

DELAWARE TOXICS RELEASE INVENTORY DATA DETAIL



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Prepared by the EPCRA Reporting Program
Department of Natural Resources and Environmental Control
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DNREC MISSION STATEMENT

The mission of the Delaware Department of Natural Resources and Environmental Control is to protect and manage the state's vital natural resources, protect public health and safety, provide quality outdoor recreation, and serve and educate the citizens of the First State about the wise use, conservation, and enhancement of Delaware's environment.

Front Cover: *Crushed automobiles are a major source of recycled steel. However, automobiles may contain mercury in switches and other devices. If these switches are not removed, the mercury may be released to the environment during the steel refining process. DNREC is working with the steel recycling industry to promote mercury switch removal.*

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A MESSAGE FROM THE SECRETARY

The Department of Natural Resources and Environmental Control is pleased to present the Toxics Release Inventory (TRI) Report for the reporting year 2005. In Delaware, TRI reports for 2005 show that on-site releases reported under TRI were lower by 18% when compared to 2004, and they were lower by 29% compared to 1998. One reason for the decrease in reported on-site release amounts is that the Indian River Power Plant had fewer impurities, including chlorine, in the coal it burned in 2005. Fuel quality, as well as amount of energy production, can affect the environment. We encourage both industry and the public to do their share to help preserve the environment through greater energy efficiency and material selection.

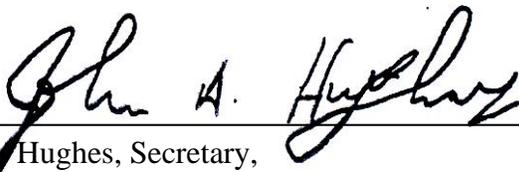
In estimating amounts for their 2005 reports, some facilities changed to more accurate methods of estimating amounts. With increasing emphasis on mercury and mercury compounds, DNREC had requested a significant reporter of these compounds, Claymont Steel, to conduct additional tests to verify their release estimates. As a result of the tests, mercury compounds and some other releases were found to be higher than originally estimated. Additional tests have been ordered, and I have also issued an order for Claymont Steel to reduce its mercury emissions by 90% by the end of 2008. DNREC is also working with the steel recycling industry to reduce mercury contained in scrap steel, and with the power industry to reduce mercury compound releases to the air. Other DNREC initiatives to reduce mercury emissions are described in our Air and Waste Management Division site at: <http://www.awm.delaware.gov/Info/MercuryInit.htm> . In sum, Delaware's 2005 TRI data shows that reporting accuracy is up, while the total long-term trend in TRI on-site releases is down.

While there is positive news within the TRI data, there is also some negative news within the program. Recently, the EPA weakened the TRI program by enacting a rule allowing more facilities to report on the TRI short Form A that does not report any amounts. A copy of our letter to the EPA opposing the proposed rule change, similar to the final rule which was enacted, can be found in Appendix M of the 2004 and 2005 TRI Data Detail Reports at: <http://www.serc.delaware.gov/reports.shtml> .

We publish two TRI reports annually. A Data Summary Report was developed in response to requests for a more compact, less technical report. This more technical TRI Data Detail Report, the Data Summary Report, and reports for recent years are available at DNREC offices and also through the public information link at <http://www.serc.delaware.gov/epcra.shtml> . Specific facility data from 1995-2005 are also available at the above web site in an easy-to-use searchable format, and the *Other Sources of Information* section of this report provides details about the many other DNREC and EPA Internet sites devoted to community right-to-know.

DNREC publishes this report to inform citizens about the environment in their communities. Even though TRI does not mandate reductions of toxic chemical releases or issue permits for chemical releases, the public visibility of TRI reporting has motivated companies to significantly reduce their emissions. I urge you to take advantage of the information in this report to learn about the management of chemicals in your community. I also encourage our industrial citizens to continue to reduce releases below today's levels and focus on providing a safer and more healthful environment for our future.

Sincerely,



John A. Hughes, Secretary,
Department of Natural Resources and Environmental Control

Executive Summary

On-site releases reported under TRI for 2005 were lower by 18% when compared to 2004, and they were lower by 29% when compared to 1998. Total "TRI-reportable waste," including on-site releases, transfers off-site, and on-site waste management, increased 4.4%, or 4.1 million pounds compared to 2004, but has declined five out of the last seven years. Since 1998 the total TRI-reportable waste decline has been 36.7%, or 55.9 million pounds. The decrease in total TRI waste has been driven by differing waste category amounts, depending on the year, and is detailed in this report.

The largest change in on-site release in 2005 is the reported decrease in the hydrochloric acid release from the Indian River Power Plant. Indian River reported an 800,000 pound reduction (22 %) in release of this chemical. This was not related to changes in their production of electricity, but rather to reduced amounts of chlorine in the coal burned, some of which came from a different source than in 2004. Another reason for changes in reported amounts is that some facilities changed to more accurate methods of estimating values in their reports. These new methods may increase or decrease the reported release amount of a specific chemical. These changes, combined with normal facility variations in production and reported amounts, resulted in the decrease in the reported amount of on-site releases.

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 2005 included 581 individual chemicals and 30 chemical categories. TRI was established in 1986 under Title III, Section 313, of the Federal Superfund Amendments and Reauthorization Act (SARA 313) 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).

Covered 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 and revisions to old reports are received. The database currently contains nineteen years of reported data. Most releases reported under TRI are also regulated through Federal and/or State permits.

This report contains detail from every 2005 TRI report and report revision from Delaware facilities filed with and received by DNREC as of November 1, 2006. Facilities must submit these reports to DNREC and EPA by July 1 of each year. Several types of analyses are presented based on this data and data from prior years.

A second, less detailed report that provides a summary of the data presented here is also available. See [Access to TRI Files](#) on page 55 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 below 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 PBTs (Persistent Bioaccumulative Toxics) are lower (see Table 7 on page 33).

Note that 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. See page 4 for more details.

Facilities that meet the criteria for reporting must submit one report for each listed toxic chemical manufactured, processed, or otherwise used above threshold quantities. 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 toxic chemicals, 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
4931 *	Coal Fired
4939 *	Electric Utilities
4953 *	Facilities Regulated Under RCRA Subtitle C
5169 *	Wholesale Chemical Distributors
5171 *	Wholesale Petroleum Stations and Terminals
7389 *	Solvent Recovery Services
**	Federal Facilities
* Added in 1998 ** Added in 2000	

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 2005 is described in Table 5 on page 14.

The standard Form R report (see Appendix N for Forms) 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 optional short form (Form A) may be used, provided certain criteria are met. Form A, initiated in the 1997 reporting year, is a two-page report that provides facility information (essentially the same as Form R) and identification of the chemical, but does not provide any release, transfer, or waste management data. 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, and,
3. The chemical is not a persistent bioaccumulative toxic (PBT) chemical.

Limitations of TRI Data

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

- **NOT ALL FACILITIES ARE REQUIRED TO REPORT.** A relatively small number of facilities in Delaware are required to report under TRI, based on the criteria listed on pages 2 - 3.
- **OTHER SOURCES NOT COVERED UNDER TRI ALSO RELEASE TOXIC CHEMICALS.** Other significant sources of pollution 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 REQUIRED TO BASE TRI DATA ON MEASUREMENTS AND MONITORING DATA IF THESE ARE AVAILABLE AT THE FACILITY.** If such data is not available, quantities may be estimated based on published emission factors, mass balance calculations, or good engineering judgment. Additional monitoring equipment and measurements are not required. For 2005, 10% of the reports representing 59% of reported on-site release amounts were estimated using monitoring data, with the balance being split between emission factors, mass balance calculations, and other methods.
- **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.
- **THE 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 weather and wind direction 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 valuable screening tool to identify areas of concern that may require further investigation.

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. Because 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 changes that have been made 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.

- **Chemical List Changes**

For reporting 1995 and beyond, EPA significantly expanded the list of chemicals. For reporting year 2000 and beyond, EPA established substantially lower reporting thresholds for 15 chemicals and 2 chemical categories that are highly persistent and bioaccumulative in the environment (PBTs). See page 33 for PBT data. In 2004, EPA removed methyl ethyl ketone (MEK) from the list of reportable chemicals, and naphthalene, already on the TRI list, was also added to the list of carcinogens.

- **Industry Expansion**

Beginning with the 1998 reporting year, EPA added seven industries to the list of facilities covered under TRI. Prior to the 1998 reporting year, only manufacturers (SIC codes 2000-3999) 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 provided additional information to the public. Some of the data presented later in this report will be adjusted for these changes in order to present the data on a more consistent reporting basis from year to year.

- **Form A Threshold Change for the 2006 Reporting Year**

EPA has enacted a change to the TRI Form A reporting requirements. See page 2 for a description of Form A and Form R and Appendix N for copies of the reporting forms. The change will increase the Form A total non-PBT waste amount reporting threshold to 5,000 pounds, and no more than 2,000 pounds may be on-site releases, up from the current 500 pounds. It will also begin to allow reporting PBTs, except dioxins, on Form A, if no release or disposal activities occur for the chemical, but at the 500 pound total waste amount threshold. All chemicals reported on Form A will still be required to meet the current 1,000,000 pound manufactured, processed, or otherwise used threshold. Because of the loss of data associated with the conversion of current Form R reports to Form A reports (29% of 2005 Form R reports), DNREC opposed the original proposal and opposes this new rule. See Appendix M for the DNREC response to the original proposal, keeping in mind that all the data reported on pages 2-5 of Form R, except the chemical name, would be lost for those chemicals that are reported on Form A.

- **SIC/NAICS**

Starting in the 2006 reporting year, four-digit facility SIC codes will be phased out and replaced with six-digit NAICS (North American Industry Classification System) codes. Facilities should not be added or removed from reporting because of this change.

- **Alternate Year Reporting Proposed Change**

EPA had indicated that they would propose some form of alternate year reporting. However, bowing to the pressure of public opinion, EPA has retracted this proposal.

2005 Data Summary

Statewide totals of reported 2005 TRI on-site releases, off-site transfers, and wastes managed on-site are shown in Table 2. On-site releases were lower by 18% compared to 2004. Increased accuracy in reporting the data (stack tests and monitoring vs. estimates) accounts for some of the decreases, while changes in raw materials, pollution controls, and production levels at other facilities account for both decreases and increases. A total of 72 facilities submitted 346 reports on 103 different chemicals. Of the 346 reports, 53 were submitted using Form A. Toluene, benzo (g,h,i)perylene, polycyclic aromatic compounds, methanol, nitrate compounds, and zinc, copper, lead, manganese, and chromium compounds all had greater than 10 reports. Air releases, led by acid gasses, constitute the largest portion of the total on-site releases.

Types of Data

Table 2 lists all the categories of data reported to Delaware and EPA under the TRI program. Within the reports received 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 one of these, **underground injection** of TRI chemical waste to wells, is not 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, including equipment leaks and evaporation, and is released into the general atmosphere. **Water** releases are to 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 containing TRI-reportable chemicals in runoff and storm water runoff are also reportable. **Land** releases are to (1) RCRA landfills, in which wastes are buried, (2) surface impoundments, which are uncovered holding areas used to volatilize and/or settle waste materials, (3) other land disposal such as waste piles or releases to land such as spills or leaks, (4) land application/treatment in which waste containing a listed chemical is applied to or incorporated into soil, and (5) other non-RCRA landfills.

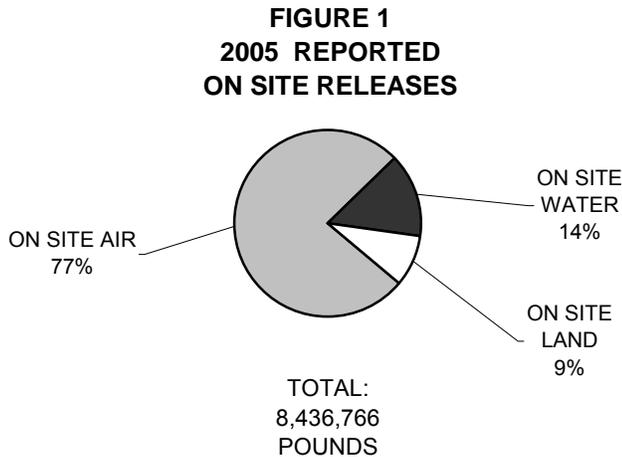
Off-Site Transfers: Off-site transfers include transfer of chemical waste to **POTWs** (Publicly owned wastewater treatment plants), **recycle** operations (5 types), **energy recovery** operations (2 types), **treatment** operations (6 types), and **disposal** (14 types). The receiving facilities are separate from the facility generating the waste. This total of 25 sub-categories is provided for the purpose of classifying the types of final off-site waste management undertaken for each chemical.

**TABLE 2
2005 TRI DATA SUMMARY
(IN POUNDS)**

	2005
No. of Facilities	72
No. of Form A's	53
No. of Form R's	293
No. of Chemicals	103
On-site Releases	
Air	6,472,074
Water	1,211,798
Land	752,894
Total Releases	8,436,766
Off-site Transfers	
POTWs	1,514,246
Recycle	11,259,408
Energy Recovery	2,709,850
Treatment	199,493
Disposal	4,400,539
Total Transfers	20,083,537
On-site Waste Mgmt.	
Recycle	10,079,028
Energy Recovery	19,786,104
Treatment	38,176,991
Total On-Site Mgmt.	68,042,123
Total Waste	96,562,426

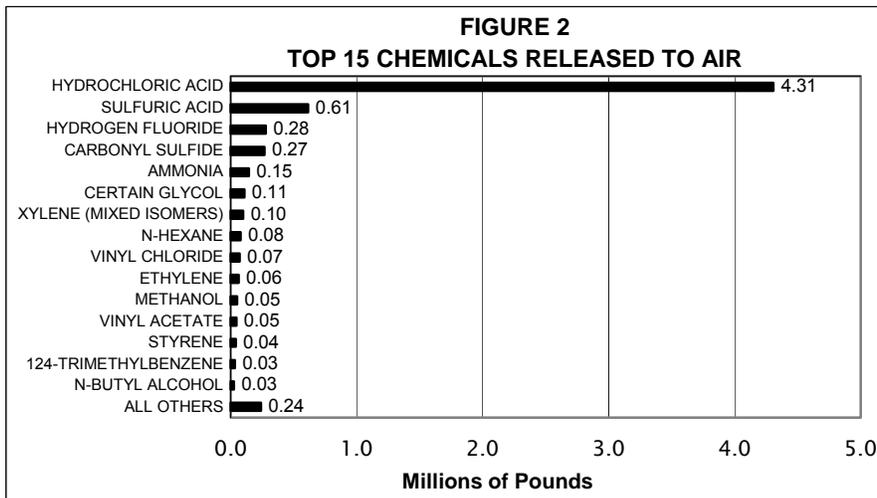
On-site Waste Management: Waste management operations at the facility generating the waste are categorized to include **recycle, energy recovery, and treatment.**

On-Site Releases



On-site TRI 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 under-ground injection. Under-ground injection is not an approved method of TRI or hazardous waste disposal in Delaware, and thus has not been reported by any facility in Delaware since TRI reporting began. Total TRI-reported on-site releases to air, water, and land in 2005 made up less than 9% of all TRI-reported wastes.

Figure 1 shows the on-site releases reported in the State. A large portion, 77% of the total on-site release, is to air. Additional analysis of on-site releases is presented in Figures 2, 3, and 4, showing the top 15 chemicals released to air, water, and land. Additional detail about on-site releases can be found in Appendices C, E, F, and H.



Releases to Air

Figure 2 provides an illustration of the relative release of the top 15 chemicals compared to the remaining 88 chemicals reported as released in 2005 to the air. As in all the years following the inclusion of power generating facilities, acid gases top the list. Specifically, hydrochloric and sulfuric acid aerosols (gases) and

hydrogen fluoride are released from power generating facilities located in all three counties. These three chemicals comprise 80% of all Delaware-reported TRI on-site air releases. Two facilities reported carbonyl sulfide, which accounted for 4.1% of all releases to air. DuPont Edgemoor was the primary reporter of this chemical. Nine facilities reported ammonia, which accounted for 2.2% of all on-site air releases. Formosa Plastics was the primary reporter for ammonia. Ammonia is released from food processing, petrochemical, and chemical facilities. It is used in refrigeration systems and is a by-product of air pollution control activities, primarily at electric generating facilities. Certain glycol ethers and xylene are primarily used as solvents

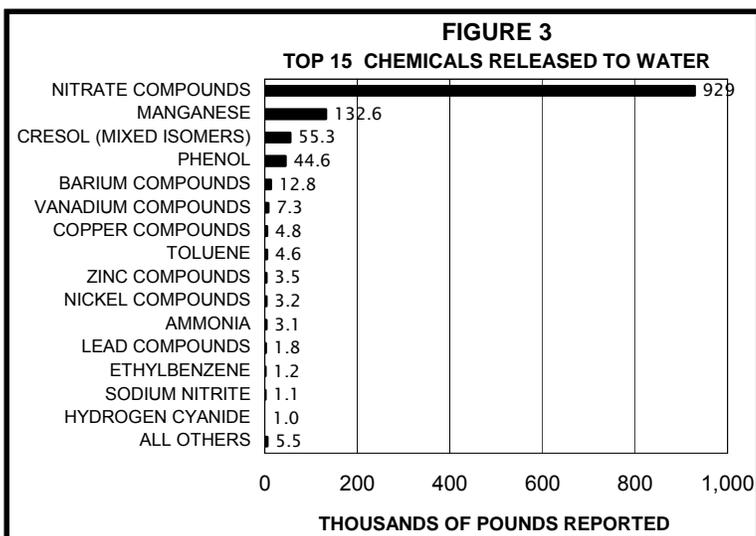
in paints for the automobile manufacturing industry. The DaimlerChrysler automobile assembly facility accounted for most of these releases. Seven facilities reported on certain glycol ethers (1.7% of on-site releases to air), and nine facilities reported xylene, (1.5% of all on-site releases to air). Six facilities reported on n-hexane (1.2% of total release to air), and 65% of this release was from the Valero refinery.

