123,119	0
CRESOL (MIXED ISOMERS)							
MOTIVA		0	56,000	0	56,000	4	282,000
CHEMICAL TOTAL		0	56,000	0	56,000	4	282,000
CUMENE							
MOTIVA		141	0	0	141	0	110
CHEMICAL TOTAL		141	0	0	141	0	110

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
CYANIDE COMPOUNDS							
MOTIVA		2,200	1,100	0	3,300	0	290,000
CHEMICAL TOTAL		2,200	1,100	0	3,300	0	290,000
CYCLOHEXANE							
CARL KING	1	0	0	0	0	0	0
CIBA SPECIALTY CHEMICALS		83	0	0	83	7,331	5,090
DAIMLER CHRYSLER		533	0	0	533	0	0
MOTIVA		14,200	0	0	14,200	186	3,000
CHEMICAL TOTAL		14,816	0	0	14,816	7,517	8,090
DI(2-ETHYLHEXYL) PHTHALATE							
ROLLER SERVICE	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0
DIBUTYL PHTHALATE							
PPG DOVER	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0
DICHLOROMETHANE							
NORAMCO		2,757	0	0	2,757	113,686	1,745,826
CHEMICAL TOTAL		2,757	0	0	2,757	113,686	1,745,826
DIETHANOLAMINE							
MOTIVA		1	890	0	891	34	89,000
CHEMICAL TOTAL		1	890	0	891	34	89,000
DIETHYL SULFATE							
UNIQEMA	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
DIISOCYANATES							
CUSTOM DECORATIVE MOULDINGS	1	0	0	0	0	0	0
E-A-R		2	0	0	2	920	0
PPG INDUSTIRES WORKS 32		0	0	0	0	750	0
RODEL		2	0	0	2	920	0
TFL USA/CANADA	1	0	0	0	0	0	0
CHEMICAL TOTAL		4	0	0	4	2,590	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS							
DUPONT EDGE MOOR		0	0	0	0	153	0
DUPONT SEAFORD		0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		0	0	0	0	0	0
FORMOSA PLASTICS		0	0	0	0	0	0
INDIAN RIVER POWER PLANT		0	0	0	0	0	0
MOTIVA		0	0	0	0	0	0
OCCIDENTAL CHEMICAL		0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	153	0
ETHYL ACRYLATE							
DOW REICHHOLD		499	0	0	499	0	617
JOHNSON POLYMER	1	0	0	0	0	0	0
CHEMICAL TOTAL		499	0	0	499	0	617
ETHYLBENZENE							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		12,300	0	0	12,300	16,470	74
GENERAL MOTORS		127	0	0	127	9	460
MOTIVA		4,170	1,300	3	5,473	159	12,000
CHEMICAL TOTAL		16,597	1,300	3	17,900	16,638	12,534

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
ETHYLENE							
MOTIVA		142	0	0	142	0	6,300
SUNOCO		52,380	0	0	52,380	0	0
CHEMICAL TOTAL		52,522	0	0	52,522	0	6,300
ETHYLENE GLYCOL							
AVECIA		15	0	0	15	31,137	0
DAIMLER CHRYSLER		101	0	0	101	12,260	0
EDGE MOOR/HAY ROAD POWER PLANTS	1	0	0	0	0	0	0
GENERAL MOTORS		0	0	0	0	880	0
MOTIVA		0	330	0	330	34	33,000
PPG DOVER		10	0	0	10	30,166	0
CHEMICAL TOTAL		126	330	0	456	74,477	33,000
ETHYLENE OXIDE							
SUNOCO		3,440	0	0	3,440	0	0
UNIQEMA		3,690	0	0	3,690	0	0
CHEMICAL TOTAL		7,130	0	0	7,130	0	0
FORMALDEHYDE							
DOW REICHHOLD		1,965	0	0	1,965	0	0
CHEMICAL TOTAL		1,965	0	0	1,965	0	0
FORMIC ACID							
AVECIA		89	0	0	89	184	87,563
MOTIVA		0	0	0	0	0	74,000
CHEMICAL TOTAL		89	0	0	89	184	161,563
HEXACHLOROBENZENE							
DUPONT EDGE MOOR		0	53	0	53	2,747	0
CHEMICAL TOTAL		0	53	0	53	2,747	0

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
HYDROCHLORIC ACID AEROSOLS							
DUPONT EDGE MOOR		4,805	0	0	4,805	0	17,820,000
DUPONT SEAFORD		284,443	0	0	284,443	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		1,718,743	0	0	1,718,743	0	0
INDIAN RIVER POWER PLANT		1,300,000	0	0	1,300,000	0	0
KANEKA		322	0	0	322	0	99,046
MOTIVA		200,000	0	0	200,000	0	240,000
NRG DOVER		33,400	0	0	33,400	0	0
CHEMICAL TOTAL		3,541,713	0	0	3,541,713	0	18,159,046
HYDROGEN CYANIDE							
MOTIVA		2,200	1,100	0	3,300	0	290,000
CHEMICAL TOTAL		2,200	1,100	0	3,300	0	290,000
HYDROGEN FLUORIDE							
ASTROPOWER PENCADER		255	0	0	255	0	13,760
ASTROPOWER SOLAR PARK		255	0	0	255	0	35,810
EDGE MOOR/HAY ROAD POWER PLANTS		83,709	0	0	83,709	0	8,890
GENERAL CHEMICAL		1,154	0	0	1,154	0	72,050
INDIAN RIVER POWER PLANT		120,000	0	0	120,000	0	13,000
CHEMICAL TOTAL		205,373	0	0	205,373	0	143,510
LEAD							
AMERICAN MINERALS		4	1	0	5	0	0
AMETEK		0	0	0	0	0	0
CHROME DEPOSIT		0	0	0	0	3,720	0
HALKO MFG.		0	0	0	0	208,000	0
PPG DOVER		0	0	0	0	0	0
PROCINO PLATING		0	0	0	0	0	0
W.L. GORE OTTS CHAPEL SITE		0	0	0	0	439	0
CHEMICAL TOTAL		4	1	0	5	212,159	0

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

F -11

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
LEAD COMPOUNDS							
ASTROPOWER PENCADER		3	0	0	3	115	0
CIBA SPECIALTY CHEMICALS		341	0	0	341	0	0
CITISTEEL		524	3	30	557	253,638	0
DENTSPLY CAULK MAIN		0	0	0	0	0	270
DUPONT EDGE MOOR		1	43	0	44	51,222	0
DUPONT SEAFORD		53	0	2,018	2,071	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		1,148	637	0	1,784	10,299	0
GENERAL CHEMICAL		42	0	0	42	1,709	0
INDIAN RIVER POWER PLANT		773	0	14,895	15,668	0	0
INSTEEL WIRE		0	0	0	0	2,286	0
JOHNSON CONTROLS		202	5	0	207	4,557,629	0
MOTIVA		600	1	29	630	78	0
NRG DOVER		11	0	0	11	896	0
VP RACING FUELS		4	0	0	4	0	0
CHEMICAL TOTAL		3,701	689	16,972	21,362	4,877,872	270
MANGANESE							
CAMDEL METALS		0	0	0	0	2,504	0
MOUNTAIRE FARMS OF DELAWARE	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	2,504	0
MANGANESE COMPOUNDS							
ALLENS HATCHERY	1	0	0	0	0	0	0
AMERICAN MINERALS		5,751	350	0	6,101	0	0
CITISTEEL		366	11	342	719	172,203	0
DAIMLER CHRYSLER		0	0	0	0	4,590	0
DUPONT EDGE MOOR		2	34,910	0	34,912	3,348,690	0
EDGE MOOR/HAY ROAD POWER PLANTS		1,019	750	0	1,769	26,816	0
INDIAN RIVER POWER PLANT		945	0	45,000	45,945	0	0
MOTIVA		1,614	2,900	5,500	10,014	0	0
MOUNTAIRE FARMS FEEDMILL	1	0	0	0	0	0	0
PERDUE BRIDGEVILLE	1	0	0	0	0	0	0
CHEMICAL TOTAL		9,697	38,921	50,842	99,460	3,552,299	0

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
MERCURY							
DENTSPLY CAULK MAIN		0	0	0	0	28,100	0
OCCIDENTAL CHEMICAL		1,074	21	0	1,095	1,144	3,675
CHEMICAL TOTAL		1,074	21	0	1,095	29,244	3,675
MERCURY COMPOUNDS							
CITISTEEL		28	0	0	28	27	0
DUPONT SEAFORD		117	0	102	219	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		148	0	0	148	58	0
INDIAN RIVER POWER PLANT		73	0	92	165	0	0
INTERVET		0	0	0	0	2	0
MOTIVA		38	0	0	38	20	0
NRG DOVER		45	0	0	45	6	0
CHEMICAL TOTAL		449	0	194	644	113	0
METHANOL							
AGILENT TECHNOLOGIES NEWPORT		854	0	0	854	9,348	0
AVECIA		1,485	0	0	1,485	92,134	0
CIBA SPECIALTY CHEMICALS		25,792	0	0	25,792	2,057,514	413,778
DAIMLER CHRYSLER		1,180	0	0	1,180	380	0
DENTSPLY CAULK MAIN		165	0	0	165	3,303	0
DENTSPLY CAULK WEST		250	0	0	250	10,275	0
DOW REICHHOLD		6	0	0	6	10	296
GENERAL MOTORS		11,200	0	0	11,200	26,017	1,500
MEDAL		250	0	0	250	10,710	873,259
MOTIVA		34,960	140	0	35,100	33	137,000
NORAMCO		1,464	0	0	1,464	419,205	376,241
VP RACING FUELS	1	0	0	0	0	0	0
CHEMICAL TOTAL		77,606	140	0	77,746	2,628,929	1,802,074

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

F -13

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
METHYL ETHYL KETONE							
D & B INDUSTRIAL GROUP		26,224	0	0	26,224	11,745	0
MACDERMID		11,367	0	0	11,367	66,804	884,005
RODEL		10,877	0	0	10,877	7,954	166,947
CHEMICAL TOTAL		48,468	0	0	48,468	86,503	1,050,952
METHYL ISOBUTYL KETONE							
DAIMLER CHRYSLER		28,000	0	0	28,000	47,600	0
CHEMICAL TOTAL		28,000	0	0	28,000	47,600	0
METHYL METHACRYLATE							
DENTSPLY CAULK WEST		250	0	0	250	3,002	0
DOW REICHHOLD		1,941	0	0	1,941	55	719
JOHNSON POLYMER		376	0	0	376	35	1,178
CHEMICAL TOTAL		2,567	0	0	2,567	3,092	1,897
METHYL TERT-BUTYL ETHER							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		1,283	0	0	1,283	0	0
GENERAL MOTORS		754	0	0	754	43	0
MOTIVA		22,400	470	0	22,870	210	150,000
VP RACING FUELS	1	0	0	0	0	0	0
CHEMICAL TOTAL		24,437	470	0	24,907	253	150,000
MOLYBDENUM TRIOXIDE							
MOTIVA		400	2,000	2,900	5,300	3,900	0
CHEMICAL TOTAL		400	2,000	2,900	5,300	3,900	0
N,N-DIMETHYLFORMAMIDE							
RODEL		23,213	0	0	23,213	780,111	3,068,353
CHEMICAL TOTAL		23,213	0	0	23,213	780,111	3,068,353