Releases to Water

As can be seen in Figure 1 on page 6, releases to water were much lower than releases to air. On-site water releases make up 14% of the total on-site releases, compared to 77% for air. Table 3 provides the amount of TRI chemicals released to each water body that received a TRI chemical. Figure 3 shows the relative relationship of the top 15 TRI chemicals and the 22 other chemicals reported as released to water. This clearly shows the influence that nitrate compounds have on the total. Figure 3 shows that nitrate compounds were the top chemical released (77% of the total water release), followed by manganese compounds (11%), cresol (mixed isomers) (4.6%), phenol (3.7%), and barium compounds (1.1%). The remaining chemicals released to water were each less than 1.0% of total releases to water. The biological treatment of nitrogen-containing materials such as animal waste and ammonia is responsible for the formation of nitrate compounds. Perdue Georgetown was the largest reporter of nitrate compounds at 385,000 pounds, with INVISTA reporting 310,000 pounds and Valero reporting 234,000 pounds. Manganese

TABLE 3
TRI CHEMICALS RELEASED TO WATER BY WATERSHED

WATER BODY	NO. OF FACILITIES	NO. OF REPORTS	RELEASE (POUNDS)
DELAWARE RIVER	9	102	511,436
DRAWYER CREEK TRIBUTARY	1	1	4
ISLAND CREEK	1	17	4,820
MCKEE RUN	1	2	0
MUDDY RUN	1	1	0
NAAMANS CREEK	1	6	34
NANTICOKE RIVER	1	13	310,500
RED LION CREEK	1	1	4
SAVANNAH DITCH	1	3	385,000
STATE TOTAL	17	146	1,211,798



compounds are formed from ore refining and from impurities in coal used in the power generating facilities. DuPont Edgemoor reported over 99% of the manganese compounds released to water. Cresols and Phenol are products of petroleum refining and were released to water only by Valero. DuPont Edgemoor reported 85% of the barium compounds released to water. These compounds are products of fuel combustion and ore refining.

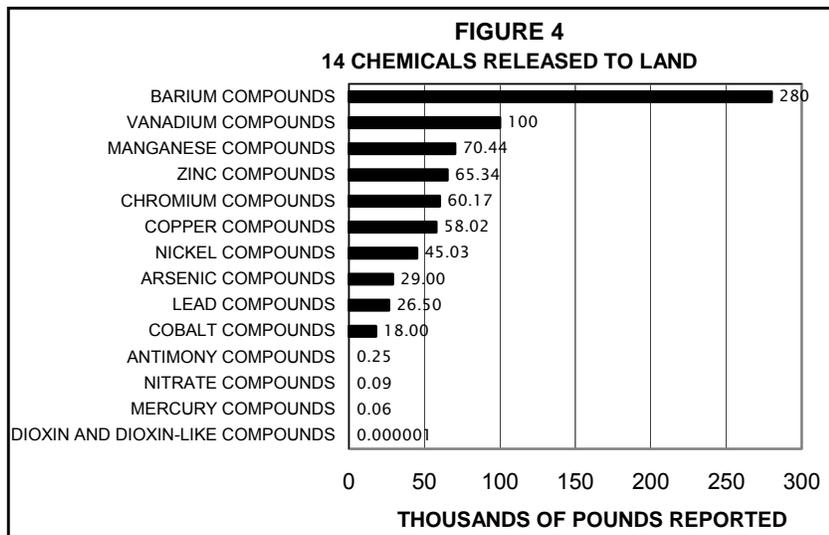
Not every report to a water body in Table 3 shows a release quantity. For example, of the 102 reports listing the Delaware River as their destination watershed, only 56 reports show an actual release quantity to the Delaware River. The other 46 met the TRI reporting requirements and had the potential 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. In Delaware, 70 of 146 reports listing a water body as a destination for a possible water release did not report any quantities actually released to that water body.

**TABLE 4
TRI CHEMICALS
RELEASED TO WATER BY BASIN**

BASIN	RELEASE (IN POUNDS)	PERCENT
CHESAPEAKE	310,500	25.6%
DELAWARE BAY	746,630	61.6%
INLAND BAYS	4,820	0.4%
PIEDMONT	149,849	12.4%
STATE TOTAL	1,211,798	100.0%

Table 4 shows 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 River eventually feed into the Delaware Bay. The total amount released to water decreased by 19,000 pounds (1.6%) in 2005. Additional discussion about these releases can be found in the Trend Analysis Section starting on page 40.

Releases to Land



Releases to land, as shown in Figure 1 on page 6, are relatively small, amounting to 9% of total on-site releases. Figure 4 shows the relative contribution for all 14 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 dioxins (0.00077 pounds). 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 51% of the total land releases. Land releases by the Indian River power plant and INVISTA facilities, generally the metallic compounds shown above, account for over 99% of the total land releases. Additional discussion about these land releases and their trends can be found in the Trend Analysis Section starting on page 40.

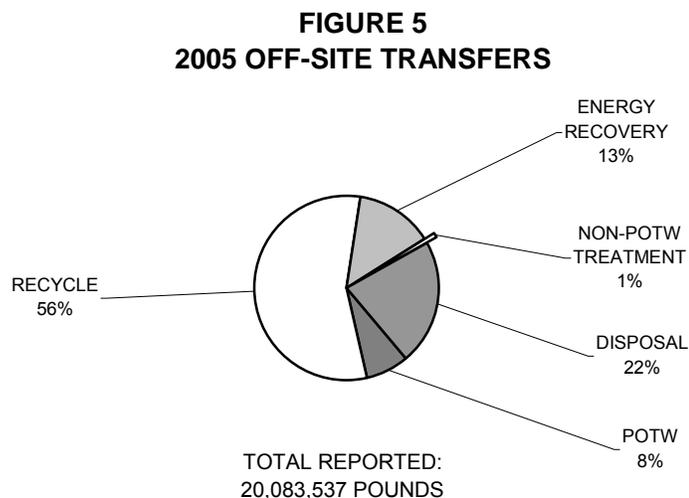
Descriptions about some of the hazards these chemicals may present to us can be found in Appendix K.

Off-Site Transfers

Off-site transfers are material transfers to off-site locations for the purpose of disposal, recycling, energy recovery, or treatment. Treatment could be at a private waste treatment facility or at a publicly owned treatment works (POTW), typically a municipal wastewater treatment plant.

Figure 5 shows the relative portions transferred to the five off-site transfer categories. Table 2 on page 5 shows these values in tabular form, and 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 17 states in addition to Delaware, some as far away as Wisconsin and Texas. About 92% of TRI chemicals in all wastes and over 99% of non-POTW wastes that were transferred off-site were sent to out-of-state locations for further processing and/or disposal.



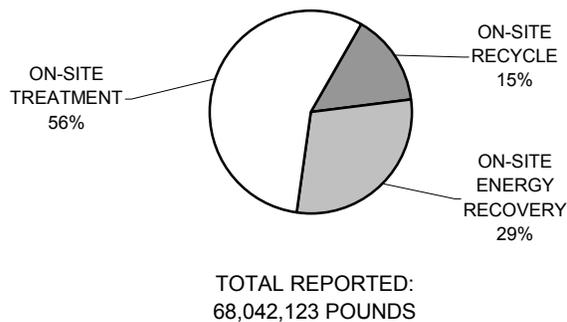
While on-site releases account for 9% of total TRI waste, reported off-site transfers account for 21% of the total TRI wastes. See Figure 7 on page 10 for detail. Off-site transfer to recycle operations accounted for 56% of the amounts within the five categories in off-site transfers, and disposals accounted for almost 22% of the transfers. Eighty-nine percent of the transfers to POTWs were to the City of Wilmington POTW, and virtually all (99%+) of the transfers to POTWs were to Delaware POTW facilities. Cytec, Ciba, DaimlerChrysler, and Rohm & Haas combined for 92% of the total TRI transfers to the Wilmington POTW.

See page 52 for more information on Delaware facilities receiving TRI chemicals from other Delaware TRI facilities and from out-of-state TRI facilities.

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 categories of **Recycle**, **Energy Recovery**, and **Treatment** are used to define on-site management activities related to TRI chemical wastes.

FIGURE 6
2005 ON SITE WASTE MANAGEMENT

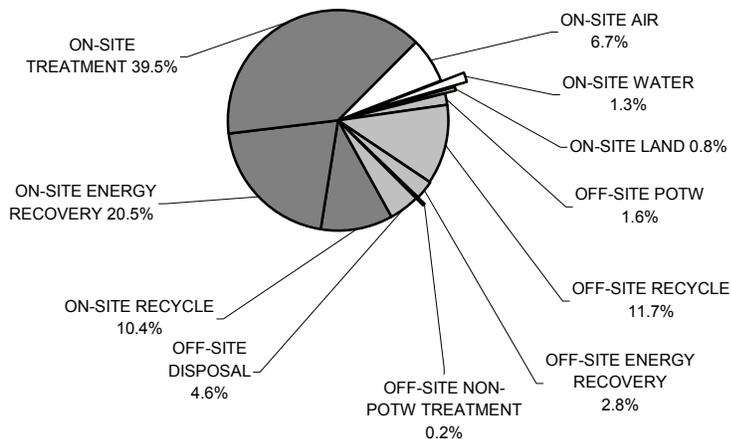


The total amount of TRI chemicals managed on-site is 70 percent of the total TRI chemical waste. This amount is over 8 times the amount of on-site releases. Figure 6 shows the portions of these wastes processed on-site. Appendices D and G provide additional detail about management of this chemical waste. **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. Valero, DuPont Edgemoor, Rohm & Haas, Medal, Noramco, Dow Reichhold, Occidental Chemical, and Indian River Power Plant have the highest total amounts of on-site waste management.

Total Waste

FIGURE 7
TOTAL 2005 TRI CHEMICAL MANAGEMENT
TOTAL REPORTED: 96,562,426 POUNDS



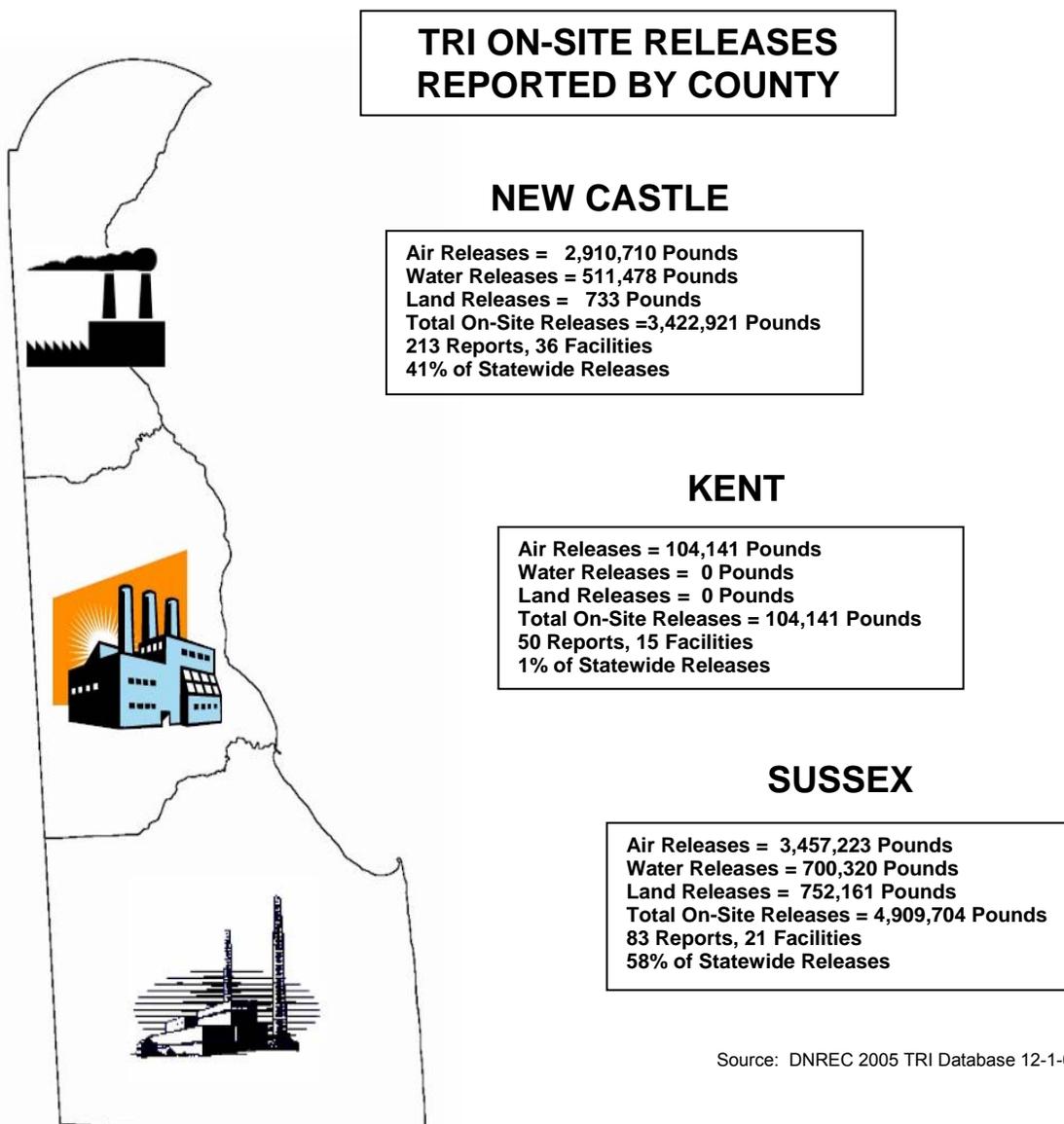
Total waste is the combined total of the on-site release, off-site transfer, and on-site waste management portions of the TRI chemical report. Figure 7 provides a perspective of the total TRI chemical waste picture in Delaware. About 9 percent of the total reported TRI waste is released on-site, 21 percent is transferred off-site, and 70 percent is managed on-site through treatment, energy recovery, and recycling operations by the facilities generating the waste. Figure 7 shows the relative portions of each major and sub-segment of TRI waste management.

2005 Data Detail

On-Site Releases by County

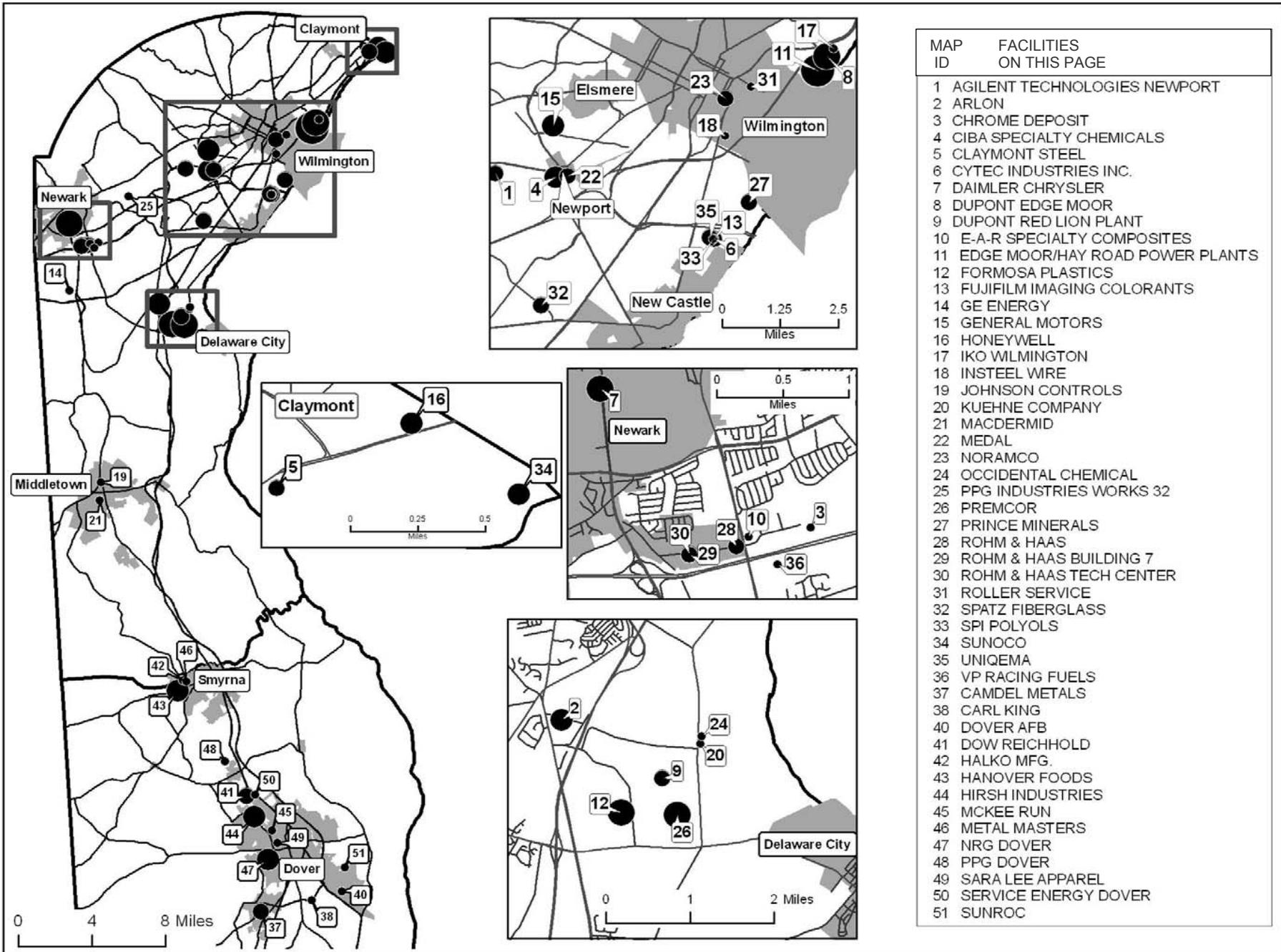
Figure 8 below provides basic on-site release information for each county in the State. Figure 9 on the following pages provides the location of each reporting facility in the State. The size of the facility location marker depicts the size of its on-site release relative to other facilities in the State. The facility location, telephone number, and contact person are provided in Appendix B.