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
NAPHTHALENE							
DOVER AFB		1	0	0	1	0	0
MOTIVA		720	0	0	720	14	790
CHEMICAL TOTAL		721	0	0	721	14	790
N-BUTYL ALCOHOL							
DAIMLER CHRYSLER		51,200	0	0	51,200	4,300	6,900
GENERAL MOTORS		36,120	0	0	36,120	620	17,000
MOTIVA		570	11	0	581	0	1,100
NORAMCO		1	0	0	1	20,139	0
CHEMICAL TOTAL		87,891	11	0	87,902	25,059	25,000
N-HEXANE							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		533	0	0	533	0	0
HONEYWELL		7,050	0	0	7,050	66,089	0
MEDAL		250	0	0	250	0	756,824
MOTIVA		58,810	0	0	58,810	0	8,100
CHEMICAL TOTAL		66,643	0	0	66,643	66,089	764,924
NICKEL							
CAMDEL METALS		0	0	0	0	13,290	0
METAL MASTERS		5	0	0	5	4,306	0
CHEMICAL TOTAL		5	0	0	5	17,596	0

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
NICKEL COMPOUNDS							
AMERICAN MINERALS		11	10	0	21	0	0
CITISTEEL		19	3	21	43	3,416	0
DUPONT EDGE MOOR		33	147	0	180	27,388	0
EDGE MOOR/HAY ROAD POWER PLANTS		9,272	1,196	0	10,468	23,839	0
INDIAN RIVER POWER PLANT		545	0	27,000	27,545	0	0
MOTIVA		9,401	1,400	70,000	80,801	29,500	0
SPI POLYOLS		10	0	0	10	36,044	6,100
CHEMICAL TOTAL		19,291	2,756	97,021	119,068	120,187	6,100
NITRATE COMPOUNDS							
DAIMLER CHRYSLER		0	0	0	0	29,018	0
DUPONT SEAFORD		0	145,100	0	145,100	7	0
EDGE MOOR/HAY ROAD POWER PLANTS	1	0	0	0	0	0	0
MOTIVA		0	580	0	580	0	620,000
PERDUE GEORGETOWN		0	550,000	160	550,160	0	0
SPI POLYOLS	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	695,680	160	695,840	29,025	620,000
NITRIC ACID							
ASTROPOWER SOLAR PARK		10	0	0	10	0	15,350
DAIMLER CHRYSLER		29	0	0	29	0	2,900
PLAYTEX PRODUCTS		34	0	0	34	19,800	2,000
SPI PHARMA	1	0	0	0	0	0	0
SPI POLYOLS	1	0	0	0	0	0	0
CHEMICAL TOTAL		73	0	0	73	19,800	20,250
NITROBENZENE							
ORIENT		214	0	0	214	361	0
CHEMICAL TOTAL		214	0	0	214	361	0

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
N-METHYL-2-PYRROLIDONE							
DAIMLER CHRYSLER		37,000	0	0	37,000	722	4,200
GENERAL MOTORS		19,300	0	0	19,300	15	200
MEDAL		250	0	0	250	35,420	0
RODEL TECHNICAL CENTER		2,974	0	0	2,974	32,528	0
CHEMICAL TOTAL		59,524	0	0	59,524	68,685	4,400
N-METHYLOLACRYLAMIDE							
DOW REICHHOLD		268	0	0	268	0	0
CHEMICAL TOTAL		268	0	0	268	0	0
OCTACHLOROSTYRENE							
DUPONT EDGE MOOR		0	0	0	0	470	0
CHEMICAL TOTAL		0	0	0	0	470	0
P-CHLOROANILINE							
CIBA SPECIALTY CHEMICALS		17	0	0	17	57,370	0
CHEMICAL TOTAL		17	0	0	17	57,370	0
PENTACHLOROBENZENE							
DUPONT EDGE MOOR		0	16	0	16	824	0
CHEMICAL TOTAL		0	16	0	16	824	0
PHENANTHRENE							
GAC	1	0	0	0	0	0	0
MOTIVA		2	0	0	2	0	3
CHEMICAL TOTAL		2	0	0	2	0	3

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

F -17

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
PHENOL							
MOTIVA		52	47,000	0	47,052	0	268,000
UNIQEMA		255	0	0	255	448	192
CHEMICAL TOTAL		307	47,000	0	47,307	448	268,192
PHOSGENE							
DUPONT EDGE MOOR		806	0	0	806	0	48,000
CHEMICAL TOTAL		806	0	0	806	0	48,000
PHTHALIC ANHYDRIDE							
RODEL		2	0	0	2	790	0
CHEMICAL TOTAL		2	0	0	2	790	0
POLYCHLORINATED BIPHENYLS (PCB's)							
DUPONT EDGE MOOR		0	0	0	0	39	0
CHEMICAL TOTAL		0	0	0	0	39	0
POLYCYCLIC AROMATIC COMPOUNDS							
DUPONT EDGE MOOR		0	0	0	0	0	0
DUPONT SEAFORD		0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		42	0	0	42	0	0
GAC		1	0	0	1	0	0
HERCULES RESEARCH CENTER		0	0	0	0	0	0
IKO PRODUCTION		0	0	0	0	102	15
INDIAN RIVER POWER PLANT		1	0	0	1	0	0
MCKEE RUN POWER PLANT		0	0	0	0	0	0
MOTIVA		5	1	0	7	4	140
NRG DOVER		0	0	0	0	0	0
PERDUE BRIDGEVILLE		0	0	0	0	0	0
PERDUE GEORGETOWN		0	0	0	0	0	0
PINNACLE FOODS		2	0	0	2	0	0
SPI POLYOLS		0	0	0	0	0	0
CHEMICAL TOTAL		53	1	0	54	107	155

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
POTASSIUM DIMETHYLDITHIOCARBAMATE							
GENERAL MOTORS		0	0	0	0	81	0
CHEMICAL TOTAL		0	0	0	0	81	0
PROPYLENE							
MOTIVA		4,600	0	0	4,600	0	520,000
CHEMICAL TOTAL		4,600	0	0	4,600	0	520,000
PROPYLENE OXIDE							
UNIQEMA		1,842	0	0	1,842	0	0
CHEMICAL TOTAL		1,842	0	0	1,842	0	0
SILVER							
DENTSPLY CAULK MAIN		0	0	0	0	4,917	0
CHEMICAL TOTAL		0	0	0	0	4,917	0
SODIUM NITRITE							
DAIMLER CHRYSLER		1,400	0	0	1,400	0	4,500
DUPONT SEAFORD		0	0	0	0	0	134,979
GENERAL MOTORS		0	0	0	0	14,230	0
MOTIVA		0	13,000	0	13,000	0	990,000
CHEMICAL TOTAL		1,400	13,000	0	14,400	14,230	1,129,479
STYRENE							
DOW REICHHOLD		4,561	0	0	4,561	657	136,990
HARDCORE COMPOSITES		463	0	0	463	0	0
JOHNSON POLYMER		341	0	0	341	39	889
JUSTIN TANKS		32,151	0	0	32,151	330	0
MARBLE WORKS		2,371	0	0	2,371	0	0
MOTIVA		25	0	0	25	0	46
SPATZ FIBERGLASS		4,474	0	0	4,474	0	0
CHEMICAL TOTAL		44,386	0	0	44,386	1,026	137,925

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
SULFURIC ACID AEROSOLS							
DUPONT SEAFORD		76,726	0	0	76,726	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		109,779	0	0	109,779	0	137,804
GENERAL CHEMICAL		12,760	0	0	12,760	0	0
INDIAN RIVER POWER PLANT		98,000	0	0	98,000	0	390,000
MOTIVA		510,000	0	0	510,000	0	0
NRG DOVER		22,500	0	0	22,500	0	22,500
CHEMICAL TOTAL		829,765	0	0	829,765	0	550,304
TETRACHLOROETHYLENE							
MOTIVA		124	0	0	124	0	0
CHEMICAL TOTAL		124	0	0	124	0	0
TITANIUM TETRACHLORIDE							
DUPONT EDGE MOOR		28	0	0	28	0	1,670,000
CHEMICAL TOTAL		28	0	0	28	0	1,670,000
TOLUENE							
AGILENT TECHNOLOGIES LITTLE FALLS		1,422	0	0	1,422	29,280	0
AVECIA		48	0	0	48	843	0
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		4,200	0	0	4,200	130	0
DUPONT EDGE MOOR		1,398	0	0	1,398	157	0
GENERAL MOTORS		1,930	0	0	1,930	73	0
GREEN TREE CHEMICAL		86	0	0	86	2,793	0
HONEYWELL		660	0	0	660	8,234	0
MOTIVA		6,200	4,800	0	11,000	690	140,000
NORAMCO		1,023	0	0	1,023	687,451	683,050
SERVICE ENERGY DOVER	1	0	0	0	0	0	0
SERVICE ENERGY MILFORD	1	0	0	0	0	0	0
SUNOCO		137	0	0	137	0	0
VP RACING FUELS	1	0	0	0	0	0	0
CHEMICAL TOTAL		17,104	4,800	0	21,904	729,651	823,050

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical) FACILITY NAME	FORM A	ON-SITE RELEASE			TOTAL	OFF-SITE TRANSFER	ON-SITE WASTE MGMT.
		AIR	WATER	LAND			
TOLUENE DIISOCYANATE (MIXED ISOMERS)							
E-A-R		4	0	0	4	2,750	0
MACDERMID		20	0	0	20	0	868
CHEMICAL TOTAL		24	0	0	24	2,750	868
TRICHLOROETHYLENE							
CAMDEL METALS		12,623	0	0	12,623	1,331	13,100,000
GREEN TREE CHEMICAL		25	0	0	25	1,956	0
METAL MASTERS		10	0	0	10	0	18,720
CHEMICAL TOTAL		12,658	0	0	12,658	3,287	13,118,720
VANADIUM COMPOUNDS							
DUPONT EDGE MOOR		13	783	0	796	56,373	0
EDGE MOOR/HAY ROAD POWER PLANTS		1,912	0	0	1,912	53,091	0
INDIAN RIVER POWER PLANT		585	0	51,000	51,585	0	0
MOTIVA		4,200	27,000	190,000	221,200	1,300	0
CHEMICAL TOTAL		6,710	27,783	241,000	275,493	110,764	0
VINYL ACETATE							
DOW REICHHOLD		2,373	0	0	2,373	8	10,755
FORMOSA PLASTICS		115,180	0	0	115,180	0	0
CHEMICAL TOTAL		117,553	0	0	117,553	8	10,755
VINYL CHLORIDE							
FORMOSA PLASTICS		103,319	0	0	103,319	0	167,000
KANEKA		36,337	1	0	36,338	5	167,905
CHEMICAL TOTAL		139,656	1	0	139,657	5	334,905

APPENDIX F

1. All values are in pounds
2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
Form A does not report amounts.

APPENDIX F

2002 ON-SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical)		ON-SITE RELEASE				OFF-SITE	ON-SITE
FACILITY NAME	FORM A	AIR	WATER	LAND	TOTAL	TRANSFER	WASTE MGMT.
XYLENE (MIXED ISOMERS)							
ARLON		1,500	0	0	1,500	5,215	117,604
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
CIBA SPECIALTY CHEMICALS		1,754	0	0	1,754	6,134	100
DAIMLER CHRYSLER		37,500	0	0	37,500	48,060	360
GENERAL MOTORS		123,000	0	0	123,000	320,430	10,000
MOTIVA		10,600	0	0	10,600	640	90,000
SUNOCO		14	0	0	14	0	0
VP RACING FUELS	1	0	0	0	0	0	0
CHEMICAL TOTAL		174,368	0	0	174,368	380,479	218,064
ZINC (FUME OR DUST)							
MOUNTAIRE FARMS OF DELAWARE	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0
ZINC COMPOUNDS							
ALLENS HATCHERY	1	0	0	0	0	0	0
AMERICAN MINERALS		22	15	0	37	0	0
CITISTEEL		2,774	16	113	2,903	1,907,249	0
CLARIANT	1	0	0	0	0	0	0
DAIMLER CHRYSLER		0	0	0	0	14,081	0
DUPONT EDGE MOOR		20	529	0	549	43,858	0
DUPONT SEAFORD		3,964	908	0	4,872	0	0
GENERAL MOTORS		330	200	0	530	10,150	0
INDIAN RIVER POWER PLANT		365	0	38,000	38,365	0	0
MOTIVA		2,500	420	480	3,400	55,000	0
MOUNTAIRE FARMS FEEDMILL	1	0	0	0	0	0	0
NVF YORKLYN		0	8,013	0	8,013	11,914	4,270,402
PERDUE BRIDGEVILLE	1	0	0	0	0	0	0
PPG DOVER		45	0	0	45	17,708	0
CHEMICAL TOTAL		10,020	10,101	38,593	58,714	2,059,960	4,270,402
STATE TOTALS		6,295,850	928,813	814,385	8,039,048	17,583,245	74,151,170

APPENDIX F

1. All values are in pounds
 2. Source: DNREC 2002 Database 2/04

3. A "1" in the Form A column indicates Form A.
 Form A does not report amounts.

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY	TREAT-	DISPOSAL	TOTAL	RECYCLE	ENERGY	TREAT-	TOTAL
			RECOVERY	MENT				RECOVERY	MENT	
1,1-DICHLORO-1-FLUOROETHANE										
GREEN TREE CHEMICAL	0	0	3,365	0	0	3,365	0	0	0	0
Chemical Total	0	0	3,365	0	0	3,365	0	0	0	0
1,2,4-TRIMETHYLBENZENE										
BLADES BULK PLANT	0	0	0	0	0	0	0	0	0	0
CARL KING	0	0	0	0	0	0	0	0	0	0
DAIMLER CHRYSLER	0	3,100	8,100	0	0	11,200	0	0	4,600	4,600
GAC	0	0	0	0	0	0	0	0	0	0
GENERAL MOTORS	0	0	26,000	0	96	26,096	0	0	8,500	8,500
MOTIVA	0	34	10	0	0	44	0	0	370,000	370,000
SERVICE ENERGY DOVER	0	0	0	0	0	0	0	0	0	0
SERVICE ENERGY MILFORD	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	3,134	34,110	0	96	37,340	0	0	383,100	383,100
1,3-BUTADIENE										
DOW REICHHOLD	0	0	0	0	0	0	0	0	1,159,617	1,159,617
MOTIVA	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	1,159,617	1,159,617
1,3-DICHLOROPROPYLENE										
HONEYWELL	0	0	13,710	1	0	13,711	0	0	0	0
Chemical Total	0	0	13,710	1	0	13,711	0	0	0	0
2,4-DIMETHYLPHENOL										
MOTIVA	0	0	0	0	0	0	0	0	54,000	54,000
Chemical Total	0	0	0	0	0	0	0	0	54,000	54,000
4,4'-ISOPROPYLIDENEDIPHENOL										
UNIQEMA	1,737	0	0	0	0	1,737	0	0	0	0
Chemical Total	1,737	0	0	0	0	1,737	0	0	0	0
4,4'-METHYLENEBIS(2-CHLOROANILINE)										
RODEL TECHNICAL CENTER	0	0	1,080	1,801	0	2,881	0	0	0	0
Chemical Total	0	0	1,080	1,801	0	2,881	0	0	0	0
ACRYLIC ACID										
DOW REICHHOLD	0	0	155	0	0	155	0	0	0	0
Chemical Total	0	0	155	0	0	155	0	0	0	0

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
ACRYLONITRILE											
DOW REICHHOLD	4	0	113	0	34	151	0	0	501,672	501,672	
Chemical Total	4	0	113	0	34	151	0	0	501,672	501,672	
AMMONIA											
AVECIA	20,805	0	304	0	0	21,109	0	0	0	0	
BIRDS EYE FOODS	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0	
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	0	0	
GENERAL CHEMICAL	2,183	0	0	0	0	2,183	0	0	0	0	
HANOVER FOODS	0	0	0	0	0	0	0	0	0	0	
HONEYWELL	0	0	0	2,895	0	2,895	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	400,000	400,000	
JOHNSON POLYMER	3,706	0	0	104	0	3,810	0	0	0	0	
KRAFT FOODS	1,120	0	0	0	0	1,120	0	0	10,000	10,000	
MOTIVA	0	0	0	0	0	0	0	13,000,000	15,000	13,015,000	
PERDUE AGRIRECYCLE	0	0	0	0	0	0	0	0	0	0	
Chemical Total	27,814	0	304	2,999	0	31,117	0	13,000,000	425,000	13,425,000	
ANILINE											
CIBA SPECIALTY CHEMICALS	17,364	13	69,673	686	0	87,736	0	0	0	0	
ORIENT	63	0	0	0	540	603	0	0	10,171	10,171	
Chemical Total	17,427	13	69,673	686	540	88,339	0	0	10,171	10,171	
ANTHRACENE											
GAC	0	0	0	0	0	0	0	0	0	0	
MOTIVA	0	0	0	0	0	0	0	0	3	3	
Chemical Total	0	0	0	0	0	0	0	0	3	3	
ANTIMONY											
HALKO MFG.	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
ANTIMONY COMPOUNDS											
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0	
JOHNSON CONTROLS	0	14,044	0	0	0	14,044	0	0	0	0	
Chemical Total	0	14,044	0	0	0	14,044	0	0	0	0	

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
ASBESTOS (FRIABLE)											
GAC	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
BARIUM											
AMERICAN MINERALS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
BARIUM COMPOUNDS											
DUPONT EDGE MOOR	0	0	0	0	27,753	27,753	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	116,686	116,686	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	144,439	144,439	0	0	0	0	
BENZENE											
BLADES BULK PLANT	0	0	0	0	0	0	0	0	0	0	
CARL KING	0	0	0	0	0	0	0	0	0	0	
DAIMLER CHRYSLER	0	0	0	0	0	0	0	0	0	0	
GENERAL MOTORS	0	0	4	0	0	4	0	0	0	0	
MOTIVA	0	9	44	0	0	53	0	190,000	37,000	227,000	
SUNOCO	0	0	0	0	0	0	0	0	0	0	
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	9	48	0	0	57	0	190,000	37,000	227,000	
BENZO(G,H,I)PERYLENE											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	0	0	
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0	
HERCULES RESEARCH CENTER	0	0	0	0	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
MCKEE RUN POWER PLANT	0	0	0	0	0	0	0	0	0	0	
MOTIVA	0	0	0	0	0	0	0	0	250	250	
NRG DOVER	0	0	0	0	0	0	0	0	0	0	
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0	
PERDUE GEORGETOWN	0	0	0	0	0	0	0	0	0	0	
PINNACLE FOODS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	250	250	

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
BIPHENYL										
CIBA SPECIALTY CHEMICALS	52,671	19	143,601	2,120	0	198,411	0	0	2,321	2,321
DUPONT SEAFORD	0	0	0	7,000	0	7,000	0	0	0	0
Chemical Total	52,671	19	143,601	9,120	0	205,411	0	0	2,321	2,321
BIS(2-CHLOROETHYL) ETHER										
UNIQEMA	2,745	0	0	0	0	2,745	0	0	0	0
Chemical Total	2,745	0	0	0	0	2,745	0	0	0	0
BORON TRIFLUORIDE										
HONEYWELL	0	0	104	13,676	0	13,780	0	0	0	0
Chemical Total	0	0	104	13,676	0	13,780	0	0	0	0
BUTYL ACRYLATE										
DOW REICHHOLD	0	0	8	0	0	8	0	0	115	115
JOHNSON POLYMER	5	0	0	25	0	30	0	0	39	39
Chemical Total	5	0	8	25	0	38	0	0	154	154
CARBON DISULFIDE										
MOTIVA	0	0	0	0	0	0	0	3,000	28,000	31,000
Chemical Total	0	0	0	0	0	0	0	3,000	28,000	31,000
CARBONYL SULFIDE										
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	0	0
MOTIVA	0	0	0	0	0	0	0	1,000,000	77,000	1,077,000
Chemical Total	0	0	0	0	0	0	0	1,000,000	77,000	1,077,000
CERTAIN GLYCOL ETHERS										
AVECIA	1,348	0	449	0	0	1,797	0	0	0	0
DAIMLER CHRYSLER	190,000	160	3,300	46	1	193,507	0	0	24,000	24,000
GENERAL MOTORS	62,000	0	0	0	960	62,960	0	0	40,000	40,000
GREEN TREE CHEMICAL	0	0	1,629	0	0	1,629	0	0	0	0
HIRSH INDUSTRIES	0	0	0	0	0	0	0	0	0	0
JOHNSON POLYMER	943	0	0	756	0	1,699	0	0	0	0
PPG DOVER	0	0	0	2,320	0	2,320	0	0	0	0
UNIQEMA	3,456	0	0	0	0	3,456	0	0	1,480	1,480
Chemical Total	257,747	160	5,378	3,122	961	267,368	0	0	65,480	65,480