FIGURE 8



Source: DNREC 2005 TRI Database 12-1-06

FIGURE 9 TRI FACILITY LOCATOR MAP



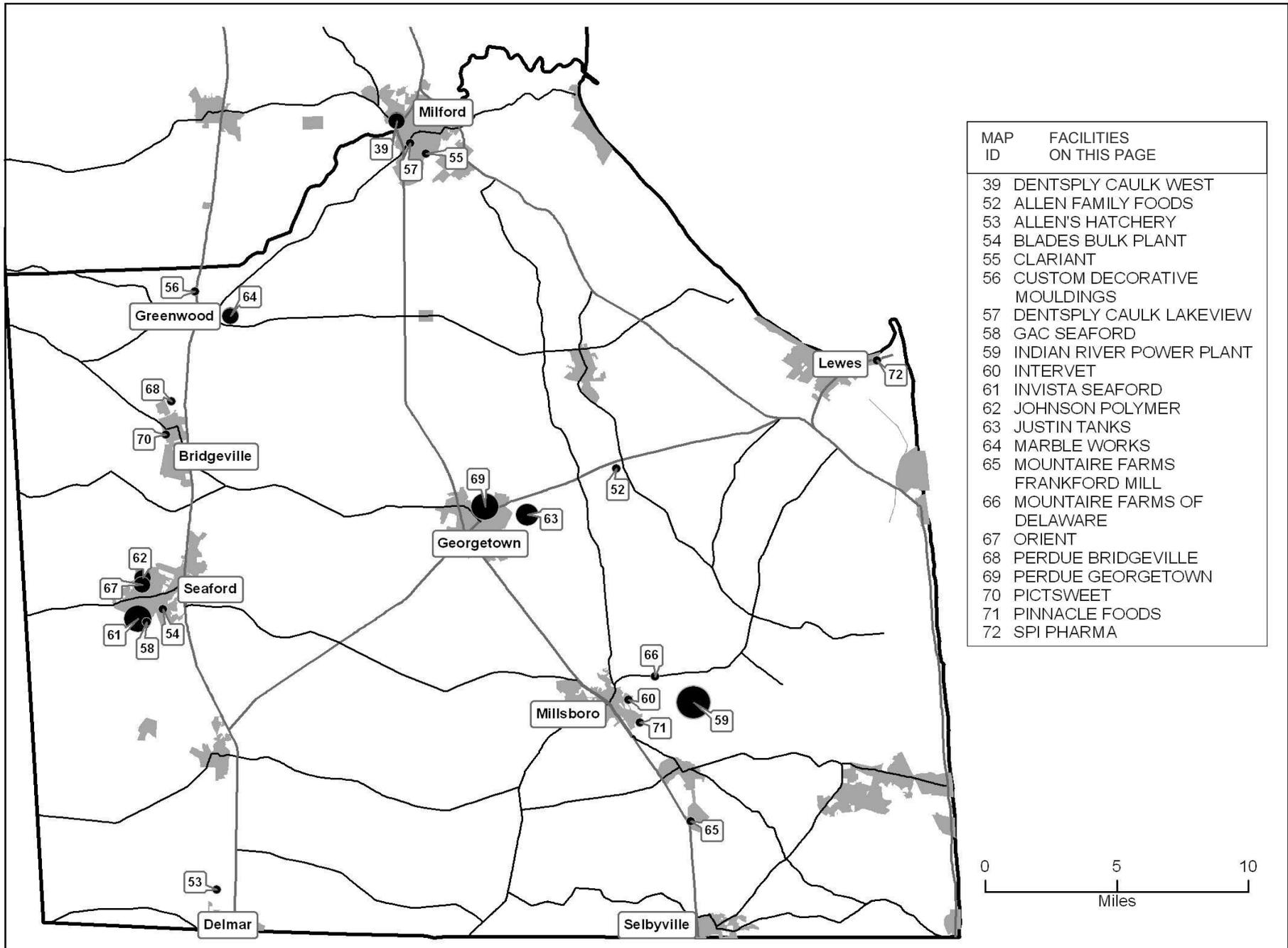


FIGURE 9 TRI FACILITY LOCATOR MAP

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, along with the reported amounts for each SIC code. This table also provides on-site releases, off-site transfers, and wastes managed on-site for each group. The one reporting facility in the metal mining group, American Minerals, processes metal ores that they receive by railcar.

TABLE 5
2005 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	4	1	0	4	2,915	0	0
20	Food Products	25	9	16	9	405,052	0	0
22	Textiles	3	1	2	1	3,218	595,112	4,320,113
24	Lumber and Wood Products	0	0	0	0	0	0	0
25	Furniture and Fixtures	1	1	0	1	13,535	0	0
26	Paper Products	0	0	0	0	0	0	0
28	Chemicals	121	22	8	113	1,279,976	9,353,991	30,607,555
29	Petroleum Refining and Products	57	5	4	53	950,588	1,463,231	31,432,362
30	Rubber and Plastics	16	10	3	13	49,760	305,555	161,580
32	Stone, Clay and Glass	1	1	0	1	0	0	0
33	Primary Metal	12	3	0	12	20,811	2,297,858	0
34	Fabricated Metal Products	4	2	0	4	10	470,256	1,300
35	Industrial Machinery and Equipment	2	1	0	2	0	6,100	0
36	Electronic Equipment, except Computers	2	2	0	2	108	4,794,273	0
37	Transportation Equipment	29	3	1	28	285,272	443,894	146,586
38	Measuring Instruments, Medical/Optical	6	2	0	6	2,255	48,991	0
39	Miscellaneous Manufacturing	1	1	0	1	2,879	0	0
4911	Oil and Coal Fired Power Plants	43	4	1	42	5,420,379	304,275	1,372,627
5171	Wholesale Petroleum Terminals	18	3	18	0	0	0	0
97	National Security	1	1	0	1	8	0	0
TOTAL		346	72	53	293	8,436,766	20,083,537	68,042,123

FIGURE 10
2005 ON SITE RELEASES
BY PRIMARY SIC GROUP

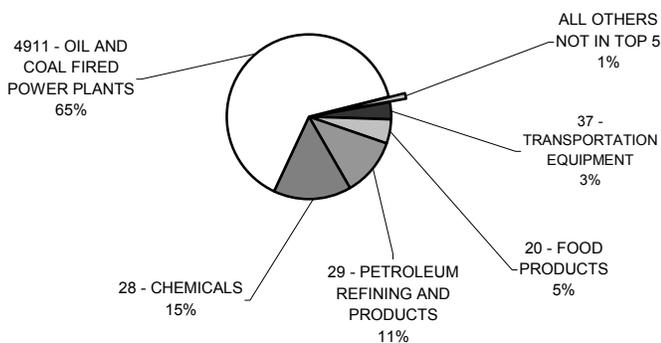


Figure 10 shows the relative contribution of each of the top five SIC groups and all others not in the top five to the reported total on-site releases. Three of these top five - SIC groups 4911 (Oil and Coal Fired Power plants), 29 (Petroleum refining), and 28 (Chemicals) combined for 91% of the total on-site releases within the State. Facilities not in the top five SIC industry groups reported contributions of only 95,500 pounds on-site, or 1.1% of the on-site release total. Starting with the 2006 reporting year, NAICS (North American Industry Classification System) codes will replace the SIC codes.

RELEASES FROM THE TOP 15 FACILITIES

Figure 11 shows the relative contribution of each of the top 15 reporting facilities to on-site releases. The top four facilities are, or have as a significant portion of their facility, an energy generating operation. Of the 8,436,766 pounds that were reported released on-site by all 72 facilities Statewide, the top 15 facilities accounted for 8,319,344 pounds, or 98.6% of the total on-site releases.

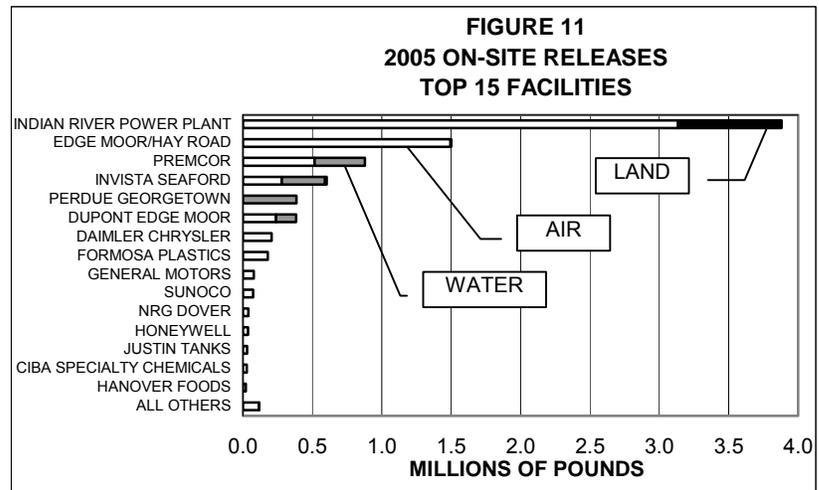


TABLE 6
TOP 15 FACILITIES 2004 AND 2005 RANKING BY ON-SITE RELEASE
(in pounds)

2004 RANK	2005 RANK	FACILITY	2005			2005 TOTAL ON-SITE RELEASE	2004 TOTAL ON-SITE RELEASE	2004 TO 2005 CHANGE IN RELEASES	
			TOTAL AIR	TOTAL WATER	TOTAL LAND				
1	1	INDIAN RIVER POWER PLANT	3,135,357	4,820	741,095	3,881,272	4,805,887	-924,615	-19%
2	2	EDGE MOOR/HAY ROAD POWER PLANTS	1,494,761	5,535	0	1,500,296	1,654,288	-153,991	-9%
3	3	PREMCOR	515,834	361,516	0	877,350	1,463,860	-586,510	-40%
4	4	INVISTA SEAFORD	280,843	310,500	10,976	602,319	752,293	-149,974	-20%
5	5	PERDUE GEORGETOWN	0	385,000	90	385,090	370,100	14,990	4%
7	6	DUPONT EDGE MOOR	239,177	143,377	0	382,554	325,714	56,840	17%
6	7	DAIMLER CHRYSLER	206,164	0	0	206,164	360,124	-153,960	-43%
9	8	FORMOSA PLASTICS	179,118	12	0	179,130	126,313	52,818	42%
10	9	GENERAL MOTORS	79,108	0	0	79,108	84,181	-5,073	-6%
12	10	SUNOCO	73,078	0	0	73,078	44,011	29,067	66%
11	11	NRG DOVER	38,811	0	0	38,811	44,011	-5,200	-12%
8	12	HONEYWELL	36,230	0	0	36,230	131,457	-95,228	-72%
14	13	JUSTIN TANKS	30,062	0	0	30,062	21,176	8,886	42%
13	14	CIBA SPECIALTY CHEMICALS	28,120	0	0	28,120	32,361	-4,241	-13%
19	15	HANOVER FOODS	19,760	0	0	19,760	11,500	8,260	72%
		ALL OTHERS	115,651	1,038	733	117,422	120,827	-3,404	-3%
TOP 15			6,356,423	1,210,760	752,161	8,319,344	10,227,274	-1,907,930	-18.7%
STATE TOTALS, ALL FACILITIES			6,472,074	1,211,798	752,894	8,436,766	10,348,101	-1,911,335	-18.5%

Source: 2004 and 2005 DNREC TRI Databases, December 1, 2006

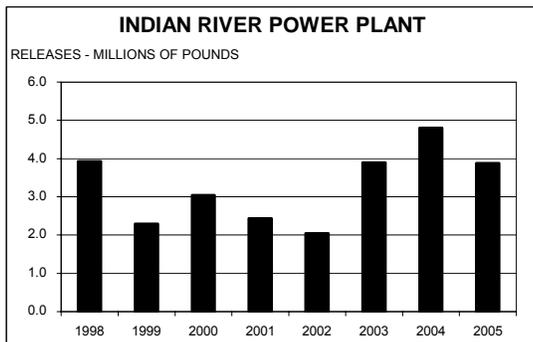
Table 6 shows the 2005 ranking of the top 15 facilities along with their 2004 ranking and the reported amounts of on-site releases for both years. Releases to the environment because of remedial actions, accidents, or one-time catastrophic events are included in these values. The percent change in total on-site releases for each of the top 15 facilities from 2004 to 2005 is also shown, and some of these changes are significant. Changes at the facility, such as the way releases are estimated, how waste is managed, changes in raw materials or processing methods, or installation of new or improved production equipment possibly used to limit or eliminate releases of all or specific chemicals, may affect reported releases. Changes in production amounts may or may not affect releases from a facility. Details for some of these changes are provided on the following pages. Interested individuals are also encouraged to contact facilities and inquire as to the reasons why changes occurred.

The next several pages present a brief description of each of the top 15 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 6, this rank for the 2005 reporting year is based on total reported on-site releases. The facility description explains the general 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. The graph for each facility includes all chemicals, including the newly reportable chemicals, which have been reported by the facility. Comparisons must be made carefully as the **scales on each of the facility graphs will be different**. Appendix C provides a complete list of 2005 on-site release data grouped by facility and chemical.

The DNREC TRI program visits facilities statewide during the year to get a better understanding of operations at the facilities, discuss TRI issues such as data quality that may have developed in the course of reporting, and to introduce new facilities and/or facility coordinators to the TRI program and its reporting requirements. Fourteen visits were conducted during the 2005 reporting year.

Although the TRI program itself has no limits for emissions, other DNREC and Federal programs do issue permits and limit emissions from operating facilities.

Rank #1 – NRG Indian River Power Plant - Oil and coal-fired power plants were required to report under TRI for the first time in the 1998 reporting year. This 784 megawatt facility, located near Millsboro, produces electricity, primarily from the combustion of coal.



The Indian River Plant reported on nineteen TRI chemicals for 2005. Ten of these were metal compounds, three were non-metallic PBTs, three were acid gases and the remaining three were ammonia, arsenic compounds, and naphthalene. All the compounds except ammonia are formed during the combustion process as a result of impurities within the coal and oil. Coal consumption increased 13% in 2003, 25% in 2004, and 16% in 2005 based on amounts of energy generated. TRI releases were in line with these

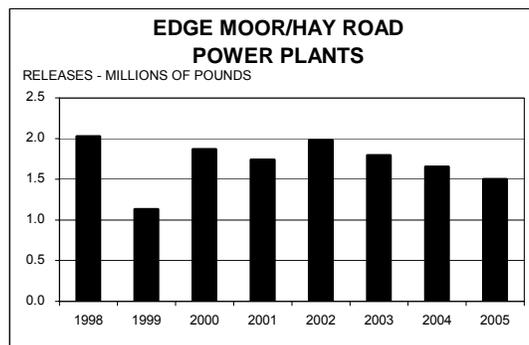
increases in 2003 and 2004, but in 2005, the releases decreased 19% due to Powder River Basin (PRB) coal and other lower sulfur coals that the plant was test burning. Chlorine and sulfur produce sulfuric and hydrochloric acid gases, and PRB coal is lower in sulfur and chlorine.

Beginning in 2003, actual stack sample data (as compared to EPA emission factor methods) were used to calculate hydrochloric acid gas releases. These methods were applied to the entire year, and this resulted in significantly higher release amounts for hydrochloric acid gas for 2003 and 2004. In 2005, coal analysis and the 2003 stack test emission factors were used to calculate the hydrochloric acid gas release. This gave a more representative total release for the year because it represents all the data for the year, not just the data collected during a single stack test run on regular coal. Acid gasses, such as hydrochloric acid, sulfuric acid, and hydrofluoric acid, accounted for 80% of the facility's on-site releases in 2005.

On-site mercury releases decreased again in 2005. Starting in 2004, coal analysis data and emission factors were used to calculate metal compound releases. Mercury total on-site releases decreased to 205 pounds down from 241 pounds in 2004 and 395 pounds in 2003. Metal compounds, formed as a result of impurities in the coal, are largely captured (97%) in the fly ash and bottom ash and sent to an on-site landfill. The metallic compounds accounted for 19% of the facility on-site releases and decreased 18% in 2005 because the lower sulfur coals tested also contained lower concentrations of metals. Again, current coal analysis data is used as a basis for calculating releases. Ammonia is released in the power production process solely from the use of urea, a pollution control agent used in Selective Non-Catalytic Reduction (SNCR) technology for limiting the formation of oxides of nitrogen to the atmosphere. Ammonia on-site release doubled in 2004 and increased 7% in 2005, the result of increased generation and associated utilization of the SNCR system. Naphthalene is in the oil consumed at the facility. Arsenic compounds are generated as a result of coal combustion and are sent to the on-site landfill.

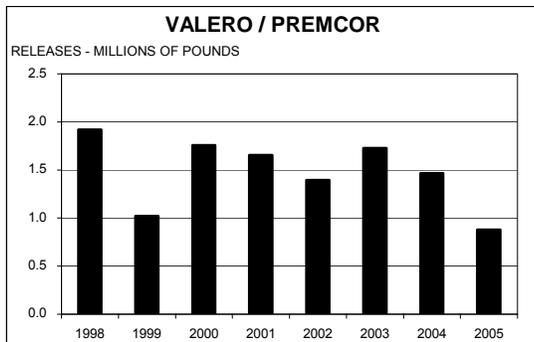
Rank #2 - Edge Moor/Hay Road Power Plants - Oil and coal-fired power plants were required to report under TRI for the first time in the 1998 reporting year. The Edge Moor/Hay Road facilities are located along the Delaware River, a mile north of the Port of Wilmington, and produce electricity from the combustion of coal, oil, and natural gas.

The Edge Moor/Hay Road power plants reported on eighteen TRI chemicals for 2005. These facilities reported three acid gases, nine metal compounds, four non-metallic PBTs, nitrate compounds, and ammonia. Acid gas emissions -- hydrochloric acid, hydrogen fluoride and sulfuric acid -- accounted for 98% of on-site releases. Most TRI chemical releases, including mercury compounds, ammonia, hydrochloric and hydrogen fluoride acid gasses, decreased because of a change in the ratio of oil to coal used in the different generating units, and a small reduction in energy generated. Overall, on-site releases decreased 9% compared to 2004 and are now 74% of the facility's 1998 level.



The Edge Moor/Hay Road Power Plants reported increases in on-site releases in lead, manganese, and nickel compounds, the result of variation in infrequent water analyses (one per quarter) weighted over the entire year. All listed compounds except ammonia are formed during the combustion process because of impurities within the fuel. Ammonia is released from the Edge Moor facility solely from the use of urea, a pollution control agent used for limiting the formation of oxides of nitrogen to the atmosphere. Ammonia is also used at the Hay Road facility for pollution control. About 89% 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 11% of metals not captured in ash was released on-site to air and water, or sent off-site to recycle or wastewater treatment, and accounted for 2% of their total on-site releases.

Rank #3 – Valero / Premcor - The Valero 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 Motiva, changed ownership to Premcor on May 1, 2004 and changed ownership to Valero on September 1, 2005. The 2005 data presented in this report were prepared under Valero ownership.

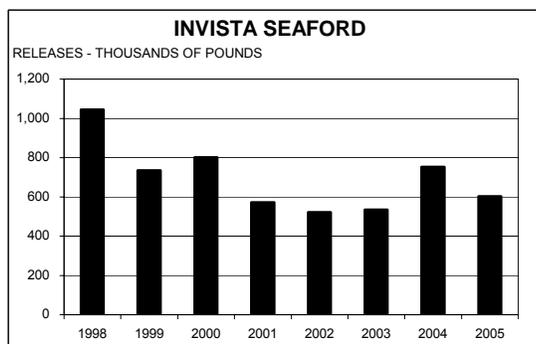


Valero reported on 45 TRI chemicals for 2005. The total facility-reported on-site releases decreased 40% in 2005 and have decreased 54% since 1998. Reported releases of ammonia declined by 198,000 pounds (84%) in 2005, the result of fewer boiler outages and updated analytical results and calculation methodologies. Reductions of 104,000 pounds (76%) for hydrochloric acid and 11,000 pounds (57%) for propylene were also reported in 2005, also the result of updated analytical results and calculation methodologies. Sulfuric and hydrochloric acids

are formed as acid gases in several units at the facility, including the fluid coker, fluid cat cracker, and the on-site power plant that combusts oil and gas. Sulfuric acid gas, almost unchanged at 99% of the 2004 release amount, accounted for 29% of Valero's total on-site releases and 50% of all Valero on-site air releases in 2005. Reported hydrogen cyanide and cyanide compounds each decreased by 12,000 pounds. These decreases were the result of updated analytical results and calculation methodologies. Reported releases of methanol decreased 10,000 pounds (53%). This is primarily due to the phase-out of MTBE as an additive in gasoline blends. The on-site landfill has been closed and disposals associated with this area, primarily metallic compounds, have been converted almost entirely to off-site recycle activities.