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
CHLORINE											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	2,908,000	2,908,000	
KUEHNE CHEMICAL	0	0	0	0	0	0	0	0	0	0	
OCCIDENTAL CHEMICAL	0	0	0	565	0	565	0	0	2,461,800	2,461,800	
PLAYTEX PRODUCTS	0	0	0	0	0	0	0	0	3,500	3,500	
SPI PHARMA	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	565	0	565	0	0	5,373,300	5,373,300	
CHLOROETHANE											
HONEYWELL	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
CHLOROFORM											
OCCIDENTAL CHEMICAL	0	0	0	10,791	0	10,791	0	0	0	0	
Chemical Total	0	0	0	10,791	0	10,791	0	0	0	0	
CHROMIUM											
CAMDEL METALS	0	20,467	0	0	250	20,717	0	0	0	0	
METAL MASTERS	0	100,027	0	0	750	100,777	0	0	0	0	
SUNROC	0	2,513	0	0	0	2,513	0	0	0	0	
Chemical Total	0	123,007	0	0	1,000	124,007	0	0	0	0	
CHROMIUM COMPOUNDS											
CITISTEEL	0	32,267	0	0	680	32,947	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	224,024	224,024	0	0	0	0	
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	5	0	0	0	29,369	29,374	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
MOTIVA	0	640	0	0	110	750	0	0	0	0	
ORIENT	0	0	0	0	500	500	0	0	0	0	
Chemical Total	5	32,907	0	0	254,683	287,595	0	0	0	0	
COBALT COMPOUNDS											
DUPONT EDGE MOOR	0	0	0	0	9,901	9,901	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	24,334	24,334	0	0	0	0	
MOTIVA	0	4,500	0	0	6,600	11,100	0	0	0	0	
Chemical Total	0	4,500	0	0	40,835	45,335	0	0	0	0	
COPPER											
DENTSPLY CAULK MAIN	0	0	0	0	0	0	0	0	0	0	
SUNROC	0	8,525	0	0	0	8,525	0	0	0	0	
Chemical Total	0	8,525	0	0	0	0	0	0	0	0	

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
COPPER COMPOUNDS										
ALLENS HATCHERY		0	0	0	0	0	0		0	0
AVECIA	379	0	0	0	393	772	0	0	0	0
CITISTEEL	0	29,896	0	0	1,250	31,146	0	0	0	0
DUPONT EDGE MOOR	0	0	0	0	3,629	3,629	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	250	0	0	0	23,322	23,572	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
MOTIVA	0	64,000	0	0	0	64,000	0	0	0	0
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0
MOUNTAIRE FARMS FEEDMILL	0	0	0	0	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0
Chemical Total	629	93,896	0	0	28,594	123,119	0	0	0	0
CRESOL (MIXED ISOMERS)										
MOTIVA	0	4	0	0	0	4	0	22,000	260,000	282,000
Chemical Total	0	4	0	0	0	4	0	22,000	260,000	282,000
CUMENE										
MOTIVA	0	0	0	0	0	0	0	0	110	110
Chemical Total	0	0	0	0	0	0	0	0	110	110
CYANIDE COMPOUNDS										
MOTIVA	0	0	0	0	0	0	0	190,000	100,000	290,000
Chemical Total	0	0	0	0	0	0	0	190,000	100,000	290,000
CYCLOHEXANE										
CARL KING	0	0	0	0	0	0	0	0	0	0
CIBA SPECIALTY CHEMICALS	0	4,334	2,997	0	0	7,331	0	0	5,090	5,090
DAIMLER CHRYSLER	0	0	0	0	0	0	0	0	0	0
MOTIVA	0	150	36	0	0	186	0	0	3,000	3,000
Chemical Total	0	4,484	3,033	0	0	7,517	0	0	8,090	8,090
DI(2-ETHYLHEXYL) PHTHALATE										
ROLLER SERVICE	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0
DIBUTYL PHTHALATE										
PPG DOVER	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
DICHLOROMETHANE											
NORAMCO	0	0	94,966	18,720	0	113,686	1,745,826	0	0	1,745,826	
Chemical Total	0	0	94,966	18,720	0	113,686	1,745,826	0	0	1,745,826	
DIETHANOLAMINE											
MOTIVA	0	34	0	0	0	34	0	0	89,000	89,000	
Chemical Total	0	34	0	0	0	34	0	0	89,000	89,000	
DIETHYL SULFATE											
UNIQEMA	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
DIISOCYANATES											
CUSTOM DECORATIVE MOULDINGS	0	0	0	0	0	0	0	0	0	0	
E-A-R	0	0	0	920	0	920	0	0	0	0	
PPG INDUSTRIES WORKS 32	0	0	500	0	250	750	0	0	0	0	
RODEL	0	0	0	920	0	920	0	0	0	0	
TFL USA/CANADA	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	500	1,840	250	2,590	0	0	0	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS											
DUPONT EDGE MOOR	0	0	0	0	153	153	0	0	0	0	
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0	
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
MOTIVA	0	0	0	0	0	0	0	0	0	0	
OCCIDENTAL CHEMICAL	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	153	153	0	0	0	0	
ETHYL ACRYLATE											
DOW REICHHOLD	0	0	0	0	0	0	0	0	617	617	
JOHNSON POLYMER	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	617	617	

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
ETHYLBENZENE										
BLADES BULK PLANT	0	0	0	0	0	0	0	0	0	0
CARL KING	0	0	0	0	0	0	0	0	0	0
DAIMLER CHRYSLER	0	16,000	470	0	0	16,470	0	0	74	74
GENERAL MOTORS	0	0	3	0	6	9	0	0	460	460
MOTIVA	0	100	59	0	0	159	0	0	12,000	12,000
Chemical Total	0	16,100	532	0	6	16,638	0	0	12,534	12,534
ETHYLENE										
MOTIVA	0	0	0	0	0	0	0	0	6,300	6,300
SUNOCO	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	6,300	6,300
ETHYLENE GLYCOL										
AVECIA	23,497	0	7,640	0	0	31,137	0	0	0	0
DAIMLER CHRYSLER	260	12,000	0	0	0	12,260	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0
GENERAL MOTORS	880	0	0	0	0	880	0	0	0	0
MOTIVA	0	34	0	0	0	34	0	0	33,000	33,000
PPG DOVER	0	0	0	30,166	0	30,166	0	0	0	0
Chemical Total	24,637	12,034	7,640	30,166	0	74,477	0	0	33,000	33,000
ETHYLENE OXIDE										
SUNOCO	0	0	0	0	0	0	0	0	0	0
UNIQEMA	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0
FORMALDEHYDE										
DOW REICHHOLD	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0
FORMIC ACID										
AVECIA	184	0	0	0	0	184	0	0	87,563	87,563
MOTIVA	0	0	0	0	0	0	0	0	74,000	74,000
Chemical Total	184	0	0	0	0	184	0	0	161,563	161,563
HEXACHLOROBENZENE										
DUPONT EDGE MOOR	0	0	0	0	2,747	2,747	0	0	0	0
Chemical Total	0	0	0	0	2,747	2,747	0	0	0	0

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
HYDROCHLORIC ACID AEROSOLS										
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	17,820,000	17,820,000
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
KANEKA	0	0	0	0	0	0	0	0	99,046	99,046
MOTIVA	0	0	0	0	0	0	0	0	240,000	240,000
NRG DOVER	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	18,159,046	18,159,046
HYDROGEN CYANIDE										
MOTIVA	0	0	0	0	0	0	0	190,000	100,000	290,000
Chemical Total	0	0	0	0	0	0	0	190,000	100,000	290,000
HYDROGEN FLUORIDE										
ASTROPOWER PENCADER	0	0	0	0	0	0	0	0	13,760	13,760
ASTROPOWER SOLAR PARK	0	0	0	0	0	0	0	0	35,810	35,810
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	8,890	8,890
GENERAL CHEMICAL	0	0	0	0	0	0	0	0	72,050	72,050
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	13,000	13,000
Chemical Total	0	0	0	0	0	0	0	0	143,510	143,510
LEAD										
AMERICAN MINERALS	0	0	0	0	0	0	0	0	0	0
AMETEK	0	0	0	0	0	0	0	0	0	0
CHROME DEPOSIT	0	3,720	0	0	0	3,720	0	0	0	0
HALKO MFG.	0	208,000	0	0	0	208,000	0	0	0	0
PPG DOVER	0	0	0	0	0	0	0	0	0	0
PROCINO PLATING	0	0	0	0	0	0	0	0	0	0
W.L. GORE OTTS CHAPEL SITE	0	417	0	0	22	439	0	0	0	0
Chemical Total	0	212,137	0	0	22	212,159	0	0	0	0

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREATMENT	TOTAL
LEAD COMPOUNDS										
ASTROPOWER PENCADER	2	74	0	0	40	115	0	0	0	0
CIBA SPECIALTY CHEMICALS	0	0	0	0	0	0	0	0	0	0
CITISTEEL	0	253,602	0	0	36	253,638	0	0	0	0
DENTSPLY CAULK MAIN	0	0	0	0	0	0	270	0	0	270
DUPONT EDGE MOOR	0	20	0	0	51,202	51,222	0	0	0	0
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	2	0	0	0	10,297	10,299	0	0	0	0
GENERAL CHEMICAL	808	0	0	0	901	1,709	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
INSTEEL WIRE	0	2,286	0	0	0	2,286	0	0	0	0
JOHNSON CONTROLS	6	4,557,496	0	0	127	4,557,629	0	0	0	0
MOTIVA	0	0	0	0	78	78	0	0	0	0
NRG DOVER	0	0	0	0	896	896	0	0	0	0
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0
Chemical Total	818	4,813,478	0	0	63,577	4,877,872	270	0	0	270
MANGANESE										
CAMDEL METALS	0	2,499	0	0	5	2,504	0	0	0	0
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	2,499	0	0	5	2,504	0	0	0	0
MANGANESE COMPOUNDS										
ALLENS HATCHERY		0	0	0	0	0	0		0	0
AMERICAN MINERALS	0	0	0	0	0	0	0	0	0	0
CITISTEEL	0	169,068	0	0	3,135	172,203	0	0	0	0
DAIMLER CHRYSLER	190	1,300	0	0	3,100	4,590	0	0	0	0
DUPONT EDGE MOOR	0	0	0	0	3,348,690	3,348,690	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	26,816	26,816	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
MOTIVA	0	0	0	0	0	0	0	0	0	0
MOUNTAIRE FARMS FEEDMILL	0	0	0	0	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0
Chemical Total	190	170,368	0	0	3,381,741	3,552,299	0	0	0	0
MERCURY										
DENTSPLY CAULK MAIN	0	28,100	0	0	0	28,100	0	0	0	0
OCCIDENTAL CHEMICAL	0	0	0	0	1,144	1,144	3,675	0	0	3,675
Chemical Total	0	28,100	0	0	1,144	29,244	3,675	0	0	3,675

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
MERCURY COMPOUNDS											
CITISTEEL	0	0	0	0	27	27	0	0	0	0	
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	58	58	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
INTERVET	0	1	0	0	0	2	0	0	0	0	
MOTIVA	0	9	0	0	11	20	0	0	0	0	
NRG DOVER	0	0	0	0	6	6	0	0	0	0	
Chemical Total	0	10	0	0	102	113	0	0	0	0	
METHANOL											
AGILENT TECHNOLOGIES NEWPORT	0	0	9,348	0	0	9,348	0	0	0	0	
AVECIA	48,352	0	43,782	0	0	92,134	0	0	0	0	
CIBA SPECIALTY CHEMICALS	439,243	1,552,007	63,040	3,224	0	2,057,514	108,212	0	305,566	413,778	
DAIMLER CHRYSLER	0	0	380	0	0	380	0	0	0	0	
DENTSPLY CAULK MAIN	0	3,303	0	0	0	3,303	0	0	0	0	
DENTSPLY CAULK WEST	0	10,275	0	0	0	10,275	0	0	0	0	
DOW REICHHOLD	10	0	0	0	0	10	0	0	296	296	
GENERAL MOTORS	0	0	26,000	0	17	26,017	0	0	1,500	1,500	
MEDAL	0	0	0	10,710	0	10,710	873,259	0	0	873,259	
MOTIVA	0	33	0	0	0	33	0	120,000	17,000	137,000	
NORAMCO	3,467	0	347,280	68,458	0	419,205	376,241	0	0	376,241	
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	491,072	1,565,618	489,830	82,392	17	2,628,929	1,357,712	120,000	324,362	1,802,074	
METHYL ETHYL KETONE											
D & B INDUSTRIAL GROUP	0	0	11,745	0	0	11,745	0	0	0	0	
MACDERMID	269	0	65,683	852	0	66,804	24,140	859,865	0	884,005	
RODEL	0	0	7,877	77	0	7,954	0	0	166,947	166,947	
Chemical Total	269	0	85,305	929	0	86,503	24,140	859,865	166,947	1,050,952	
METHYL ISOBUTYL KETONE											
DAIMLER CHRYSLER	0	45,000	2,600	0	0	47,600	0	0	0	0	
Chemical Total	0	45,000	2,600	0	0	47,600	0	0	0	0	
METHYL METHACRYLATE											
DENTSPLY CAULK WEST	0	3,002	0	0	0	3,002	0	0	0	0	
DOW REICHHOLD	0	0	55	0	0	55	0	0	719	719	
JOHNSON POLYMER	5	0	0	30	0	35	0	0	1,178	1,178	
Chemical Total	5	3,002	55	30	0	3,092	0	0	1,897	1,897	

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
METHYL TERT-BUTYL ETHER											
BLADES BULK PLANT	0	0	0	0	0	0	0	0	0	0	
CARL KING	0	0	0	0	0	0	0	0	0	0	
DAIMLER CHRYSLER	0	0	0	0	0	0	0	0	0	0	
GENERAL MOTORS	0	0	43	0	0	43	0	0	0	0	
MOTIVA	0	210	0	0	0	210	0	0	150,000	150,000	
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	210	43	0	0	253	0	0	150,000	150,000	
MOLYBDENUM TRIOXIDE											
MOTIVA	0	3,900	0	0	0	3,900	0	0	0	0	
Chemical Total	0	3,900	0	0	0	3,900	0	0	0	0	
N,N-DIMETHYLFORMAMIDE											
RODEL	237,774	0	540,431	1,870	36	780,111	3,067,083	0	1,270	3,068,353	
Chemical Total	237,774	0	540,431	1,870	36	780,111	3,067,083	0	1,270	3,068,353	
NAPHTHALENE											
DOVER AFB	0	0	0	0	0	0	0	0	0	0	
MOTIVA	0	4	10	0	0	14	0	0	790	790	
Chemical Total	0	4	10	0	0	14	0	0	790	790	
N-BUTYL ALCOHOL											
DAIMLER CHRYSLER	0	4,300	0	0	0	4,300	0	0	6,900	6,900	
GENERAL MOTORS	0	0	120	0	500	620	0	0	17,000	17,000	
MOTIVA	0	0	0	0	0	0	0	0	1,100	1,100	
NORAMCO	2,805	0	14,480	2,854	0	20,139	0	0	0	0	
Chemical Total	2,805	4,300	14,600	2,854	500	25,059	0	0	25,000	25,000	
N-HEXANE											
BLADES BULK PLANT	0	0	0	0	0	0	0	0	0	0	
CARL KING	0	0	0	0	0	0	0	0	0	0	
DAIMLER CHRYSLER	0	0	0	0	0	0	0	0	0	0	
HONEYWELL	0	0	1,355	64,734	0	66,089	0	0	0	0	
MEDAL	0	0	0	0	0	0	756,824	0	0	756,824	
MOTIVA	0	0	0	0	0	0	0	0	8,100	8,100	
Chemical Total	0	0	1,355	64,734	0	66,089	756,824	0	8,100	764,924	

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
NICKEL										
CAMDEL METALS	0	13,040	0	0	250	13,290	0	0	0	0
METAL MASTERS	0	3,556	0	0	750	4,306	0	0	0	0
Chemical Total	0	16,596	0	0	1,000	17,596	0	0	0	0
NICKEL COMPOUNDS										
AMERICAN MINERALS	0	0	0	0	0	0	0	0	0	0
CITISTEEL	0	2,814	0	0	602	3,416	0	0	0	0
DUPONT EDGE MOOR	0	0	0	0	27,388	27,388	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	44	0	0	0	23,795	23,839	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
MOTIVA	0	29,000	0	0	500	29,500	0	0	0	0
SPI POLYOLS	111	14,317	0	0	21,616	36,044	6,100	0	0	6,100
Chemical Total	155	46,131	0	0	73,901	120,187	6,100	0	0	6,100
NITRATE COMPOUNDS										
DAIMLER CHRYSLER	29,000	18	0	0	0	29,018	0	0	0	0
DUPONT SEAFORD	0	0	0	7	0	7	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0
MOTIVA	0	0	0	0	0	0	0	0	620,000	620,000
PERDUE GEORGETOWN	0	0	0	0	0	0	0	0	0	0
SPI POLYOLS	0	0	0	0	0	0	0	0	0	0
Chemical Total	29,000	18	0	7	0	29,025	0	0	620,000	620,000
NITRIC ACID										
ASTROPOWER SOLAR PARK	0	0	0	0	0	0	0	0	15,350	15,350
DAIMLER CHRYSLER	0	0	0	0	0	0	0	0	2,900	2,900
PLAYTEX PRODUCTS	0	0	0	19,800	0	19,800	0	0	2,000	2,000
SPI PHARMA	0	0	0	0	0	0	0	0	0	0
SPI POLYOLS	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	19,800	0	19,800	0	0	20,250	20,250
NITROBENZENE										
ORIENT	1	0	0	0	360	361	0	0	0	0
Chemical Total	1	0	0	0	360	361	0	0	0	0
N-METHYL-2-PYRROLIDONE										
DAIMLER CHRYSLER	0	42	550	130	0	722	0	0	4,200	4,200
GENERAL MOTORS	0	0	0	0	15	15	0	0	200	200
MEDAL	27,680	7,740	0	0	0	35,420	0	0	0	0
RODEL TECHNICAL CENTER	0	0	32,528	0	0	32,528	0	0	0	0
Chemical Total	27,680	7,782	33,078	130	15	68,685	0	0	4,400	4,400

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
N-METHYLOLACRYLAMIDE											
DOW REICHHOLD	0	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0	0
OCTACHLOROSTYRENE											
DUPONT EDGE MOOR	0	0	0	1	469	470	0	0	0	0	0
Chemical Total	0	0	0	1	469	470	0	0	0	0	0
P-CHLOROANILINE											
CIBA SPECIALTY CHEMICALS	2,737	0	54,172	461	0	57,370	0	0	0	0	0
Chemical Total	2,737	0	54,172	461	0	57,370	0	0	0	0	0
PENTACHLOROBENZENE											
DUPONT EDGE MOOR	0	0	0	0	824	824	0	0	0	0	0
Chemical Total	0	0	0	0	824	824	0	0	0	0	0
PHENANTHRENE											
GAC	0	0	0	0	0	0	0	0	0	0	0
MOTIVA	0	0	0	0	0	0	0	0	3	3	3
Chemical Total	0	0	0	0	0	0	0	0	3	3	3
PHENOL											
MOTIVA	0	0	0	0	0	0	0	48,000	220,000	268,000	268,000
UNIQEMA	448	0	0	0	0	448	0	0	192	192	192
Chemical Total	448	0	0	0	0	448	0	48,000	220,192	268,192	268,192
PHOSGENE											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	48,000	48,000	48,000
Chemical Total	0	0	0	0	0	0	0	0	48,000	48,000	48,000
PHTHALIC ANHYDRIDE											
RODEL	0	0	0	790	0	790	0	0	0	0	0
Chemical Total	0	0	0	790	0	790	0	0	0	0	0
POLYCHLORINATED BIPHENYLS (PCB's)											
DUPONT EDGE MOOR	0	0	0	0	39	39	0	0	0	0	0
Chemical Total	0	0	0	0	39	39	0	0	0	0	0

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
POLYCYCLIC AROMATIC COMPOUNDS											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	0	0	0
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0	0
GAC	0	0	0	0	0	0	0	0	0	0	0
HERCULES RESEARCH CENTER	0	0	0	0	0	0	0	0	0	0	0
IKO PRODUCTION	0	0	0	0	102	102	15	0	0	0	15
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	0
MCKEE RUN POWER PLANT	0	0	0	0	0	0	0	0	0	0	0
MOTIVA	0	4	0	0	0	4	0	0	140	0	140
NRG DOVER	0	0	0	0	0	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0	0
PERDUE GEORGETOWN	0	0	0	0	0	0	0	0	0	0	0
PINNACLE FOODS	0	0	0	0	0	0	0	0	0	0	0
SPI POLYOLS	0	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	4	0	0	102	107	15	0	140	0	155
POTASSIUM DIMETHYLDITHIOCARBAMATE											
GENERAL MOTORS	81	0	0	0	0	81	0	0	0	0	0
Chemical Total	81	0	0	0	0	81	0	0	0	0	0
PROPYLENE											
MOTIVA	0	0	0	0	0	0	0	0	520,000	0	520,000
Chemical Total	0	0	0	0	0	0	0	0	520,000	0	520,000
PROPYLENE OXIDE											
UNIQEMA	0	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0	0
SILVER											
DENTSPLY CAULK MAIN	0	4,917	0	0	0	4,917	0	0	0	0	0
Chemical Total	0	4,917	0	0	0	4,917	0	0	0	0	0
SODIUM NITRITE											
DAIMLER CHRYSLER	0	0	0	0	0	0	0	0	4,500	0	4,500
DUPONT SEAFORD	0	0	0	0	0	0	0	0	134,979	0	134,979
GENERAL MOTORS	14,000	0	230	0	0	14,230	0	0	0	0	0
MOTIVA	0	0	0	0	0	0	0	0	990,000	0	990,000
Chemical Total	14,000	0	230	0	0	14,230	0	0	1,129,479	0	1,129,479