The above changes, along with other smaller increases and decreases, resulted in a net decrease of 586,500 pounds (40%) in on-site releases for the facility in 2005.

Rank #4 – INVISTA / 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. The facility changed ownership from Dupont to INVISTA on May 1, 2004. The data prepared for the 2005 report was done under INVISTA ownership.



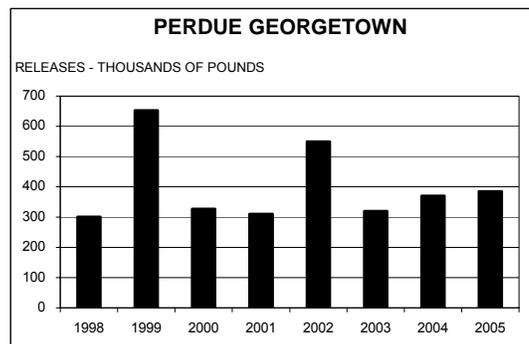
The INVISTA facility reported on 13 TRI chemicals for 2005. Of the 13 TRI chemicals reported, 98% of the on-site releases were comprised of three chemicals: hydrochloric and sulfuric acid aerosols (released to air) and nitrate compounds (released to water). Combustion of coal in the INVISTA power plant produces hydrochloric and sulfuric acid aerosols released to air from the stacks. The coal contains small amounts of chlorine and sulfur-containing compounds that convert to acid gases in the

combustion process. Nitrate compounds are formed during treatment of nylon process wastewater in the on-site biological wastewater treatment plant.

Total on-site releases declined by about 80,200 pounds (12%) since 2004. The INVISTA facility reported a 9% decrease in on-site releases of nitrate compounds and a 20% decrease in hydrochloric acid aerosols in 2005. This was the result of an 8% decrease in production and corresponding decreases in coal usage and wastewater flow. Lower coal usage and lower chlorine content in the coal resulted in decreased values for hydrochloric acid aerosol emissions. Lower water usage and sample variability resulted in decreased amounts reported for nitrate compounds. The production decrease did not result in significant changes to the other reported chemicals.

Rank #5 - Perdue Farms Georgetown - Perdue Farms is a producer of poultry products. The Georgetown facility processes chickens for sale to the retail market.

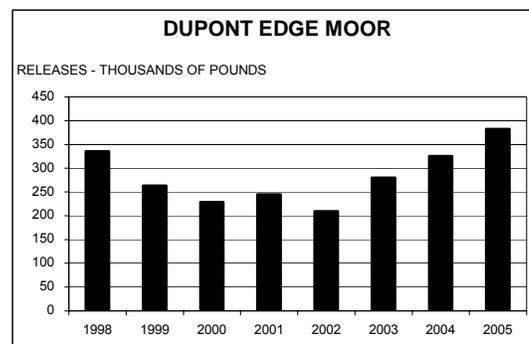
Perdue Georgetown reported on three TRI chemicals for 2005. Over 99% of the on-site releases were nitrate compounds. The Perdue wastewater treatment plant digests ammonia and production waste from the poultry processing plant's wastewater stream and converts some of these wastes to nitrate compounds. On-site releases increased by 15,000 pounds (4%) in 2005.



Nitrate compound volume at Perdue's wastewater treatment plant peaked in 1999 when new government-mandated poultry 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 amounts have varied in recent years because of changes in the way the amount of nitrate compounds releases are estimated. In 2003, nitrate compound on-site release decreased by 42%, the result of additional water recycle projects. In 2004, a production increase accounted for the increase, and in 2005, production was 4% greater than 2004, which correlates with the increase in the on-site release amount.

Rank #6 - DuPont Edge Moor - The Edge Moor Plant is one of three domestic DuPont facilities that manufactures titanium dioxide, a white pigment that is used in the paint and paper industries. The facility also produces titanium tetrachloride and ferric chloride. The plant is located along the Delaware River a few miles north of the Port of Wilmington.

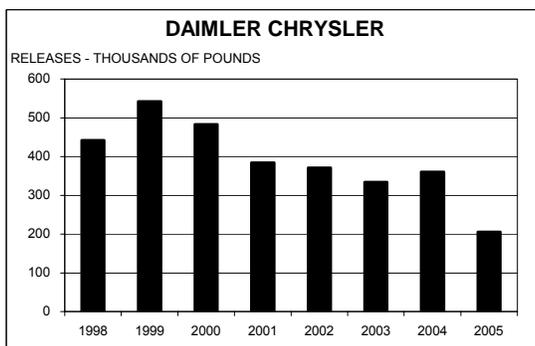
DuPont Edge Moor reported on 21 TRI chemicals for 2005. Carbonyl sulfide accounted for 60% of their total on-site release amounts, and manganese compounds accounted for 34%. Carbonyl sulfide is a by-product produced from the use of sulfur-bearing coke in the process of manufacturing the titanium dioxide from titanium-



rich ores. Manganese compounds are also by-products produced from the ores during the manufacturing process. Although production increased 3% in 2005, production of carbonyl sulfide increased by 7%, and production of manganese compounds increased 44%, causing a net increase in total on-site releases of 18%.

Also, dioxins and dioxin-like compounds are created as a result of ore processing. Over 99.99% of the dioxins generated are contained within the solid material sent to an out-of-state landfill facility. DuPont has made a public commitment to reduce generation of dioxin and dioxin like compounds by 90% by 2007, compared with 2001 levels. Through 2005, generation of dioxin and dioxin-like compounds has been reduced by approximately 77% from 2001 levels by making process modifications. A major capital project is now underway to provide further reductions and permit DuPont to meet its goal.

Rank #7 - DaimlerChrysler Newark Assembly Plant - DaimlerChrysler assembles the Dodge Durango SUV for distribution to dealers.

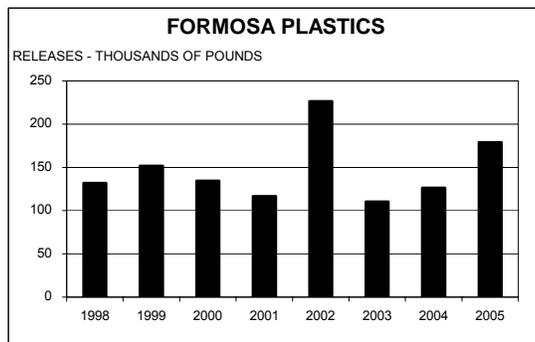


DaimlerChrysler reported on 17 TRI chemicals for 2005. All on-site releases were to the air. Many of these are solvents used in paints or for parts cleaning, while others are materials that are incorporated into the cars themselves, such as ethylene glycol (antifreeze) and n-hexane (gasoline). The vehicle body coating process makes use of 1,2,4-trimethylbenzene, certain glycol ethers, methyl isobutyl ketone, n-butyl alcohol, and xylene. Some of these materials are also used elsewhere in the facility. In total, these

chemicals accounted for approximately 86% of the DaimlerChrysler on-site releases in 2005. DaimlerChrysler accounted for about 84% of certain glycol ethers, 53% of 1,2,4-trimethylbenzene and 21% of all xylene leases in the state in 2005.

This facility had a production decrease of 32% because of a model changeover in 2005, but the on-site releases decreased 43% because vehicle painting operation efficiencies increased as a result of block painting, or grouping several vehicles of the same color together, to reduce the frequency of color switching and the associated solvent purge.

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 three TRI chemicals for 2005. Vinyl chloride monomer (VCM) accounted for 40% 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.

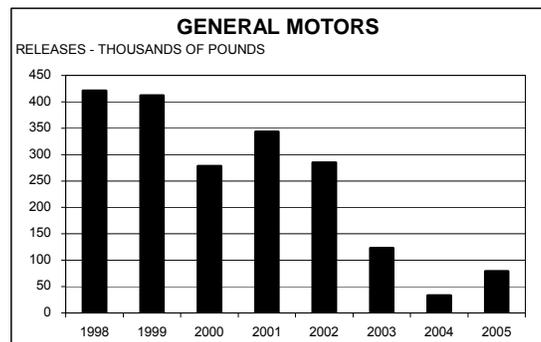
Vinyl acetate accounted for 25% of Formosa’s on-site releases. Vinyl acetate is also a raw material used in certain products and is released through the drying process. Ammonia is also used in several of Formosa's products and is released during the PVC drying process. Ammonia accounted for 35% of Formosa's on-site releases.

Formosa Plastics initiated better process monitoring and control in 2003 that reduced vinyl chloride emissions by 39% and vinyl acetate emissions by 67%. In 2004, on-site releases were higher by 15% compared to 2003, the direct result of a production increase. For 2005, on-site releases were up 42%. The method used to estimate the ammonia release was changed to an improved method that, along with a 35% production increase, resulted in a significantly higher estimated amount. Ammonia accounted for 86% of the total increase in on-site releases. The vinyl chloride release increased 2,800 pounds (4%) because of an accidental release, and vinyl acetate increased 3,700 pounds (9%) because of increased residual vinyl acetate.

Formosa started using a new basis on which to estimate vinyl acetate releases in 2002, so direct comparison of 2002 and later years with prior years is not possible.

Rank #9 – General Motors Wilmington Assembly Plant - General Motors assembles Pontiac Solstice and Saturn Sky automobiles for distribution to dealers; and the Opel GT for export to Europe.

GM reported on 11 TRI chemicals for 2005. Many of these are solvents (certain glycol ethers, xylene) used in paints or for parts cleaning, while others are materials that are incorporated into the cars themselves, such as ethylene glycol (antifreeze). All on-site releases reported by GM were to the air. Xylene, certain glycol ethers, and 1,2,4-trimethylbenzene are paint solvents used in both the base and top coats and accounted for 96% of on-site releases in 2005.



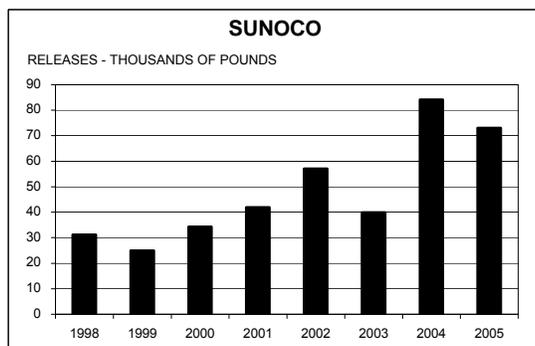
General Motors accounted for about 4% of certain glycol ethers, 42% of 1,2,4-trimethylbenzene, and 53% of all xylene releases in the state in 2005.

Although 2005 production was 70% of the 2004 level, on-site releases were 140% higher in 2005. During 2005, the plant underwent a significant model change-over in which chemicals identical to those used in production were used for cleaning, filling of bulk tanks, removal and replacement of chemicals in large systems, etc. The increase in xylene and 1,2,4-trimethylbenzene emissions can be attributed to the usage of purge cleaning solvent in preparing the paint systems to receive the new colors for the Pontiac Solstice. During such change-over activities, actual production is curtailed, causing the inverse relationship of less production and higher reported releases.

Rank #10 – Sunoco Refining and Marketing – The Sunoco facility, located in Marcus Hook, PA, also 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

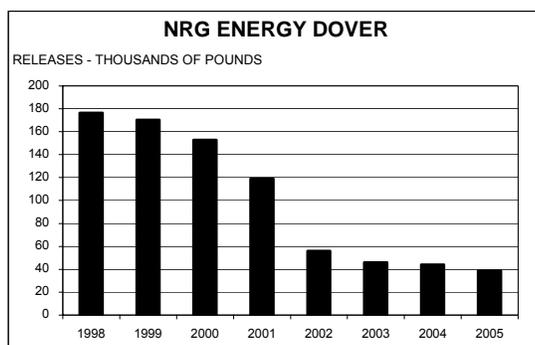
petrochemicals are benzene, toluene, xylene, cyclohexane, propylene, ethylene, and ethylene oxide; these are sold to chemical companies, which use them to make a variety of other products.

The portion of the Sunoco facility in Delaware reported four TRI chemicals in 2005. Ethylene and ethylene oxide account for 93% of the total on-site Delaware releases, and smaller amounts of benzene and xylene were also reported as released to air from tanks in Delaware.



The primary reason for the upward trend in 2004 was the large increase in the reported amount of ethylene released. This increase was the result of an improved method used to determine plant fugitives. Changes in production levels were not a factor in the changes in 2004. For 2005, emissions decreased by 16%. This is primarily due to decreased production of ethylene and ethylene oxide and faster equipment leak repair time.

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



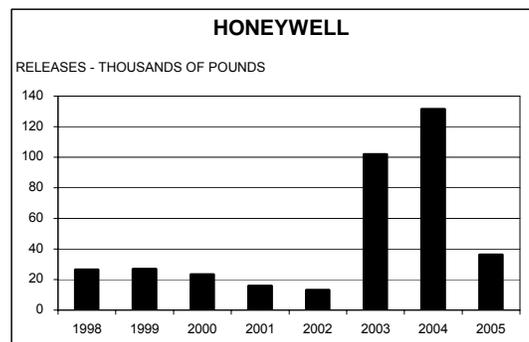
The NRG Dover Plant reported on four TRI chemicals for 2005. Two of these were acid gases - hydrochloric acid and sulfuric acid - formed during the combustion process. Acid gas releases accounted for over 99% of the facility on-site releases. Small amounts of metal compounds are also formed during combustion because of metallic impurities in the coal and are largely (97%) captured in the fly ash and bottom ash and sent to an off-site landfill.

The decrease in the 2002 reported releases was the result of using actual coal mine data as a basis for estimating releases of hydrochloric acid aerosols. This new basis reduced the reported release of hydrochloric acid by 65% (63,000 pounds) in 2002, and the hydrochloric acid release amount was nearly the same for 2003. The sulfuric acid release in 2003, however, was lower by 47%, the result of applying a coal mine coal cleaning factor which was included for the first time that year. For 2005, production increased by 4% while reported releases decreased by 12%. This reduced release amount was because of the lower sulfur content in coal purchased in 2005, which resulted in a 38% reduction in the reported sulfuric acid release.

Rank #12 - Honeywell International - Honeywell, located in Claymont adjacent to the now-closed General Chemical facility 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.

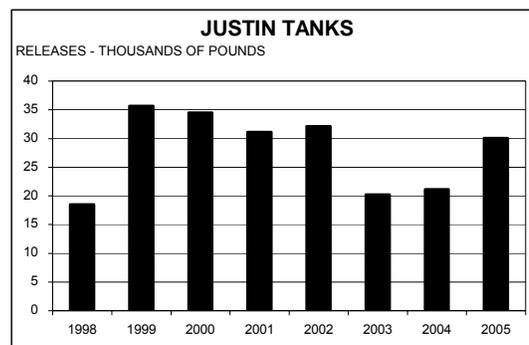
The Honeywell facility reported on eleven TRI chemicals in 2005. Releases of ammonia and n-hexane, used in production of caulking, accounted for about 94% of their total on-site releases. Although production increased 17% in 2003, the primary reason for the increase in the reported amount that year was that Honeywell performed stack testing and is now using this more accurate basis for estimating releases. In 2004, production increased 31% and the increase in on-site releases is a direct result of the production increase.

Honeywell has completed a two phase emission control project that decreased on-site emissions by 72% even with a 2005 production increase of 11%. In the 2006 report year Honeywell will be reporting the full year impact of the completed emission reductions project.



Rank #13 – 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.

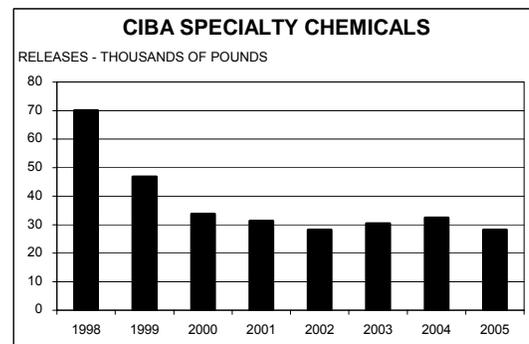
Justin reported on one TRI chemical, styrene, for 2005. Styrene is used as a monomer in the polymerization of fiberglass resin. The majority of the styrene is released to the air during the application process of fiberglass to the tank. During polymerization and curing, the amount of styrene release diminishes to zero at full cure. No release occurs after the tank polymerization and curing process is complete.

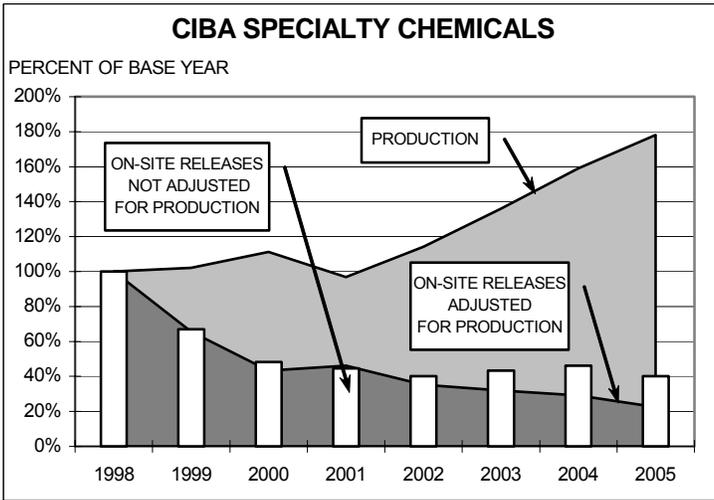


On-site releases increased 42% over 2004. This resulted from an increase in production and a product mix utilizing equipment with higher ratios of styrene release during the application process. Justin Tanks is scheduling equipment improvements in 2006, to reduce styrene releases during the application process.

Rank #14 – Ciba Specialty Chemicals - Ciba Specialty Chemicals is located in Newport. Ciba manufactures pigments for the paints, plastic, and printing industries. They reported on eight TRI chemicals for 2005. All on-site releases were to air.