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
STYRENE											
DOW REICHHOLD	358	0	173	0	126	657	0	0	136,990	136,990	
HARDCORE COMPOSITES	0	0	0	0	0	0	0	0	0	0	
JOHNSON POLYMER	9	0	0	30	0	39	0	0	889	889	
JUSTIN TANKS	0	0	0	330	0	330	0	0	0	0	
MARBLE WORKS	0	0	0	0	0	0	0	0	0	0	
MOTIVA	0	0	0	0	0	0	0	0	46	46	
SPATZ FIBERGLASS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	367	0	173	360	126	1,026	0	0	137,925	137,925	
SULFURIC ACID AEROSOLS											
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	137,804	137,804	
GENERAL CHEMICAL	0	0	0	0	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	390,000	390,000	
MOTIVA	0	0	0	0	0	0	0	0	0	0	
NRG DOVER	0	0	0	0	0	0	0	0	22,500	22,500	
Chemical Total	0	0	0	0	0	0	0	0	550,304	550,304	
TETRACHLOROETHYLENE											
MOTIVA	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
TITANIUM TETRACHLORIDE											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	1,670,000	1,670,000	
Chemical Total	0	0	0	0	0	0	0	0	1,670,000	1,670,000	
TOLUENE											
AGILENT TECHNOLOGIES LITTLE FALLS	0	0	29,280	0	0	29,280	0	0	0	0	
AVECIA	164	0	679	0	0	843	0	0	0	0	
BLADES BULK PLANT	0	0	0	0	0	0	0	0	0	0	
CARL KING	0	0	0	0	0	0	0	0	0	0	
DAIMLER CHRYSLER	0	0	130	0	0	130	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	157	0	157	0	0	0	0	
GENERAL MOTORS	0	0	72	0	1	73	0	0	0	0	
GREEN TREE CHEMICAL	0	0	2,793	0	0	2,793	0	0	0	0	
<i>(TOLUENE CONTINUED ON NEXT PAGE)</i>											

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
<i>(TOLUENE, CONTINUED)</i>											
HONEYWELL	0	0	1,355	6,879	0	8,234	0	0	0	0	
MOTIVA	0	430	260	0	0	690	0	0	140,000	140,000	
NORAMCO	0	0	574,251	113,200	0	687,451	683,050	0	0	683,050	
SERVICE ENERGY DOVER	0	0	0	0	0	0	0	0	0	0	
SERVICE ENERGY MILFORD	0	0	0	0	0	0	0	0	0	0	
SUNOCO	0	0	0	0	0	0	0	0	0	0	
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	164	430	608,820	120,236	1	729,651	683,050	0	140,000	823,050	
TOLUENE DIISOCYANATE (MIXED ISOMERS)											
E-A-R	0	0	0	2,750	0	2,750	0	0	0	0	
MACDERMID	0	0	0	0	0	0	0	0	868	868	
Chemical Total	0	0	0	2,750	0	2,750	0	0	868	868	
TRICHLOROETHYLENE											
CAMDEL METALS	0	0	0	1,331	0	1,331	13,100,000	0	0	13,100,000	
GREEN TREE CHEMICAL	0	0	1,956	0	0	1,956	0	0	0	0	
METAL MASTERS	0	0	0	0	0	0	18,720	0	0	18,720	
Chemical Total	0	0	1,956	1,331	0	3,287	13,118,720	0	0	13,118,720	
VANADIUM COMPOUNDS											
DUPONT EDGE MOOR	0	0	0	0	56,373	56,373	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	53,091	53,091	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
MOTIVA	0	0	0	0	1,300	1,300	0	0	0	0	
Chemical Total	0	0	0	0	110,764	110,764	0	0	0	0	
VINYL ACETATE											
DOW REICHHOLD	0	0	8	0	0	8	0	0	10,755	10,755	
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	8	0	0	8	0	0	10,755	10,755	
VINYL CHLORIDE											
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	167,000	167,000	
KANEKA	0	0	0	0	5	5	0	0	167,905	167,905	
Chemical Total	0	0	0	0	5	5	0	0	334,905	334,905	

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX G

2002 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE BY CHEMICAL

Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
XYLENE (MIXED ISOMERS)											
ARLON	0	0	0	5,215	0	5,215	0	117,604	0	117,604	
BLADES BULK PLANT	0	0	0	0	0	0	0	0	0	0	
CARL KING	0	0	0	0	0	0	0	0	0	0	
CIBA SPECIALTY CHEMICALS	170	0	4,954	1,010	0	6,134	0	0	100	100	
DAIMLER CHRYSLER	0	46,000	1,900	160	0	48,060	0	0	360	360	
GENERAL MOTORS	0	0	320,000	0	430	320,430	0	0	10,000	10,000	
MOTIVA	0	390	250	0	0	640	0	0	90,000	90,000	
SUNOCO	0	0	0	0	0	0	0	0	0	0	
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	170	46,390	327,104	6,385	430	380,479	0	117,604	100,460	218,064	
ZINC (FUME OR DUST)											
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
ZINC COMPOUNDS											
ALLENS HATCHERY		0	0	0	0	0	0	0	0	0	
AMERICAN MINERALS	0	0	0	0	0	0	0	0	0	0	
CITISTEEL	0	1,907,166	0	0	83	1,907,249	0	0	0	0	
CLARIANT	0	0	0	0	0	0	0	0	0	0	
DAIMLER CHRYSLER	280	3,800	0	0	10,001	14,081	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	43,858	43,858	0	0	0	0	
DUPONT SEAFORD	0	0	0	0	0	0	0	0	0	0	
GENERAL MOTORS	250	0	0	0	9,900	10,150	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
MOTIVA	0	54,000	0	0	1,000	55,000	0	0	0	0	
MOUNTAIRE FARMS FEEDMILL	0	0	0	0	0	0	0	0	0	0	
NVF YORKLYN	7,290	0	0	0	4,624	11,914	4,270,402	0	0	4,270,402	
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0	
PPG DOVER	0	0	0	0	17,708	17,708	0	0	0	0	
Chemical Total	7,820	1,964,966	0	0	87,174	2,059,960	4,270,402	0	0	4,270,402	
STATE TOTALS	1,201,161	9,248,730	2,538,090	398,572	4,196,691	17,583,245	25,033,817	15,740,469	33,376,885	74,151,170	

APPENDIX G

1. All values are in pounds
2. Source: DNREC 2002 Database, February 2004

APPENDIX H

2002 ON SITE RELEASE SUMMARY BY CHEMICAL

(Ranked by On-Site Release) CHEMICAL	ON SITE RELEASE			TOTAL	OFF SITE TRANSFER	ON-SITE WASTE MGMT.
	AIR	WATER	LAND			
HYDROCHLORIC ACID AEROSOLS	3,541,713	0	0	3,541,713	0	18,159,046
SULFURIC ACID AEROSOLS	829,765	0	0	829,765	0	550,304
NITRATE COMPOUNDS	0	695,680	160	695,840	29,025	620,000
BARIUM COMPOUNDS	7,383	1,857	270,000	279,240	144,439	0
VANADIUM COMPOUNDS	6,710	27,783	241,000	275,493	110,764	0
CERTAIN GLYCOL ETHERS	230,312	0	0	230,312	267,368	65,480
HYDROGEN FLUORIDE	205,373	0	0	205,373	0	143,510
XYLENE (MIXED ISOMERS)	174,368	0	0	174,368	380,479	218,064
CARBONYL SULFIDE	163,350	0	0	163,350	0	1,077,000
VINYL CHLORIDE	139,656	1	0	139,657	5	334,905
NICKEL COMPOUNDS	19,291	2,756	97,021	119,068	120,187	6,100
VINYL ACETATE	117,553	0	0	117,553	8	10,755
AMMONIA	106,850	2,873	0	109,723	31,117	13,425,000
MANGANESE COMPOUNDS	9,697	38,921	50,842	99,460	3,552,299	0
N-BUTYL ALCOHOL	87,891	11	0	87,902	25,059	25,000
CHROMIUM COMPOUNDS	5,754	825	73,053	79,632	287,595	0
METHANOL	77,606	140	0	77,746	2,628,929	1,802,074
1,2,4-TRIMETHYLBENZENE	72,310	0	0	72,310	37,340	383,100
N-HEXANE	66,643	0	0	66,643	66,089	764,924
N-METHYL-2-PYRROLIDONE	59,524	0	0	59,524	68,685	4,400
ZINC COMPOUNDS	10,020	10,101	38,593	58,714	2,059,960	4,270,402
CRESOL (MIXED ISOMERS)	0	56,000	0	56,000	4	282,000
ETHYLENE	52,522	0	0	52,522	0	6,300
METHYL ETHYL KETONE	48,468	0	0	48,468	86,503	1,050,952
PHENOL	307	47,000	0	47,307	448	268,192
STYRENE	44,386	0	0	44,386	1,026	137,925
COPPER COMPOUNDS	4,195	12,297	23,147	39,639	123,119	0
METHYL ISOBUTYL KETONE	28,000	0	0	28,000	47,600	0
METHYL TERT-BUTYL ETHER	24,437	470	0	24,907	253	150,000
N,N-DIMETHYLFORMAMIDE	23,213	0	0	23,213	780,111	3,068,353
TOLUENE	17,104	4,800	0	21,904	729,651	823,050
LEAD COMPOUNDS	3,701	689	16,972	21,362	4,877,872	270
ETHYLBENZENE	16,597	1,300	3	17,900	16,638	12,534
1,3-BUTADIENE	17,369	0	0	17,369	0	1,159,617
CYCLOHEXANE	14,816	0	0	14,816	7,517	8,090
SODIUM NITRITE	1,400	13,000	0	14,400	14,230	1,129,479
TRICHLOROETHYLENE	12,658	0	0	12,658	3,287	13,118,720
BENZENE	5,642	6,100	0	11,742	57	227,000
ETHYLENE OXIDE	7,130	0	0	7,130	0	0
MOLYBDENUM TRIOXIDE	400	2,000	2,900	5,300	3,900	0

Source: DNREC 2002 Database, February, 2004
All values are in pounds

APPENDIX H

2002 ON SITE RELEASE SUMMARY BY CHEMICAL

(Ranked by On-Site Release) CHEMICAL	ON SITE RELEASE			TOTAL	OFF SITE	ON-SITE
	AIR	WATER	LAND		TRANSFER	WASTE MGMT.
BIPHENYL	4,823	0	0	4,823	205,411	2,321
PROPYLENE	4,600	0	0	4,600	0	520,000
ACRYLONITRILE	3,587	0	0	3,587	151	501,672
CYANIDE COMPOUNDS	2,200	1,100	0	3,300	0	290,000
HYDROGEN CYANIDE	2,200	1,100	0	3,300	0	290,000
DICHLOROMETHANE	2,757	0	0	2,757	113,686	1,745,826
ANILINE	2,649	0	0	2,649	88,339	10,171
METHYL METHACRYLATE	2,567	0	0	2,567	3,092	1,897
CHLORINE	2,448	0	0	2,448	565	5,373,300
FORMALDEHYDE	1,965	0	0	1,965	0	0
PROPYLENE OXIDE	1,842	0	0	1,842	0	0
COBALT COMPOUNDS	1,269	65	500	1,834	45,335	0
4,4'-ISOPROPYLIDENEDIPHENOL	1,194	0	0	1,194	1,737	0
ACRYLIC ACID	1,125	0	0	1,125	155	0
MERCURY	1,074	21	0	1,095	29,244	3,675
DIETHANOLAMINE	1	890	0	891	34	89,000
PHOSGENE	806	0	0	806	0	48,000
BUTYL ACRYLATE	742	0	0	742	38	154
NAPHTHALENE	721	0	0	721	14	790
MERCURY COMPOUNDS	449	0	194	644	113	0
2,4-DIMETHYLPHENOL	0	550	0	550	0	54,000
ETHYL ACRYLATE	499	0	0	499	0	617
ETHYLENE GLYCOL	126	330	0	456	74,477	33,000
N-METHYLOLACRYLAMIDE	268	0	0	268	0	0
BIS(2-CHLOROETHYL) ETHER	255	0	0	255	2,745	0
1,1-DICHLORO-1-FLUOROETHANE	238	0	0	238	3,365	0
CHLOROFORM	223	0	0	223	10,791	0
BORON TRIFLUORIDE	215	0	0	215	13,780	0
NITROBENZENE	214	0	0	214	361	0
CUMENE	141	0	0	141	0	110
TETRACHLOROETHYLENE	124	0	0	124	0	0
BARIUM	31	79	0	110	0	0
FORMIC ACID	89	0	0	89	184	161,563
NITRIC ACID	73	0	0	73	19,800	20,250
POLYCYCLIC AROMATIC COMPOUNDS	53	1	0	54	107	155
HEXACHLOROBENZENE	0	53	0	53	2,747	0
CARBON DISULFIDE	33	0	0	33	0	31,000
TITANIUM TETRACHLORIDE	28	0	0	28	0	1,670,000
1,3-DICHLOROPROPYLENE	27	0	0	27	13,711	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)	24	0	0	24	2,750	868

APPENDIX H

2002 ON SITE RELEASE SUMMARY BY CHEMICAL

(Ranked by On-Site Release) CHEMICAL	ON SITE RELEASE			TOTAL	OFF SITE TRANSFER	ON-SITE WASTE MGMT.
	AIR	WATER	LAND			
P-CHLOROANILINE	17	0	0	17	57,370	0
PENTACHLOROBENZENE	0	16	0	16	824	0
ANTIMONY COMPOUNDS	14	0	0	14	14,044	0
LEAD	4	1	0	5	212,159	0
CHROMIUM	5	0	0	5	124,007	0
NICKEL	5	0	0	5	17,596	0
DIISOCYANATES	4	0	0	4	2,590	0
BENZO(G,H,I)PERYLENE	1	3	0	3	0	250
4,4'-METHYLENEBIS(2- CHLOROANILINE)	2	0	0	2	2,881	0
PHENANTHRENE	2	0	0	2	0	3
PHTHALIC ANHYDRIDE	2	0	0	2	790	0
POLYCHLORINATED BIPHENYLS (PCB) *	0.00	0.30	0.00	0.30	39	0
OCTACHLOROSTYRENE *	0.00	0.20	0.00	0.20	470	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS *	0.01	0.03	0.00	0.04	153	0
ANTHRACENE	0	0	0	0	0	3
ANTIMONY	0	0	0	0	0	0
ASBESTOS (FRIABLE)	0	0	0	0	0	0
CHLOROETHANE	0	0	0	0	0	0
COPPER	0	0	0	0	8,525	0
DI(2-ETHYLHEXYL) PHTHALATE	0	0	0	0	0	0
DIBUTYL PHTHALATE	0	0	0	0	0	0
DIETHYL SULFATE	0	0	0	0	0	0
MANGANESE	0	0	0	0	2,504	0
POTASSIUM DIMETHYLDITHIOCARBAMATE	0	0	0	0	81	0
SILVER	0	0	0	0	4,917	0
ZINC (FUME OR DUST)	0	0	0	0	0	0
CHEMICAL TOTALS	6,295,850	928,813	814,385	8,039,048	17,583,245	74,151,170

* = 0.3 lbs or less total on-site release

APPENDIX I 2002 PBT RELEASE DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				TRANSFERS ON SITE	
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE
BENZO(G,H,I)PERYLENE						
DUPONT EDGE MOOR	0	0	0	0	0	0
DUPONT SEAFORD	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0
HERCULES RESEARCH CENTER	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0
MCKEE RUN POWER PLANT	0	0	0	0	0	0
MOTIVA	1	3	0	3	0	250
NRG DOVER	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0
PERDUE GEORGETOWN	0	0	0	0	0	0
PINNACLE FOODS	0	0	0	0	0	0
CHEMICAL TOTAL	1	3	0	3	0	250
DIOXIN AND DIOXIN-LIKE COMPOUNDS						
DUPONT EDGE MOOR	0	0	0	0	153	0
DUPONT SEAFORD	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0
FORMOSA PLASTICS	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0
MOTIVA	0	0	0	0	0	0
OCCIDENTAL CHEMICAL	0	0	0	0	0	0
CHEMICAL TOTAL	0	0	0	0	153	0
HEXACHLOROBENZENE						
DUPONT EDGE MOOR	0	53	0	53	2,747	0
CHEMICAL TOTAL	0	53	0	53	2,747	0
LEAD						
AMERICAN MINERALS	4	1	0	5	0	0
AMETEK	0	0	0	0	0	0
CHROME DEPOSIT	0	0	0	0	3,720	0
HALKO MFG.	0	0	0	0	208,000	0
PPG DOVER	0	0	0	0	0	0
PROCINO PLATING	0	0	0	0	0	0
W.L. GORE OTTS CHAPEL	0	0	0	0	439	0
CHEMICAL TOTAL	4	1	0	5	212,159	0

Additional detail on PBT's can be found in this report on pages 3 and 36-37

APPENDIX I 2002 PBT RELEASE DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				TRANSFERS ON SITE	
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE
LEAD COMPOUNDS						
ASTROPOWER PENCADER	3	0	0	3	115	0
CIBA SPECIALTY CHEMICALS	341	0	0	341	0	0
CITISTEEL	524	3	30	557	253,638	0
DENTSPLY CAULK MAIN	0	0	0	0	0	270
DUPONT EDGE MOOR	1	43	0	44	51,222	0
DUPONT SEAFORD	53	0	2,018	2,071	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	1,148	637	0	1,784	10,299	0
GENERAL CHEMICAL	42	0	0	42	1,709	0
INDIAN RIVER POWER PLANT	773	0	14,895	15,668	0	0
INSTEEL WIRE	0	0	0	0	2,286	0
JOHNSON CONTROLS	202	5	0	207	4,557,629	0
MOTIVA	600	1	29	630	78	0
NRG DOVER	11	0	0	11	896	0
VP RACING FUELS	4	0	0	4	0	0
CHEMICAL TOTAL	3,701	689	16,972	21,362	4,877,872	270
MERCURY						
DENTSPLY CAULK MAIN	0	0	0	0	28,100	0
OCCIDENTAL CHEMICAL	1,074	21	0	1,095	1,144	3,675
CHEMICAL TOTAL	1,074	21	0	1,095	29,244	3,675
MERCURY COMPOUNDS						
CITISTEEL	28	0	0	28	27	0
DUPONT SEAFORD	117	0	102	219	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	148	0	0	148	58	0
INDIAN RIVER POWER PLANT	73	0	92	165	0	0
INTERVET	0	0	0	0	2	0
MOTIVA	38	0	0	38	20	0
NRG DOVER	45	0	0	45	6	0
CHEMICAL TOTAL	449	0	194	644	113	0
OCTACHLOROSTYRENE						
DUPONT EDGE MOOR	0	0	0	0	470	0
CHEMICAL TOTAL	0	0	0	0	470	0
PENTACHLOROBENZENE						
DUPONT EDGE MOOR	0	16	0	16	824	0
CHEMICAL TOTAL	0	16	0	16	824	0

Additional detail on PBT's can be found in this report on pages 3 and 36-37

Source: DNREC 2002 Database, February, 2004

All values are in pounds

APPENDIX I 2002 PBT RELEASE DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				TRANSFERS ON SITE	
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE
POLYCHLORINATED BIPHENYLS (PCB)						
DUPONT EDGE MOOR	0	0	0	0	39	0
CHEMICAL TOTAL	0	0	0	0	39	0
POLYCYCLIC AROMATIC COMPOUNDS						
DUPONT EDGE MOOR	0	0	0	0	0	0
DUPONT SEAFORD	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	42	0	0	42	0	0
GAC	1	0	0	1	0	0
HERCULES RESEARCH CENTER	0	0	0	0	0	0
IKO PRODUCTION	0	0	0	0	102	15
INDIAN RIVER POWER PLANT	1	0	0	1	0	0
MCKEE RUN POWER PLANT	0	0	0	0	0	0
MOTIVA	5	1	0	7	4	140
NRG DOVER	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0
PERDUE GEORGETOWN	0	0	0	0	0	0
PINNACLE FOODS	2	0	0	2	0	0
SPI POLYOLS	0	0	0	0	0	0
CHEMICAL TOTAL	53	1	0	54	107	155
STATE PBT TOTALS	5,282	784	17,166	23,232	5,123,727	4,350

Additional detail on PBT's can be found in this report on pages 3 and 36-37

APPENDIX J

2002 CARCINOGEN RELEASE DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				TRANSFERS ON SITE	
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE
1,3-BUTADIENE (Probable)						
DOW REICHHOLD	16,599	0	0	16,599	0	1,159,617
MOTIVA	770	0	0	770	0	0
CHEMICAL TOTAL	17,369	0	0	17,369	0	1,159,617
1,3-DICHLOROPROPYLENE (Possible)						
HONEYWELL	27	0	0	27	13,711	0
CHEMICAL TOTAL	27	0	0	27	13,711	0
4,4'-METHYLENEBIS(2-CHLOROANILINE) (Probable)						
RODEL TECHNICAL CENTER	2	0	0	2	2,881	0
CHEMICAL TOTAL	2	0	0	2	2,881	0
ACRYLONITRILE (Probable)						
DOW REICHHOLD	3,587	0	0	3,587	151	501,672
CHEMICAL TOTAL	3,587	0	0	3,587	151	501,672
ASBESTOS (FRIABLE) (Known)						
GAC	0	0	0	0	0	0
CHEMICAL TOTAL	0	0	0	0	0	0
BENZENE (Known)						
BLADES BULK PLANT	0	0	0	0	0	0
CARL KING	0	0	0	0	0	0
DAIMLER CHRYSLER	0	0	0	0	0	0
GENERAL MOTORS	250	0	0	250	4	0
MOTIVA	4,300	6,100	0	10,400	53	227,000
SUNOCO	1,092	0	0	1,092	0	0
VP RACING FUELS	0	0	0	0	0	0
CHEMICAL TOTAL	5,642	6,100	0	11,742	57	227,000
CHLOROFORM (Possible)						
OCCIDENTAL CHEMICAL	223	0	0	223	10,791	0
CHEMICAL TOTAL	223	0	0	223	10,791	0
CHROMIUM COMPOUNDS (Known)						
CITISTEEL	118	2	53	173	32,947	0
DUPONT EDGE MOOR	1	63	0	64	224,024	0
DUPONT SEAFORD	3,576	0	0	3,576	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	993	750	0	1,743	29,374	0
INDIAN RIVER POWER PLANT	715	0	36,000	36,715	0	0
MOTIVA	351	10	37,000	37,361	750	0
ORIENT	0	0	0	0	500	0
CHEMICAL TOTAL	5,754	825	73,053	79,632	287,595	0

Additional detail on carcinogens can be found in this report on pages 4 and 44-45.