Methanol was the predominant chemical released on-site in 2005 (94% of total on-site releases). Methanol is used as a reactant and a solvent in the pigment manufacturing process. A significant portion of methanol used at the facility is recycled. Total pigment production remained relatively flat in 2005 vs. 2004. Overall, on-site releases fell by 13% due to a different pigment assortment manufactured. Ciba has expanded and modernized their facility since 1998. Although facility production has increased significantly since



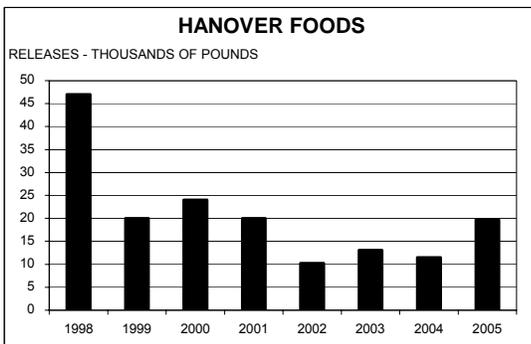


1998, Ciba has achieved a 60% reduction in on-site releases during this time. Ciba has also reduced transfers off-site of methanol to water treatment by 70% since 1998.

This second Ciba graph shows the relationships between actual on-site releases (bars), production (light area), and on-site releases based on units of production (dark area) starting with a 100% reference point in 1998. This graph shows that releases for each unit of production fell over the time period because

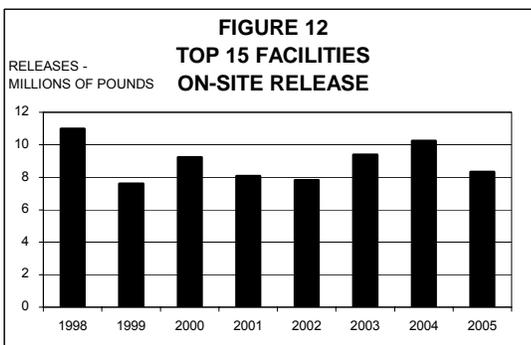
although production increased significantly, on-site releases were controlled to relatively constant amounts year-to-year.

Rank #15 – 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, and mushrooms, and packages frozen entrees. Hanover reported only ammonia releases for the past several years. This was primarily due to leaks and other losses in their refrigeration equipment. In recent years, the increases and decreases ammonia releases reflect the level of production. In 1999, an agreement with DNREC's Emergency Planning and Response Branch was reached to reduce ammonia releases to no more

than 14,000 pounds per year. However, since the expiration of the agreement, ammonia releases have increased. In 2005, production increased 50% but the reported ammonia release increased 72% to 19,760 pounds. DNREC is investigating this reported increase and suspects that a recent system inventory increase may not have been properly accounted for.



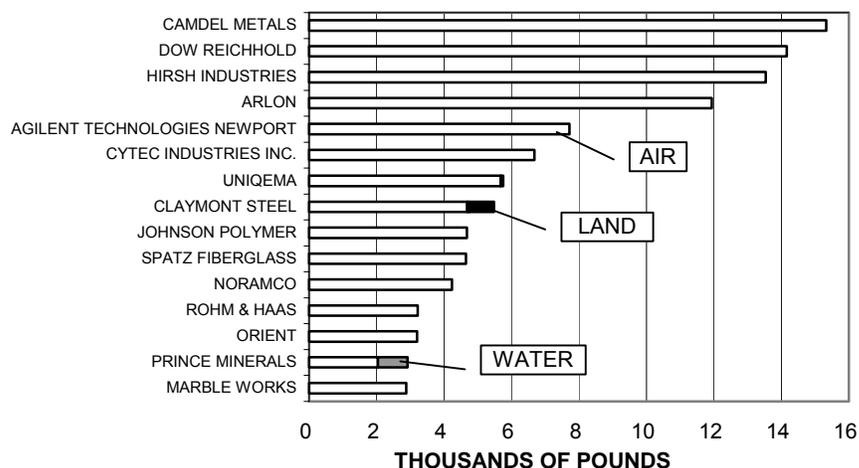
Combined Top 15 Facilities Trend – Figure 12 shows the totals for reported on-site releases for the top 15 facilities during 1998-2005. These facilities represent over 98% of the total on-site releases in the State for 2005. Six facilities had increases in 2005, the largest being DuPont Edgemoor (#6). Nine facilities had decreases, the most notable being the Indian River Power Plant (#1). The total on-site release trend for these 15 facilities is down 24% since 1998. All newly reportable chemicals are included in the

data shown on this graph and the ones for the individual facilities. Additional trends will be presented later in this report, and some of these trends take into account the new reporting requirements.

Releases from the 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 released a much smaller amount of TRI chemicals on-site, their operations are an important part of the Delaware economy. Again, the ranking is based on the total facility reported on-site release. Releases to air constitute about 98.4% of the second 15 group total on-site release, while releases to water and land each contribute less than 1%. Figure 13 shows the relative portions released to air, water, and land by each of the second 15 facilities.

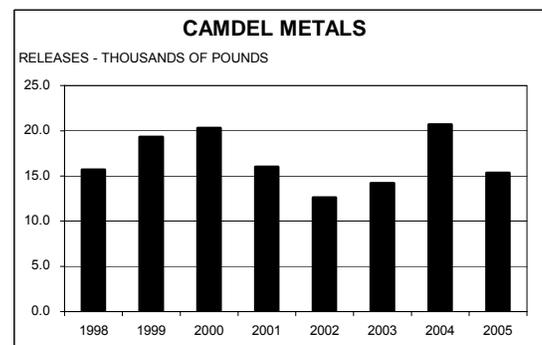
**FIGURE 13
2005 ON SITE RELEASES REPORTED BY
SECOND 15 FACILITIES**



In comparing facility rankings and release amounts with prior years' data, you may note that some facilities have reduced their on-site releases but their rank did not change. This is because of the general downward trend of this group (12 decreases, two increases, and one facility new to the group, Rohm & Haas, #31 last year). In addition, some facilities may move to another group or out of the top 30 entirely.

These facilities may be replaced by other facilities that have lower release amounts. Individual facilities that remain in the group must keep pace with this downward trend and effect their reductions at a similar rate in order to maintain their rank. In some cases, significant reductions result in little, if any change in rank, and no change or a small reduction in release may result in an increase in rank.

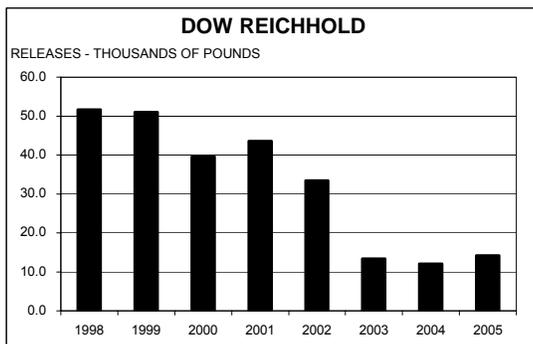
Rank #16 - Camdel Metals - Camdel Metals Corporation specializes in the production of seamless & welded stainless steel coiled and straight-length tubing. These tubes have been produced for numerous petrochemical applications, process construction, general control systems, instrumentation, medical, military, oil & gas, down-hole and sub-sea umbilical applications. Camdel produces the world's longest continuous seamless coils which can be in excess



of 5,000 feet. The tubing ranges in size from 0.020 to 3/4 inch diameter. Some types (welded) may be supplied in coils as long as 25,000 feet.

Trichloroethylene is the primary TRI chemical reported by Camdel Metals, and makes up 100% of the on-site release amount. It is used as a solvent to clean the tubing. Production increases in 2003 (15%) and 2004 (27%) accounted for most of the on-site release increases over 2002, and releases generally tracked production. Although production-related activities for trichloroethylene fell 6% in 2005, trichloroethylene releases fell by 26%, the result of improved process management.

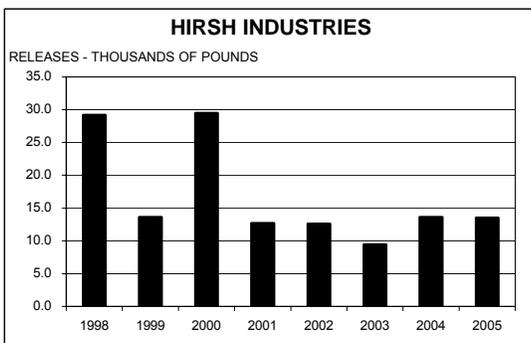
Rank #17 – Dow Reichhold – Dow Reichhold is located two miles south of Cheswold. Dow Reichhold produces emulsion polymers, sometimes referred to as latex. These products are sold in bulk liquid form and are used in the manufacture of synthetic fuels, nitrile rubber gloves, textiles, and other specialty products.



Dow Reichhold reported on ten TRI chemicals in 2005. Most of these are raw materials used to form the emulsion polymers, and 35% of on-site releases were of 1,3-butadiene, whose 2005 on-site release was 18% of its 1998 level. Pollution control equipment captured most of the residual monomers and achieved 98.0-99.9% removal efficiency before releasing its exhaust to the air. Dow Reichhold on-site releases increased 17% in 2005, but are still at 27% of 1998 levels. Although overall facility production remained steady in

2005, increases in releases of 1,3-butadiene and styrene contributed to most of the increase in on-site releases. These increases were primarily because of a production increase in the part of the facility that processes 1,3-butadiene and an accidental release, both involving 1,3-butadiene. The recent reductions in 2003-2005 compared to 1998-2002 are partially the result of declining production, but also the result of implementing of a more rigorous Leak Detection and Repair (LDAR) program that exceeds current regulations. Some of the reduction is also attributable to improvements in the conversion of monomer in the production recipes.

In 2006, a railcar containing styrene on the facility site spontaneously polymerized, releasing styrene to the air and land. There were no fires or explosions at the facility, and no serious injuries occurred at the facility or in the nearby community. Release and transfer amounts associated with the incident will be reported in the 2006 TRI report.



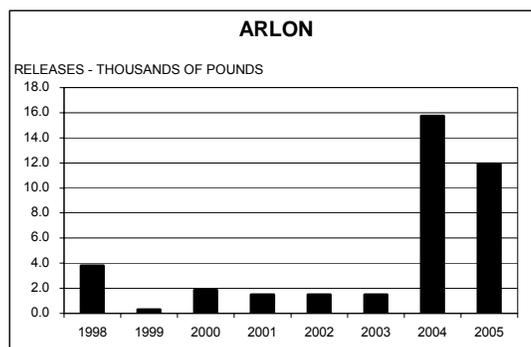
Rank #18 – Hirsh Industries – Hirsh Industries produces a line of consumer durables. These products include file cabinets, shelving units, and lateral filing systems. These items are used in home and office applications. Hirsh Industries is located north of Dover.

Hirsh reported one TRI chemical in 2005, certain glycol ethers. It is used as a paint solvent in their process. Although on-site releases decreased 1% in 2005, production activities involving certain glycol

ethers increased 10%, and total on-site release is now at 46% of the 1998 amount. This trend is partially the result of declining production during 1999-2003 (production increased 32% for 2003-2005), but also the result of a more effective painting process, improved paint products from their vendors formulated to meet new hazardous air pollutant (HAP) regulations, and utilizing more accurate methods to estimate the amounts of releases. One of the chemicals last reported in 2000 is used in small amounts and no longer meets the reporting threshold. The on-site release amount also varies year-to-year because of production levels and the amount of paint used in the process.

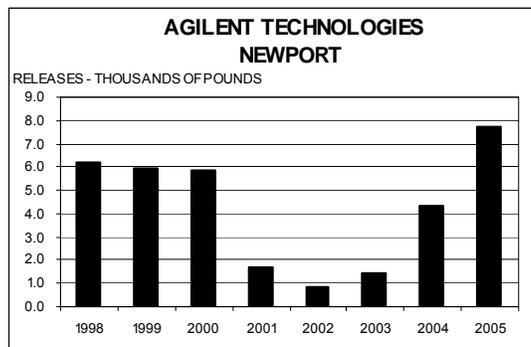
Rank #19 – Arlon – Arlon specializes in ceramic-filled fluoropolymers (i.e., PTFE) and other laminates that are used in frequency-dependent circuit applications such as base stations and antennas for wireless telecommunications. Arlon also produces precision calendared silicone rubber coated fabric sheets and specialty extruded silicone rubber tapes.

Arlon reported two TRI chemicals, xylene and copper, in 2005. Arlon uses xylene as a chemical processing aid in the coating of fiberglass with the silicone rubber dispersion. A large portion of xylene released by the process is sent to the on-site thermal oxidizer system. Copper is used in the antenna assemblies and all copper waste was recycled.



On-site release amounts increased significantly in 2004 because of a failure in the heat exchanger in the thermal oxidizers that destroy xylene releases from the coating process. The heat exchanger was repaired in September 2005, and the xylene release amount should return to historical levels in 2006.

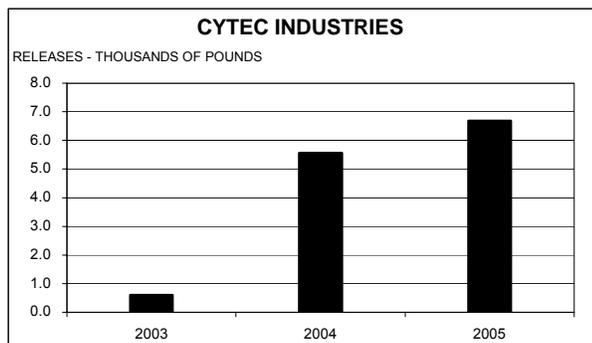
Rank #20 – Agilent Technologies Newport – Agilent is a global company that manufactures test and measurement equipment, life science and chemical analysis solutions, and automated test equipment. The Agilent Technologies facility, located in Newport, manufactures columns for use with liquid gas chromatographs, and cleans and coats glass for use in making instruments at other Agilent facilities.



Agilent Technologies reported on-site releases of methanol, toluene, and acetonitrile in 2005. All of the releases were to air. The largest reported release was for methanol. Larger amounts of the three chemicals were also sent off site and burned in an energy recovery unit.

The 79% increase in on-site release amounts in 2005 was due to the continuing consolidation of some manufacturing operations from another Agilent facility to the Newport facility in 2004, initiating the reporting of acetonitrile and increasing the release of methanol.

Rank #21 - Cytec Industries – Cytec Industries is manufacturer of polymers used in commercial and military aerospace polymer composites. This facility is located in New Castle. No Cytec reports were filed in 2001 and 2002 as the facility was part of an adjacent facility,

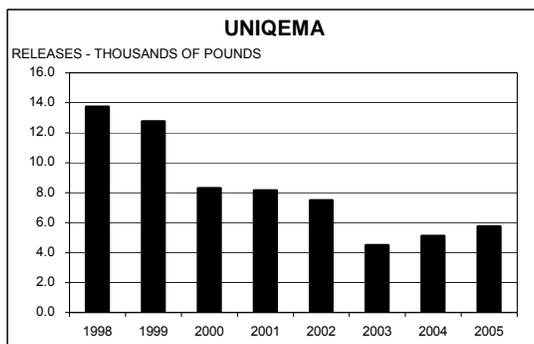


Avecia, and became a separate facility in August 2003. The current facility began reporting as a separate facility in August 2003, and the facility filed a partial year report for that year. The 2004 year is the first full year report for this facility, and a trend for this facility is just starting to become established.

Cytec reported on two TRI chemicals, methanol and ethylene glycol, for 2005. All releases were to air. The largest on-site release was from methanol, and it made up

over 99% of the total on-site release. Methanol is produced on-site and used as a processing aid. Larger amounts of methanol were also sent off site for treatment and energy recovery. Although Cytec reported a 70% production increase in 2005 related to the process involving methanol, on-site releases increased only 20% because most of the releases were better managed in 2005, and were not directly related to production volume.

Rank #22 - Uniqema - Formerly ICI Atlas Point; these two companies have occupied the site located in New Castle near the Delaware Memorial Bridge since 1971.



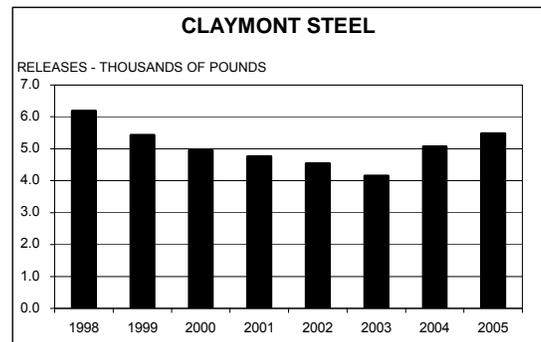
This facility manufactures products that promote the mixing of oil and water-based ingredients in many consumer products, such as baby shampoo, shaving cream, mouthwash, pharmaceuticals, and many other personal care and industrial products.

Uniqema reported on eleven chemicals for 2005. The majority of the on-site chemical releases were from 4,4-isopropylidenediphenol, ethylene oxide, and propylene oxide. All on-site releases were to air. Uniqema TRI releases increased 13% in 2005 and 14% in 2004 following a 40% decrease in

2003, but have decreased 58% since 1998. The increases in 2004 and 2005 were the result of changes in production levels related to the specific chemicals, and a modification to the product portfolio in response to market conditions. Additionally, in 2005 Uniqema brought on-line the first phase of a 20-million lb/year expansion to manufacture amine-based chemicals. Overall production during 2003-2005 increased by 9%.

Rank # 23 – Claymont Steel / Citisteel- Located on a 425-acre site in Claymont, Claymont Steel, formerly known as CitiSteel, manufactures carbon steel plate for heavy industrial applications. The facility purchases and recycles more than 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 1/4” to 5-1/2”. The plates are sold throughout the entire United States. Claymont Steel reported on-site releases of seven TRI chemicals, all metallic compounds, in 2005. Most of the releases, 86%, were to air. Zinc compounds were the largest on-site release, at 51% of the total.

The increase in the 2004 on-site amount total was due to a 22 percent increase in production over 2003. For 2005, on-site releases increased 24%, although production decreased 13%. In early 2006, in an effort to more accurately measure emissions and releases of toxic chemicals, Claymont Steel conducted "stack tests" on exhaust air leaving their furnace dust collector. This data provides a more accurate report of emissions than the existing emission factor method (see page 3). Because the results of these tests were known prior to the reporting date for 2005, they are included in the 2005 TRI reports.

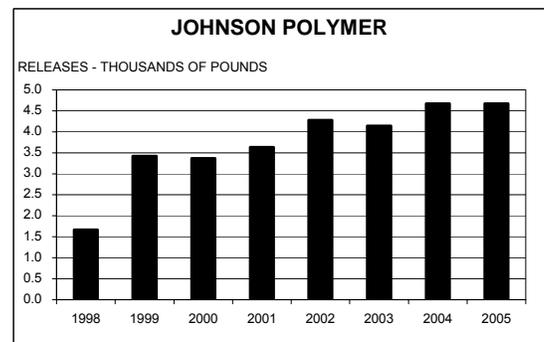


The results of these tests showed that the release amounts for most chemicals reported by Claymont Steel were higher than previously reported, although one test was lower. Mercury compounds in particular, was significantly higher than expected, increasing to 361 pounds, up from 36 pounds reported in 2004. Claymont Steel conducted a second test of these metallic compounds in January 2007 to verify the accuracy of the initial test, pursuant to a November 2006 DNREC Secretary's order requiring quarterly stack testing and substantial reductions in mercury emissions. The two tests were done by different independent laboratories. The test results are not available at press time and will be reported at a later date and in the 2006 TRI Detail Report. Also included in the order are requirements to reduce mercury emissions by not accepting any municipal scrap steel that may contain mercury, by continuing to participate in the above Mercury Switch Recovery Program, and by developing a mercury reduction plan that includes selecting and implementing by the end of 2008 one or more of several options to reduce remaining on-site mercury emissions.

In August 2006, Delaware joined with other stakeholders including Claymont Steel and the EPA, in announcing the National Vehicle Mercury Switch Recovery Program. This program is designed to recover mercury switches used in lighting and braking systems in 2002 and older vehicles as they are being prepared for recycling. Some of the mercury in the switches can be released to air during the steel-melting process. Although Claymont Steel does not prepare vehicles for recycling, the company has committed to purchasing shredded automobile scrap steel from suppliers that are participating in the switch recovery program.

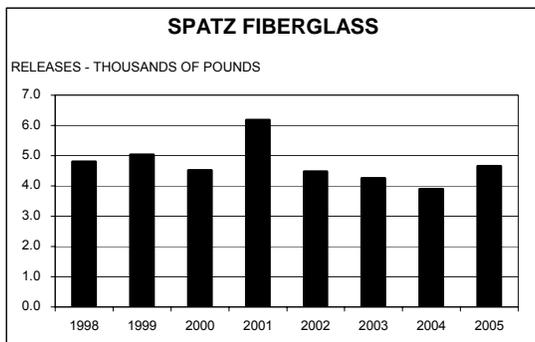
Rank #24 – Johnson Polymer – Johnson Polymer manufactures emulsion polymers, sometimes referred to as latex, primarily for the printing and packaging industries, but also used as additives for paints and coatings. Typical customers include ink and coating manufacturers.

Johnson Polymer reported six TRI chemicals in 2005. The total amount of individual releases reported in 2005 was unchanged from 2004. Ammonia was the largest on-site release. It is used to adjust the pH of their process. On-site releases of all chemicals have increased by 181% since 1998, primarily due to changes in methods used to more accurately estimate release amounts. Although small increases in some chemicals occurred because of scheduled tank



cleanings, these were offset by decreases in other chemical releases because of product consolidation and production efficiency increases.

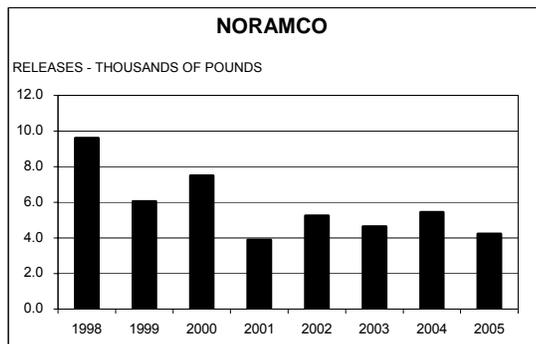
Rank #25 – Spatz Fiberglass – Spatz Fiberglass Products Inc. is a custom manufacturer of fiberglass reinforced products for the corrosion resistant and molded products industries.



Spatz manufactures three types of products: Industrial fiberglass components, commercial gel-coated products, and architectural products. Industrial components include duct systems, pressure pipe, stacks, scrubbers, tanks, and fume hoods. Commercial products include seats and tables for fast food restaurants and fish hatchery tanks. Architectural products consist primarily of cornices, columns, and landscaping products.

Spatz reports on one TRI chemical, styrene. It is used as a solvent in their adhesives used to manufacture the fiberglass components. The trend of on-site release in recent years has been slightly down, primarily the result of lower production volumes. However, in 2005, production increased and the amount of on-site styrene release increased by a corresponding amount.

Rank #26 – 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.

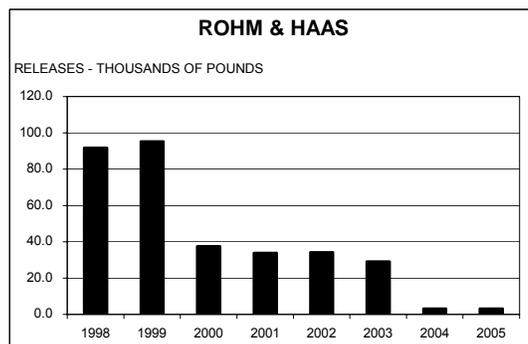


Noramco reported on-site releases of six TRI chemicals in 2005. The largest on-site chemical release was dichloromethane, followed by methanol and toluene. All on-site releases were to air. Noramco on-site releases have decreased

by 44% since 1998, with year-to-year variations reflecting the overall level of production, amounts of specific products produced, and efforts to reduce releases. For 2005, with production up about 6%, the combination of an 8% decrease in dichloromethane and a 19% increase in methanol resulted in a 3% increase in total on-site releases, not including an accidental release of toluene in 2004. When the 2004 accidental toluene release is included, reported on-site releases are down 22% in 2005.

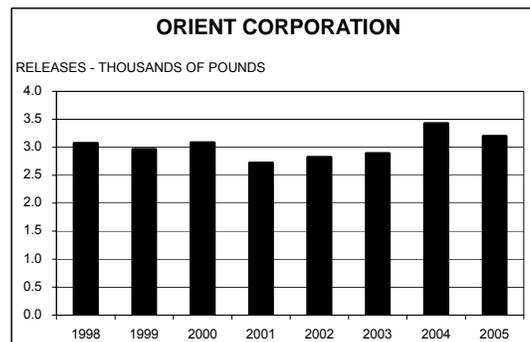
Rank #27 – Rohm & Haas / Rodel – Rohm & Haas, formerly known as Rodel, changed ownership in 2003. This facility manufactures polishing pads and slurries for the semiconductor, electronics, and glass industries. The facility is located south of Newark in the Diamond State Industrial Park. Rohm & Haas reported on three TRI chemicals for 2005.

N,N-Dimethylformamide (DMF), used as a solvent carrier in the polishing pad manufacturing process, accounted for 100% of their on-site releases. Releases of DMF from the Rohm & Haas facility 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 2005 DMF release was 4% of the 1998 level, the result of installing improved recovery equipment in 2000 and increasing fume collection as well as distillation column efficiency in 2004. Also in 2004, methyl ethyl ketone (MEK) was delisted from TRI reporting. In 2003, MEK contributed 10,158 pounds to the total on-site release for that year. All on-site releases of DMF were to air, and were primarily stack emissions from the oxidizer used to control process emissions.



Rank #28 – Orient - Orient Corporation of America was established in Port Newark, NJ in 1979. Its parent company, Orient Chemical Industries, Ltd., is located in Osaka, Japan and was established in 1917. Orient distributes various dyes, pigment dispersions and charge control agents.

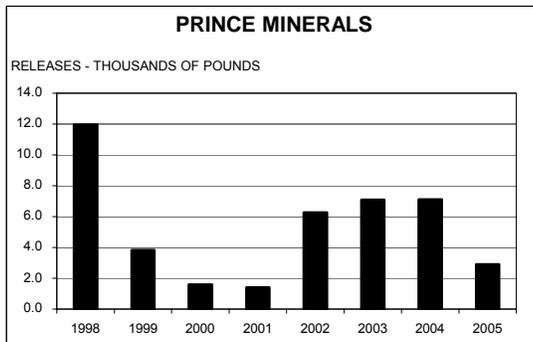
In order to meet the increasing demand for its products, Orient Corporation of America moved its manufacturing operations to Seaford, Delaware in 1991 where it constructed a new manufacturing facility for the production of Nigrosine Dye, a product used in phenolic and polyamide resins and special paints. Orient supplies a large share of domestic demand for this type of dye.



Orient reported on three TRI chemicals for 2005. All on-site releases were to air. Aniline was the predominant on-site release and accounted for 92% of the total. Chromium compounds and nitrobenzene were the other reported TRI chemicals, with nitrobenzene reported as the remaining 8% on-site release. Aniline and nitrobenzene are used in the production of dyes. Chromium compounds are purchased and sold as is, with no releases. Small amounts of aniline and nitrobenzene were also sent off-site for treatment, and additional aniline waste was also treated on-site. Although production levels have increased 11% since 1998, on-site releases have increased only 4%, the result of higher efficiency due to lengthening of the production cycle and a corresponding reduction of startup/shutdown times.

Rank #29 – Prince Minerals / American Minerals - Prince Minerals Inc. is a custom processor of natural occurring ores and minerals. These minerals include manganese, olivine (magnesium iron silicate), iron chromite, and magnesite. Prince Minerals, formerly known as American Minerals, is located in New Castle. In March 2005, Prince Minerals acquired American Minerals. Prince Minerals is a specialty minerals processor with processing and warehousing facilities across North America. The New Castle facility converts ore materials into products which are utilized by industry and the public on a daily basis such as bricks, steel, and fertilizer. Prince Minerals grinds, crushes, screens, and blends these materials into

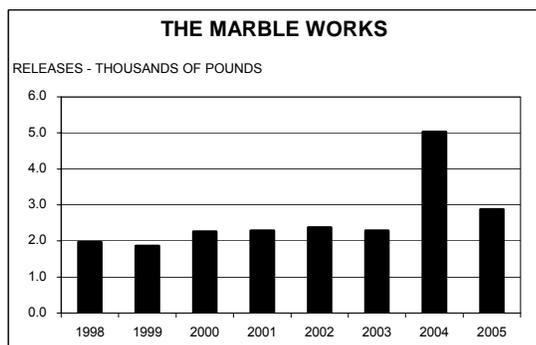
products tailored to the specific needs of their industrial, agricultural, and environmental remediation customers.



Prince Minerals reported on four TRI chemicals for 2005. These were all metals or metal compounds. Over 60% of the on-site release amount was manganese compounds released to air. The facility has reduced its on-site releases by 76% since 1998. In 2002, an increase in manganese emissions was reported because manganese inventory was increased and a more accurate emission factor was used to estimate the manganese releases. From 2002-2004, increases in on-site releases were production-related. In 2005, the reported manganese emissions

decreased, as reporting was based on a more detailed and accurate calculation of emissions based on actual production rates and material inventory volume. Overall production has increased 28% at this facility since 2001.

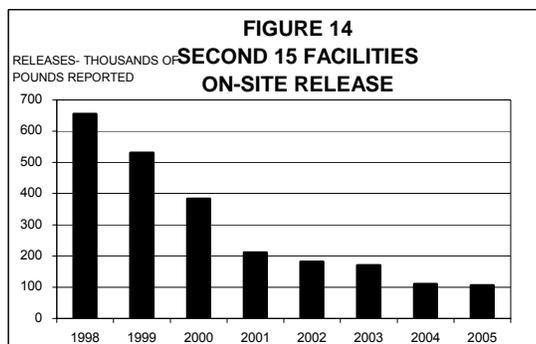
Rank # 30 – The Marble Works – Established in 1983 near Greenwood, The Marble Works manufactures cultured marble products for home and commercial bath and kitchen applications. Typical customers include builders who incorporate these products into their finished buildings.



The Marble Works reported one TRI chemical, styrene, in 2005. Styrene is used as a solvent in their process. On-site releases of TRI chemicals at The Marble Works have increased by 46% since 1998, mainly through production increases. In 2004, methyl methacrylate was included in TRI reporting as it exceeded the TRI reporting threshold only for that year. For 2005, methyl

methacrylate did not exceed the reporting threshold, and the on-site release amount reported for styrene increased about 30% compared to 2003 reported amounts, in line with the 2004-2005 production increases.

Combined Second 15 Facilities Trend - Figure 14 shows the totals for the facilities ranked #16-30 for reported on-site releases. The trend is down by 84% since 1998. This trend shows a greater percent decrease than the top 15 group, which had a 14% decrease since 1998.



Because of the greater decrease in amounts of the Second 15 group, its contribution to the State total decreased from 3% in 1998 to 1% in 2005. Facilities in the Second 15 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.

Persistent Bioaccumulative Toxic (PBT) Chemicals, 2000-2005

For reporting year 2000 and beyond, EPA established substantially lower reporting thresholds for 15 chemicals and 2 chemical categories that are highly persistent and bioaccumulative in the environment (PBTs). Six chemicals and one new category 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 7 provides a list of these PBT chemicals and their thresholds.

Persistent Bioaccumulative Toxics (PBTs) are receiving increased scrutiny as we learn more about them, and reporting PBTs is also being emphasized to an increasing degree. These chemicals are of particular concern because they are not only toxic, but also because they remain in the environment for long periods of time, are not readily destroyed, and accumulate in body tissues. 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.

Therefore, not all of the PBT chemicals released in prior years were reportable, even though it is likely these chemicals were released at, or near, the current reported rate if the facility had no significant change in its operation. For example, 21 facilities reported lead or lead compounds in 2002 and 2001 and 19 in 2003 compared to 7 in 2000. All of these facilities were in operation prior to 2001. Dover Air Force Base (DAFB) Small Arms Range was the top reporter for on-site lead release in 2001 but did not report any lead release for 2002-2005. Although at least two Executive Orders, 12856 and 13148, encourage Federal facilities to set leadership examples in reporting information to the public regarding toxic and hazardous chemicals, the DAFB claims that the Small Arms Range, on the grounds of the base, is a separate facility and is exempt since it has less than 10 full-time employees. Although DAFB did report a small amount of one fuel-based chemical in 2005, it used a TRI-allowable exemption to exclude other non-PBT TRI chemicals on the base that might otherwise be reportable.

Additional release information on all PBTs reported to the Delaware TRI program can be found starting on the next page.

**TABLE 7
PBT CHEMICALS AND
REPORTING THRESHOLDS
(pounds/year)**

Chemical or Chemical Category	Threshold (Pounds)	2005 Reports
Aldrin	100	0
Benzo[g,h,i]perylene	10	10
Chlorodane	10	0
Dioxin and dioxin-like compounds category	0.1 grams	6
Heptachlor	10	0
Hexachlorobenzene	10	1
Isodrin	10	0
Lead *	100	4
Lead and lead compounds *	100	14
Mercury	10	2
Mercury compounds	10	7
Methoxychlor	100	0
Octachlorostyrene	10	1
Pendimethalin	100	0
Pentachlorobenzene	10	2
Polychlorinated biphenyls (PCB's)	10	1
Polycyclic aromatic compounds category	100	13
Tetrabromobisphenol A	100	0
Toxaphene	10	0
Trifluralin	100	0

* Lower Threshold For 2001 Reports

Table 8 shows the results of PBT reporting for 2003-2005 compared to total 2005 TRI data. PBT on-site releases for 2005 comprise about 0.4% of the total TRI on-site releases. Total reported PBT wastes increased by 1.25 million pounds (28%) in 2005, largely because of increased off-site recycle, but PBT on-site releases were higher by only 1%. All reports are made on Form R, as Form A may not be used to report PBTs.

TABLE 8
2005 TRI PBT DATA SUMMARY
(IN POUNDS)

	All Data 2005	PBTs only 2005	PBTs only 2004	PBTs only 2003
No. of facilities	72	28	26	28
No. of Form A's	53	NA	NA	NA
No. of Form R's	293	61	60	62
No. of PBT Chemicals	103	11	11	11
On-site Releases				
Air	6,472,074	4,095	3,797	5,230
Water	1,211,798	1,857	1,002	311
Land	752,894	26,559	27,356	21,826
Total On-Site	8,436,766	32,510	32,154	27,367
Off-site Transfers				
POTWs	1,514,246	11	186	2,013
Recycle	11,259,408	5,488,166	4,293,112	4,575,042
Energy Recovery	2,709,850	1	0	0
Treatment	199,493	12	0	0
Disposal	4,400,539	80,633	66,217	70,592
Total Transfers	20,083,537	5,568,822	4,359,516	4,647,648
On-site Waste Mgmt.				
Recycle	10,079,028	50,619	10,603	7,185
Energy Recovery	19,786,104	0	0	0
Treatment	38,176,991	749	766	710
Total on-site Mgmt.	68,042,123	51,368	11,369	7,895
Total Waste	96,562,426	5,652,701	4,403,039	4,682,910

Table 9 below shows the amounts of each PBT chemical reported as released by the TRI reporting facilities in 2005. Lead compounds made up 87% of the total on-site PBT releases and over 93% of the transfers off-site, largely to recycle from Johnson Controls. Almost the entire large amount of mercury transferred off-site was from the closure of the Occidental Chemical chlor-alkali facility.

TABLE 9
2005 PBT RELEASE SUMMARY
(REPORTED AMOUNTS IN POUNDS)

2005 PBT CHEMICAL	FORM R REPORTS	ON-SITE RELEASES				ON-SITE TOTAL	TRANSFERS OFF-SITE	ON-SITE WASTE MGMT.
		TOTAL AIR	TOTAL WATER	TOTAL LAND				
BENZO (G,H,I)PERYLENE	10	57.49	4.20	0.00	61.69	0.10	411.00	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	6	0.01	0.00	0.00	0.01	39.27	0.00	
HEXACHLOROBENZENE	1	0.00	0.00	0.00	0.00	886.10	0.00	
LEAD	4	5.00	5.00	0.00	10.00	61.00	46,616.00	
LEAD COMPOUNDS	14	2,608.96	1,826.56	26,500.00	30,935.52	5,173,914.70	0.00	
MERCURY	2	261.09	17.26	0.00	278.35	393,561.23	4,000.00	
MERCURY COMPOUNDS	7	734.60	0.01	59.00	793.61	91.54	0.00	
OCTACHLOROSTYRENE	1	0.00	0.00	0.00	0.00	143.30	0.00	
PENTACHLOROBENZENE	2	14.30	0.00	0.00	14.30	12.80	0.00	
POLYCHLORINATED BIPHENYLS (PCBs)	1	0.00	0.00	0.00	0.00	15.20	0.00	
POLYCYCLIC AROMATIC COMPOUNDS	13	413.44	3.50	0.00	416.94	96.83	341.36	
TOTALS	61	4,094.89	1,856.53	26,559.00	32,510.42	5,568,822.07	51,368.36	

(1) Dioxins are reportable in grams and have been converted to pounds.