All values are in pounds

Source: DNREC 2002 Database, February 2004

J-1

APPENDIX J

2002 CARCINOGEN RELEASE DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				TRANSFERS ON SITE	
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE
COBALT COMPOUNDS (Possible)						
DUPONT EDGE MOOR	2	53	0	55	9,901	0
EDGE MOOR/HAY ROAD POWER PLANTS	857	0	0	857	24,334	0
MOTIVA	410	12	500	922	11,100	0
CHEMICAL TOTAL	1,269	65	500	1,834	45,335	0
DI(2-ETHYLHEXYL) PHTHALATE (Possible)						
ROLLER SERVICE	0	0	0	0	0	0
CHEMICAL TOTAL	0	0	0	0	0	0
DICHLOROMETHANE (Possible)						
NORAMCO	2,757	0	0	2,757	113,686	1,745,826
CHEMICAL TOTAL	2,757	0	0	2,757	113,686	1,745,826
DIETHYL SULFATE (Probable)						
UNIQEMA	0	0	0	0	0	0
CHEMICAL TOTAL	0	0	0	0	0	0
ETHYL ACRYLATE (Possible)						
DOW REICHHOLD	499	0	0	499	0	617
JOHNSON POLYMER	0	0	0	0	0	0
CHEMICAL TOTAL	499	0	0	499	0	617
ETHYLBENZENE ((Possible)						
BLADES BULK PLANT	0	0	0	0	0	0
CARL KING	0	0	0	0	0	0
DAIMLER CHRYSLER	12,300	0	0	12,300	16,470	74
GENERAL MOTORS	127	0	0	127	9	460
MOTIVA	4,170	1,300	3	5,473	159	12,000
CHEMICAL TOTAL	16,597	1,300	3	17,900	16,638	12,534
ETHYLENE OXIDE (Known)						
SUNOCO	3,440	0	0	3,440	0	0
UNIQEMA	3,690	0	0	3,690	0	0
CHEMICAL TOTAL	7,130	0	0	7,130	0	0
FORMALDEHYDE (Probable)						
DOW REICHHOLD	1,965	0	0	1,965	0	0
CHEMICAL TOTAL	1,965	0	0	1,965	0	0
HEXACHLOROBENZENE (Possible)						
DUPONT EDGE MOOR	0	53	0	53	2,747	0
CHEMICAL TOTAL	0	53	0	53	2,747	0

Additional detail on carcinogens can be found in this report on pages 4 and 44-45.

All values are in pounds

APPENDIX J

2002 CARCINOGEN RELEASE DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				TRANSFERS ON SITE	
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE
LEAD (Possible)						
AMERICAN MINERALS	4	1	0	5	0	0
AMETEK	0	0	0	0	0	0
CHROME DEPOSIT	0	0	0	0	3,720	0
HALKO MFG.	0	0	0	0	208,000	0
PPG DOVER	0	0	0	0	0	0
PROCINO PLATING	0	0	0	0	0	0
W.L. GORE OTTS CHAPEL SITE	0	0	0	0	439	0
CHEMICAL TOTAL	4	1	0	5	212,159	0
LEAD COMPOUNDS (Possible)						
ASTROPOWER PENCADER	3	0	0	3	115	0
CIBA SPECIALTY CHEMICALS	341	0	0	341	0	0
CITISTEEL	524	3	30	557	253,638	0
DENTSPLY CAULK MAIN	0	0	0	0	0	270
DUPONT EDGE MOOR	1	43	0	44	51,222	0
DUPONT SEAFORD	53	0	2,018	2,071	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	1,148	637	0	1,784	10,299	0
GENERAL CHEMICAL	42	0	0	42	1,709	0
INDIAN RIVER POWER PLANT	773	0	14,895	15,668	0	0
INSTEEL WIRE	0	0	0	0	2,286	0
JOHNSON CONTROLS	202	5	0	207	4,557,629	0
MOTIVA	600	1	29	630	78	0
NRG DOVER	11	0	0	11	896	0
VP RACING FUELS	4	0	0	4	0	0
CHEMICAL TOTAL	3,701	689	16,972	21,362	4,877,872	270
NICKEL (Possible)						
CAMDEL METALS	0	0	0	0	13,290	0
METAL MASTERS	5	0	0	5	4,306	0
CHEMICAL TOTAL	5	0	0	5	17,596	0
NICKEL COMPOUNDS (Known)						
AMERICAN MINERALS	11	10	0	21	0	0
CITISTEEL	19	3	21	43	3,416	0
DUPONT EDGE MOOR	33	147	0	180	27,388	0
EDGE MOOR/HAY ROAD POWER PLANTS	9,272	1,196	0	10,468	23,839	0
INDIAN RIVER POWER PLANT	545	0	27,000	27,545	0	0
MOTIVA	9,401	1,400	70,000	80,801	29,500	0
SPI POLYOLS	10	0	0	10	36,044	6,100
CHEMICAL TOTAL	19,291	2,756	97,021	119,068	120,187	6,100
NITROBENZENE (Possible)						
ORIENT	214	0	0	214	361	0
CHEMICAL TOTAL	214	0	0	214	361	0
P-CHLOROANILINE (Possible)						
CIBA SPECIALTY CHEMICALS	17	0	0	17	57,370	0
CHEMICAL TOTAL	17	0	0	17	57,370	0

Additional detail on carcinogens can be found in this report on pages 4 and 44-45.

All values are in pounds

Source: DNREC 2002 Database, February 2004

APPENDIX J

2002 CARCINOGEN RELEASE DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				TRANSFERS ON SITE	
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE
POLYCHLORINATED BIPHENYLS (PCB) (Probable)						
DUPONT EDGE MOOR	0	0	0	0	39	0
CHEMICAL TOTAL	0	0	0	0	39	0
POLYCYCLIC AROMATIC COMPOUNDS (Possible)						
DUPONT EDGE MOOR	0	0	0	0	0	0
DUPONT SEAFORD	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	42	0	0	42	0	0
GAC	1	0	0	1	0	0
HERCULES RESEARCH CENTER	0	0	0	0	0	0
IKO PRODUCTION	0	0	0	0	102	15
INDIAN RIVER POWER PLANT	1	0	0	1	0	0
MCKEE RUN POWER PLANT	0	0	0	0	0	0
MOTIVA	5	1	0	7	4	140
NRG DOVER	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0
PERDUE GEORGETOWN	0	0	0	0	0	0
PINNACLE FOODS	2	0	0	2	0	0
SPI POLYOLS	0	0	0	0	0	0
CHEMICAL TOTAL	53	1	0	54	107	155
PROPYLENE OXIDE (Possible)						
UNIQEMA	1,842	0	0	1,842	0	0
CHEMICAL TOTAL	1,842	0	0	1,842	0	0
STYRENE (Possible)						
DOW REICHHOLD	4,561	0	0	4,561	657	136,990
HARDCORE COMPOSITES	463	0	0	463	0	0
JOHNSON POLYMER	341	0	0	341	39	889
JUSTIN TANKS	32,151	0	0	32,151	330	0
MARBLE WORKS	2,371	0	0	2,371	0	0
MOTIVA	25	0	0	25	0	46
SPATZ FIBERGLASS	4,474	0	0	4,474	0	0
CHEMICAL TOTAL	44,386	0	0	44,386	1,026	137,925
TETRACHLOROETHYLENE (Possible)						
MOTIVA	124	0	0	124	0	0
CHEMICAL TOTAL	124	0	0	124	0	0
TOLUENE DIISOCYANATE (MIXED ISOMERS) (Possible)						
E-A-R	4	0	0	4	2,750	0
MACDERMID	20	0	0	20	0	868
CHEMICAL TOTAL	24	0	0	24	2,750	868

Additional detail on carcinogens can be found in this report on pages 4 and 44-45.

All values are in pounds

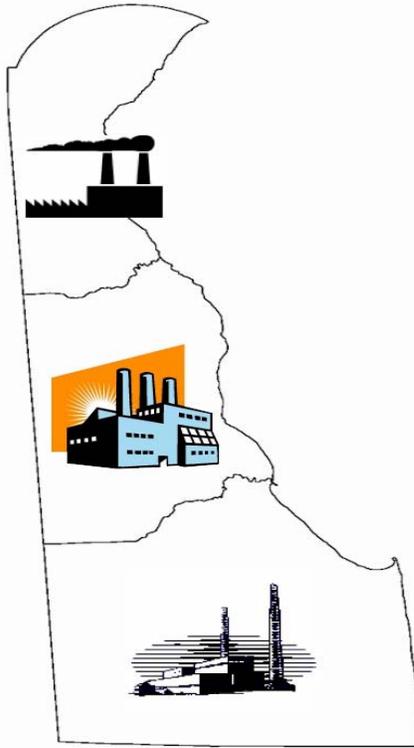
APPENDIX J 2002 CARCINOGEN RELEASE DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES			TOTAL	TRANSFERS ON SITE		
	AIR	WATER	LAND		OFF SITE	WASTE	
TRICHLOROETHYLENE (Probable)							
CAMDEL METALS	12,623	0	0	12,623	1,331	13,100,000	
GREEN TREE CHEMICAL	25	0	0	25	1,956	0	
METAL MASTERS	10	0	0	10	0	18,720	
CHEMICAL TOTAL	12,658	0	0	12,658	3,287	13,118,720	
VINYL ACETATE (Possible)							
DOW REICHHOLD	2,373	0	0	2,373	8	10,755	
FORMOSA PLASTICS	115,180	0	0	115,180	0	0	
CHEMICAL TOTAL	117,553	0	0	117,553	8	10,755	
VINYL CHLORIDE (Known)							
FORMOSA PLASTICS	103,319	0	0	103,319	0	167,000	
KANEKA	36,337	1	0	36,338	5	167,905	
CHEMICAL TOTAL	139,656	1	0	139,657	5	334,905	
CARCINOGEN TOTALS	402,350	11,791	187,549	601,690	5,786,359	17,256,964	

Additional detail on carcinogens can be found in this report on pages 4 and 44-45.

All values are in pounds

Source: DNREC 2002 Database, February 2004



EPCRA Reporting Program
Air Quality Management Section, DNREC
156 South State Street
Dover, DE 19901
(302) 739-4791

The Department of Natural Resources and Environmental Control is committed to affirmative action, equal opportunity, and the diversity of its workforce.

Doc. No. 40-09-03-04-03-01

The covers of this report were printed on recycled post-consumer paper.