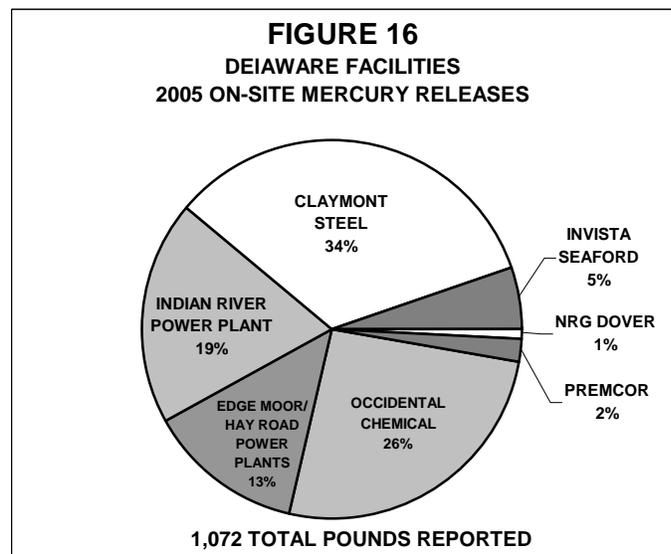
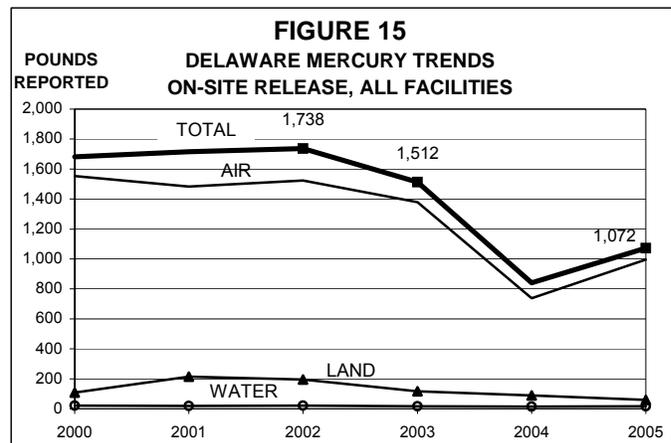
The Indian River Power plant reported a 2,179-pound decrease in the on-site release of lead compounds, primarily the result of coal analysis data. Halko again reported the top amount of on-site PBT chemical waste management with 46,616 pounds of lead being recycled on-site. Appendix I shows the PBT data detail, listing each facility reporting on each PBT chemical. Also see additional facility information in the Top 15/Second 15 sections regarding reasons for changes in reports from other PBT-reporting facilities.

Mercury and Mercury Compounds

Mercury (elemental mercury) and mercury compounds are an important part of the PBT category, and this section discusses some of the data in these reports. Reported elemental mercury on-site release amounts were unchanged as Occidental Chemical transitions through its chlor-alkali plant shutdown. Occidental Chemical sent about 383,000 pounds of mercury off-site for recycling as part of this shutdown activity. Occidental contributed virtually all the 278 pounds of elemental mercury released on-site, but this amount will substantially decrease as the facility completes its shutdown. DNREC has requested verification of Occidental mercury release amounts, as we suspect that the reported amounts are not as accurate as available technology can provide. Results of this verification will be reported on in the 2006 TRI report.

Reported on-site releases of mercury compounds in Delaware increased 231 pounds (41%) due to an increase in the report from the Claymont Steel facility. Despite this increase in reported mercury release from Claymont steel, overall total mercury releases in Delaware decreased by 29% in 2005 compared to the 2003 reported amount of 1,512 pounds and decreased 38% since the peak of 1,738 pounds in 2002. Figure 15 shows the combined trend for mercury and mercury compounds. See the Claymont Steel profile on pages 28-29 for additional information on this increase.

Figure 16 shows the percentage each of the facilities that reported a mercury or mercury compound release contributed in 2005. Two facilities, Dentsply Caulk Lakeview and Intervet, were required to report because of other mercury activity, but did not have any mercury on-site releases to report in 2005. On-site release amounts for mercury can be found on page F-10 in Appendix F.



Carcinogenic TRI Chemicals

TABLE 10
CARCINOGENS REPORTED BY
DELAWARE FACILITIES FOR 2005

CHEMICAL NAME	IARC	2005
		REPORTS
ACROLONITRILE	2B	1
ARSENIC	1	1
ARSENIC COMPOUNDS	1	2
BENZENE	1	6
1,3-BUTADIENE	2A	2
BUTYL ACRYLATE	2B	2
CHROMIUM COMPOUNDS	1	10
COBALT COMPOUNDS	2B	3
DICHLOROMETHANE	2B	1
1,3-DICHLOROPROPYLENE	2B	1
DIETHYL SULFATE	2A	1
ETHYL ACRYLATE	2B	2
ETHYLBENZENE	2B	4
ETHYLENE OXIDE	1	1
FORMALDEHYDE	2A	1
HEXACHLOROENZENE	2B	1
LEAD	2B	4
LEAD COMPOUNDS	2B	14
4,4'-METHYLENEBIS(2-CHLOROANILINE)	2A	1
NAPHTHALENE	2B	6
NICKEL	2B	3
NICKEL COMPOUNDS	1	6
NITROBENZENE	2B	1
P-CHLOROANILINE	2B	1
POLYCHLORINATED BIPHENYLS	2A	1
POLYCYCLIC AROMATIC COMPOUNDS	2A,B	13
PROPYLENE OXIDE	2B	1
STYRENE	2B	6
TETRACHLOROETHYLENE	2B	1
TOLUENE DIISOCYANATE (MIXED ISOMERS)	2B	2
TRICHLOROETHYLENE	2A	1
VINYL ACETATE	2B	2
VINYL CHLORIDE	1	1
TOTAL =		103

Source: 2005 DNREC Database, December 1, 2006

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 10 contains those known and suspected carcinogens that were reported by Delaware facilities for 2005. 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 8.4 million pounds of TRI chemicals reported by facilities as released on-site to the environment in 2005, 4.9% (411,000 pounds) were known or suspected carcinogens. Releases on-site of all carcinogens decreased 10% (45,000 pounds) compared to 2004 data and decreased 52% (446,000 pounds) since the 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 55.

Carcinogens Trend, 1995-2005

The number of carcinogen reports increased by 3 to 103 in 2005, and the total number of carcinogen chemicals increased by three to 33 following a large increase in the number of lead and lead compounds reporting facilities in 2001 (because of the reduced reporting threshold). Additional information of lead and lead compounds is on pages 33-35.

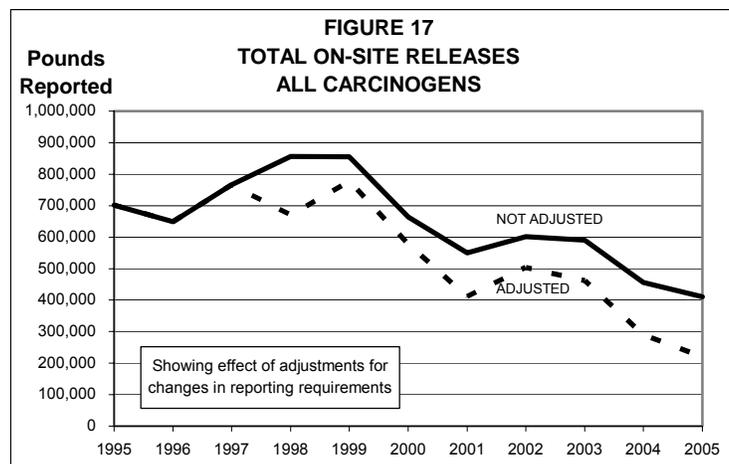
Table 11 contains amounts unadjusted for changes in reporting requirements. In order to put the trend in uniform perspective, adjustments must be made for changes in reporting requirements during this period. The downward trends of both unadjusted and adjusted values are shown in Figure 17 on the next page. Chemical reports required during a portion of the time period because of changes in reporting requirements have been excluded for the entire period in the "Adjusted" trend.

TABLE 11
1995-2005 CARCINOGENS
REPORTED ON-SITE RELEASES IN POUNDS, NOT ADJUSTED

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
KNOWN											
AIR	253,818	225,184	192,099	209,094	219,970	209,828	209,295	177,473	123,191	96,562	98,107
WATER	596	201	6,917	10,246	3,048	4,395	9,114	9,682	9,339	9,817	4,643
LAND	1,791	331	286,041	363,793	306,630	258,008	169,197	170,074	312,576	173,414	134,194
KNOWN TOTAL	256,205	225,716	485,057	583,133	529,648	472,231	387,606	357,229	445,106	279,793	236,944
PROBABLE											
AIR	113,482	78,491	55,274	53,558	139,293	55,418	44,326	35,581	24,216	27,417	23,600
WATER	0	0	0	0	0	0	0	0	4	4	4
LAND	0	0	0	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	24,220	27,421	23,604
POSSIBLE											
AIR	331,904	344,888	223,518	167,420	186,506	135,946	91,851	189,296	98,269	97,283	102,427
WATER	359	351	196	1,175	290	271	4,873	2,109	1,431	2,308	3,416
LAND	0	5	2,550	51,625	142	40	21,607	17,475	21,714	49,266	44,500
POSSIBLE TOTAL	332,263	345,244	226,264	220,220	186,938	136,257	118,331	208,880	121,414	148,856	150,343
TOTAL AIR	699,204	648,563	470,891	430,072	545,769	401,192	345,472	402,350	245,676	221,262	224,135
TOTAL WATER	955	552	7,113	11,421	3,338	4,666	13,987	11,791	10,773	12,129	8,062
TOTAL LAND	1,791	336	288,591	415,418	306,772	258,048	190,804	187,549	334,290	222,680	178,694
GRAND TOTAL	701,950	649,451	766,595	856,911	855,879	663,906	550,263	601,690	590,739	456,071	410,890

Source: DNREC TRI 2005 Database, December 1, 2006

These adjustments generally exclude the power-generating and ore-processing industries, and involve 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. For example, new reports for lead and lead compounds at their lower thresholds starting in 2001 accounted for 30,300 pounds of exclusions in 2005. Lead and lead compounds reports under the higher thresholds were not excluded if the facility was already reporting them in 2000 or before. In either the adjusted or unadjusted trend, the strong downward trend continued in 2005. Additional carcinogen detail is reported in Appendix J.



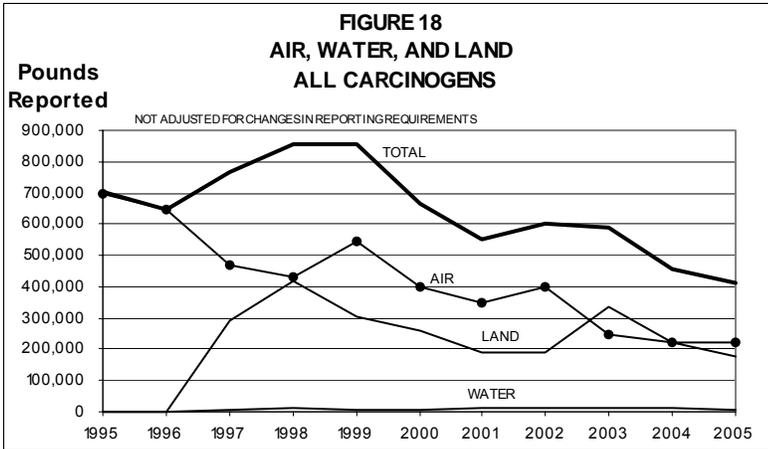
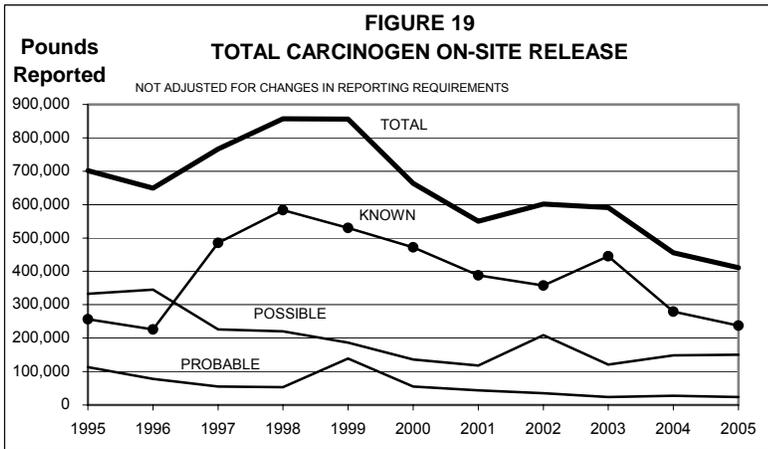


Figure 18 shows the effects of each of the media category releases on the total reported carcinogen release trend. Air and land releases equally influence the total, while water releases play a minor part.

Known Carcinogens

Figure 19 shows the trend of each of the three carcinogen groups and their effect on the total on-site release. Reported releases to land of all known carcinogen compounds were 75% of on-site land releases for carcinogens in all categories (known, probable, and possible). Chromium compounds, 95% released to land and also a product of fuel combustion, are the highest land release at 60,200 pounds, with the Indian River Power Plant and INVISTA contributing over 99% of these land releases. Nickel compounds, 81% released to land, are second highest of the three land releases in the known carcinogen category. The Indian River Power Plant reported almost all of the nickel compound releases to land for 2005. From 1997-2000, the land release reports of nickel compounds, a product of fuel combustion at Valero, greatly influenced the values for known carcinogens. Their 1997 value was 283,000 pounds. Now, the ash and chemicals in it are transferred out-of-state for waste management. Arsenic compounds, the remaining known carcinogen released to land, was released by the Indian River Power Plant in the form of ash. Arsenic compounds accounted for 16% of the total known carcinogen land release.



81% released to land, are second highest of the three land releases in the known carcinogen category. The Indian River Power Plant reported almost all of the nickel compound releases to land for 2005. From 1997-2000, the land release reports of nickel compounds, a product of fuel combustion at Valero, greatly influenced the values for known carcinogens. Their 1997 value was 283,000 pounds. Now, the ash and chemicals in it are transferred out-of-state for waste management. Arsenic compounds, the remaining known carcinogen released to land, was released by the Indian River Power Plant in the form of ash. Arsenic compounds accounted for 16% of the total known carcinogen land release.

Reported air releases of known carcinogens increased by 1.6% in 2005 but have generally been declining and are now at 39% of the peak in 1995. Vinyl chloride contributed 73% of the known carcinogen category air releases in 2005. Vinyl chloride constitutes 32% of all carcinogen air releases and 17% of carcinogen total on-site releases for air, water, and land in 2005. Vinyl chloride, with a total release of 71,600 pounds and only reported by Formosa Plastics, is highest in total releases in the known carcinogen category. Kaneka reported vinyl chloride up until 2003, but Kaneka is now closed. Benzene releases to air, all from Valero and Sunoco, have declined from 58,000 pounds in 1995 (from Valero and the now closed Metachem facility) to 8,000 pounds in 2005. Benzene made up 8.1% of the known carcinogen air releases.

Water releases on-site of known carcinogens are 2.0% of the known carcinogen total. Nickel compounds contributed 68% of the known carcinogen release to water, with chromium compounds and benzene contributing 19% and 13%, respectively.

Probable Carcinogens

All seven probable category carcinogens except four pounds to water, were reported released to on-site air during this period. The largest air release contributors were trichloroethylene, reported by Camdel Metals, and 1,3-butadiene, reported by Dow Reichhold. They combined for 90% of the probable carcinogen releases. The trend for trichloroethylene release has declined 48%, down from 29,332 pounds in 1995 to 15,333 pounds in 2005. The trend for 1,3-butadiene, reported by Valero and Dow Reichhold, is up 1,650 pounds (40%) in 2005, and is now at 5,789 pounds and only 8% of the 72,439 pounds reported in 1995. Both facilities reported increases in 2005. The probable carcinogen air release high in 1999 (139,923 pounds) was due to an 83,000-pound reported release of formaldehyde from Valero. The probable carcinogen total for 2005 is down 3,820 pounds (14%) and is now at 23,600 pounds, 21% of the 1995 amount and 17% of the 1999 amount.

Possible Carcinogens

There are 19 chemicals in this category for 2005. About two-thirds of the total amount is reported released to air, one-third to land, and about 2% to water. The top release in this category is vinyl acetate, 98% (46,400 pounds) of which is released by Formosa Plastics. The Formosa report accounts for 30% of the total category release to all media and 44% of the category release to air. This release was estimated using a higher basis starting in 2002. Although the Formosa reported amount (45,397 pounds for 2005) is much higher than the 2,000 pounds reported for 2001, the actual amount may not be much different from prior years because of the change in basis in 2002. Styrene, 75% of which is released by Justin Tanks, is the second highest on-site release for this class, and increased 9,200 pounds in 2005. Most of this increase, 8,886 pounds, was reported by Justin Tanks. Styrene accounts for 27% of the total release for this category. The Justin Tanks' styrene trend has increased 21% since 1995, but total styrene releases have decreased by 3% over the same period.

As before, in *Limitations of TRI Data* on Page 3, we urge caution when using this data, as THIS DATA DOES NOT INDICATE AMOUNT OF HUMAN EXPOSURE.

Discussion about specific facilities and their releases can be found on pages 15-32 in the Top 15 and Second 15 Facilities Sections.

Trend Analysis

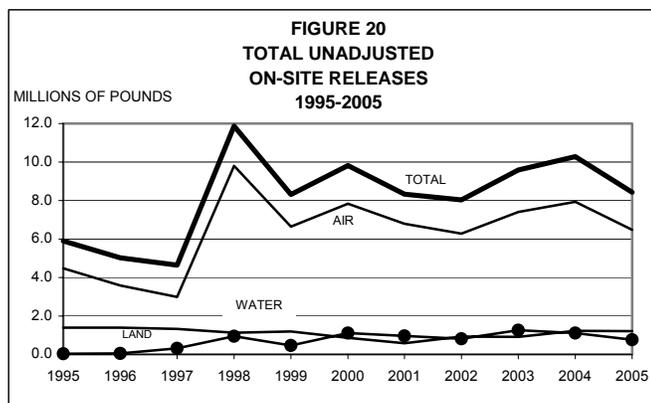
TRI data is available back to 1987. Changes in the reporting requirements over time have caused an increase both in the number of chemicals and in the number industries subject to reporting. As explained on page 4, two of the most significant changes to TRI reporting occurred in 1995 and 1998, when large increases in chemicals (1995) and industries subject to reporting (1998) occurred. The next section shows the results of the 1998 addition. Later sections show data on a constant reporting basis with adjustment made for the new data.

Unadjusted Trends, 1995-2005

The analysis presented in this section uses 1995 as a base year for presenting trends for all reportable chemicals and facilities and is **not adjusted** for changes in reporting requirements. Figure 20 on this page and Table 12 on the next page show the results of reporting during the entire 1995-2005 period. For comparison, please read the explanation for **adjusted trends** on page 42 and look at the corresponding adjusted amounts in Table 13 on page 43.

On-Site Releases, Unadjusted, 1995-2005

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 20 shows the trend of on-site releases without adjustments. The increase in 1998 was due to the change in reporting requirements when a large number of new facilities started to report, as explained above and also on page 4. Unadjusted on-site release amounts decreased 18% (1,842,000 pounds) since 2004, and have decreased 29% since the peak in 1998. Significant changes reported in 2005 include the facilities and chemicals shown in the table below.



FACILITY	CHEMICAL	MEDIA	AMOUNT (pounds)
Formosa Plastics	Ammonia	Air	+46,000
DuPont Edge Moor	Manganese Compounds	Water	+40,000
General Motors	Xylene (Mixed Isomers)	Air	+37,000
Indian River Power Plant	Hydrogen fluoride	Air	+30,000
Valero	Vanadium compounds	Land	-149,000
Indian River Power Plant	Barium compounds	Land	-187,000
Valero	Ammonia	Air	-198,000
Indian River Power Plant	Hydrochloric acid	Air	-800,000

Some of these changes have been caused by improvements in the way facilities estimate amounts, and many of these changes were discussed in the Top 15 or Second 15 facility profiles on pages 15-32. In addition, you may contact the facility for a more in-depth discussion of the reasons for specific changes.

TABLE 12

1995-2005 TRI DATA SUMMARY

(IN POUNDS)

NOT ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
No. of facilities	75	77	74	80	76	80	82	83	84	73	72
No. of Form A's	33	40	34	75	72	61	57	55	55	52	53
No. of Form R's	228	220	242	277	254	310	316	317	325	307	293
No. of Chemicals	90	98	100	106	101	109	104	106	103	102	103
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	6,281,850	7,408,938	7,935,898	6,472,074
Water	1,394,739	1,395,328	1,328,937	1,126,527	1,197,861	866,312	573,937	928,813	916,287	1,231,061	1,211,798
Land	28,678	42,409	317,243	937,708	462,579	1,103,632	965,666	814,385	1,263,668	1,111,392	752,894
Unadjusted On-Site Release	5,906,819	5,023,919	4,641,641	11,860,666	8,311,606	9,810,961	8,336,287	8,025,048	9,588,893	10,278,351	8,436,766
Off-site Transfers											
POTW's	3,214,800	4,522,131	4,301,095	3,286,302	2,996,401	2,199,807	1,575,732	1,201,161	1,452,241	1,466,465	1,514,246
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	8,366,885	9,841,412	11,259,408
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	2,834,075	2,755,903	2,709,850
Treatment	910,090	1,297,004	688,661	630,761	894,822	901,604	183,567	398,572	370,126	179,969	199,493
Disposal	2,767,339	2,905,928	4,010,594	3,983,506	3,056,466	3,816,862	3,878,689	4,196,691	4,084,899	3,919,599	4,400,539
Total Transfers	26,447,166	19,952,877	21,276,308	21,395,038	17,632,940	18,111,791	17,125,940	17,583,245	17,108,225	18,163,347	20,083,537
On-site Waste Mgmt.											
Recycle	29,100,208	29,882,121	32,996,062	34,549,050	32,671,856	31,188,694	24,133,885	25,033,817	22,404,667	8,772,135	10,079,028
Energy Recovery	332,834	219,184	19,255,280	16,155,665	22,981,591	29,095,221	25,863,740	15,740,469	16,455,440	23,595,635	19,786,104
Treatment	55,990,904	51,590,060	69,425,233	68,475,327	69,501,151	64,404,879	40,734,134	33,392,650	30,305,786	31,654,455	38,176,991
Total On-Site Waste Mgmt.	85,423,946	81,691,365	121,676,575	119,180,042	125,154,598	124,688,794	90,731,759	74,166,935	69,165,893	64,022,225	68,042,123
Total Waste	117,777,931	106,668,161	147,594,524	152,435,746	151,099,144	152,611,546	116,193,986	99,775,229	95,863,010	92,463,923	96,562,426

NOT ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS EXCEPT PBTs AS NOTED

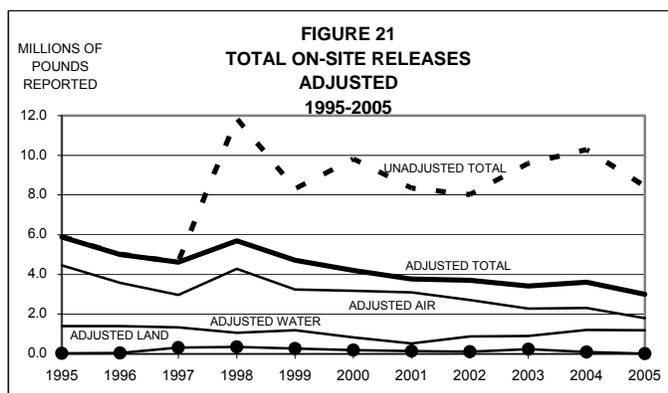
SOURCE: DNREC 2005 DATABASE, DECEMBER 1, 2006



Adjusted Trends, 1995-2005

When the new facilities that were added in 1998 are removed from the trends, the adjusted result is shown in Table 13 on the facing page and Figure 21 below. Table 13 shows the adjusted amounts of TRI chemicals in all categories that were reported in 1995-2005. This table is adjusted to show only those facilities and chemicals that were reporting in 1995 and earlier. Facilities and chemicals added after 1995 are not included. For comparison, please look at the corresponding unadjusted values in Table 12 on page 41.

On-Site Adjusted Releases, 1995-2005



Overall, reported **adjusted** on-site releases decreased 17% (606,000 pounds) in 2005 following a 7% increase in 2004. Since 1995, adjusted on-site releases have decreased 49% (2.9 million pounds). Figure 21 shows this trend. Data on this page and in Table 13 can be compared to pages 40-41 to see the effects of the adjustments, and the top two lines in Figure 21 show the effect of the new facilities when they are removed from the unadjusted totals. Figure 20 on

page 40 shows the effect of the new facility additions in 1998. Significant changes for 2005 for reports not mentioned in the unadjusted trend include:

FACILITY	CHEMICAL	MEDIA	AMOUNT (pounds)
Valero	Carbonyl Sulfide	Air	+23,000
DuPont Edge Moor	Carbonyl Sulfide	Air	+15,000
Perdue Georgetown	Nitrate Compounds	Water	+15,000
Valero	Nickel Compounds	Air/Water	-53,000
Honeywell	n-Hexane	Air	-95,000
Valero	Hydrochloric Acid	Air	-104,000

Some of these changes have been caused by improvements in the way facilities estimate amounts, and many of these changes were discussed in the Top 15 or Second 15 facility profiles on pages 15-32. In addition, the facility may be contacted for a more in-depth discussion of the reasons for specific changes.

TABLE 13
1995-2005 TRI DATA SUMMARY
(IN POUNDS)

ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS AFTER 1995

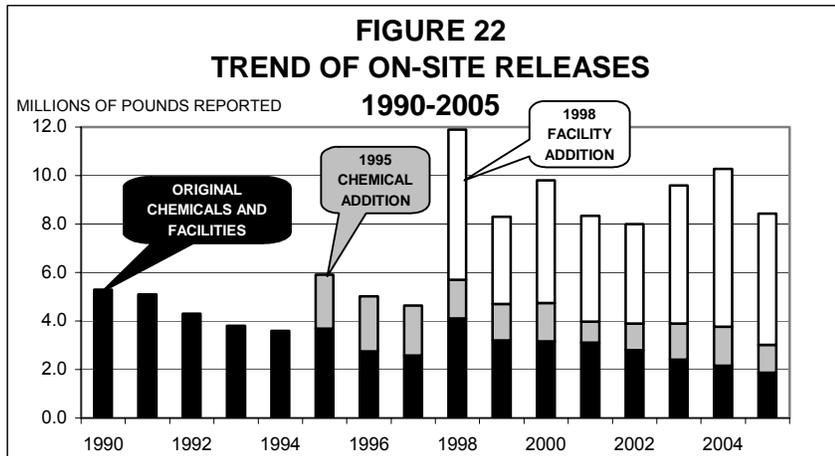
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
No. of facilities	73	75	73	69	66	67	68	69	69	59	59
No. of Form A's	28	34	29	30	32	31	31	34	35	30	35
No. of Form R's	221	212	237	240	231	241	235	230	241	220	211
No. of Chemicals	87	94	98	103	98	101	95	97	94	92	93
On-site Releases											
Air	4,466,247	3,569,898	2,973,704	4,286,680	3,246,228	3,179,809	3,095,921	2,709,026	2,276,521	2,303,755	1,797,066
Water	1,394,739	1,395,328	1,328,937	1,066,787	1,186,041	826,660	524,281	884,057	904,351	1,207,521	1,193,242
Land	28,678	42,409	317,243	347,129	278,319	194,448	144,956	117,249	243,873	93,534	8,373
Adjusted On-Site Releases	5,889,664	5,007,635	4,619,884	5,700,596	4,710,588	4,200,917	3,765,159	3,710,331	3,424,745	3,604,811	2,998,681
Off-site Transfers											
POTW's	3,214,795	4,511,126	4,301,090	3,286,189	2,996,375	2,199,732	1,575,639	1,200,858	1,451,686	1,460,708	1,504,209
Recycle	17,127,835	10,054,483	10,544,518	11,963,716	9,295,315	8,613,087	8,833,437	9,217,843	8,351,340	9,061,209	10,222,101
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	2,834,075	2,755,903	2,709,850
Treatment	897,090	1,277,004	675,561	611,696	894,822	899,534	172,939	398,571	370,126	179,718	199,481
Disposal	2,767,339	2,905,928	4,010,594	3,719,902	2,985,340	3,472,927	3,572,487	3,825,837	3,678,483	3,545,566	4,031,903
Total Transfers	26,434,161	19,921,872	21,195,203	21,073,046	17,561,788	17,729,120	16,797,128	17,181,199	16,685,709	17,003,103	18,667,544
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	22,404,664	8,772,132	10,079,025
Energy Recovery	332,834	219,184	19,255,280	16,155,665	22,981,591	29,095,220	25,863,740	15,740,469	16,455,440	23,595,635	19,786,104
Treatment	55,811,179	51,424,487	68,575,887	67,199,660	69,149,944	63,832,520	40,120,809	32,420,206	29,106,061	29,514,410	36,803,615
Total On-Site Waste Mgmt.	85,244,221	81,525,792	120,827,229	117,904,375	124,803,391	124,116,394	90,118,069	73,194,206	67,966,165	61,882,177	66,668,744
Total Waste	117,568,046	106,455,299	146,642,316	144,678,017	147,075,767	146,046,431	110,680,356	94,085,737	88,076,619	82,490,091	88,334,969



ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS

SOURCE: DNREC 2005 DATABASE, DECEMBER 1, 2006

Effect of Chemical and Facility Group Additions, 1990-2005



As mentioned above, significant groups of chemicals and facilities were added to the TRI program at two times over the years. Other smaller groups, or even individual chemicals, were also added or deleted over this time. Analysis later in this section will start with the first addition in 1995 and remove the major group of facilities that were added in 1998 to show the trend

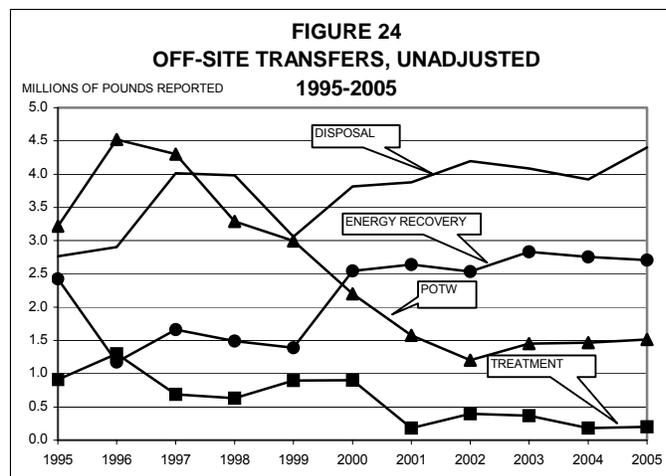
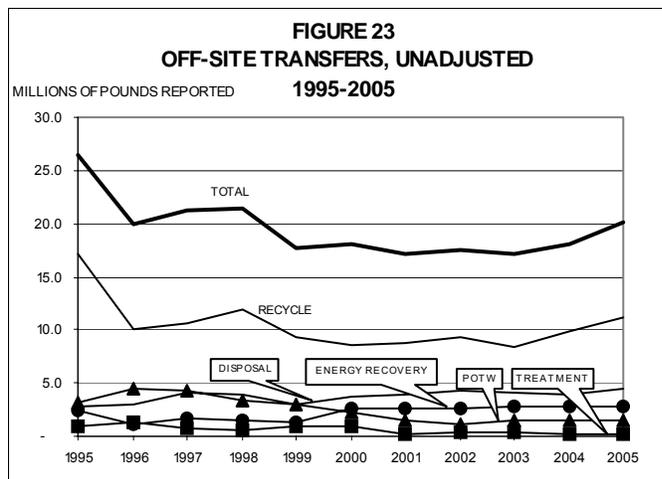
of constantly reportable groups of facilities and chemicals over time. Figure 22 shows the effect starting in 1990 and follows the trend of each group since it was added to the TRI program. Data from 1987-89 is excluded because reporting requirements changed significantly and a valid comparison of this data with later data is not feasible.

The trend of each group and the reports affecting the trends will be discussed in the following portions of this section. All groups show generally decreasing trends over time, but the group of facilities added in 1998 did report an increase over its initial amount in 2004. This group declined in 2005 and is now 780,000 pounds below its starting amount of 6.2 million pounds. The table below shows the amount reported in millions of pounds for each group at the time it was added, the 2005 reported amount, and the amount of change since the time it was added. The unadjusted increases in statewide total amounts reported in 1995 and 1998 are the result of the additions. If each group had remained constant at the time of its addition, amounts reported for 1998 and beyond would be 13.7 million pounds instead of the 8.4 million pounds actually reported in 2005. The reporting facilities have effected a reduction of 5.3 million pounds, or 39%, in their reported TRI chemical releases since 1990, or later if they were not reporting in 1990.

GROUP	STARTING YEAR AMOUNT	2005 AMOUNT	CHANGE
	Millions of Pounds	Millions of Pounds	Millions of Pounds
Original Facilities and Chemicals	5.30	1.87	-3.43
1995 Chemical Addition	2.23	1.15	-1.08
1998 Facility Addition	6.20	5.42	-0.78
TOTAL	13.73	8.44	-5.29

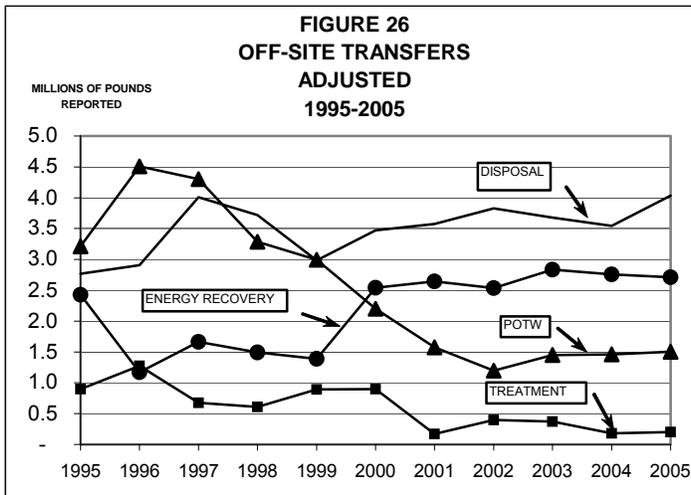
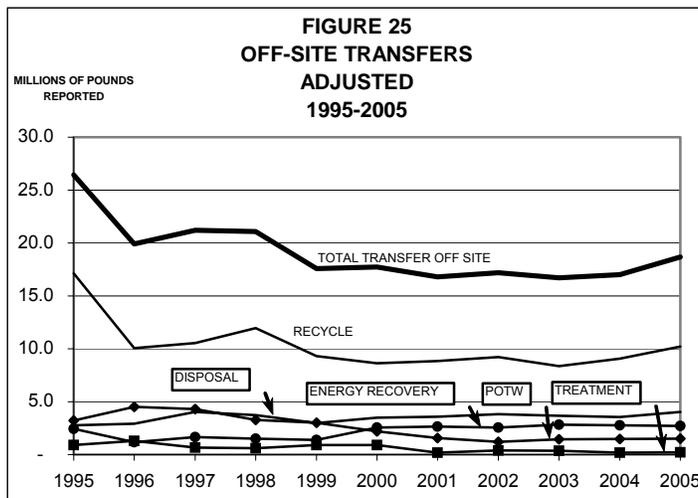
Off-Site Transfers, Unadjusted, 1995-2005

An off-site transfer is a transfer of toxic chemical in wastes to another facility that is physically separate from the reporting facility and may even be out of state. Chemicals are reported as transferred to an off-site facility when they are transported away from the reporting facility for the purposes of treatment at a publicly owned treatment works (POTW), recycling, energy recovery, treatment, or disposal facility. Off-site transfers increased 11% in 2005, driven by recycling and disposal. Figures 23 and 24 show the trends in amounts of TRI chemicals in wastes transferred off-site for all facilities and chemicals reporting since 1995. To increase clarity, the lower portion of Figure 23 is expanded in Figure 24. The amount of recycle has been relatively steady from 1999-2003, but has increased in 2004 and 2005. The amounts sent to POTW and non-POTW treatment have been generally declining and the amounts sent off-site for energy recovery and disposal have been increasing. For comparison, please look at the corresponding adjusted values in Table 13 on page 43. Although the off-site transfers may be of less immediate local concern than on-site releases, the transfers to POTWs, treatment, and disposal still represent toxic chemicals in wastes that must be ultimately accounted for. As noted on page 9 and in Table 12 on page 41, the amounts reported here as transferred off-site are much greater than the amount of on-site releases. Significant changes reported for off-site transfer trends in 2005 are:



FACILITY	CHEMICAL	OFF-SITE METHOD	AMOUNT (pounds)
Claymont Steel	Zinc Compounds	Recycle	-364,000
SPI Polyols	Nickel Compounds	Recycle, Disposal	-226,000
Ciba	Methanol	Recycle	-203,000
Ciba	Biphenyl	Energy Recovery	-155,000
Noramco	Methanol	Energy Recovery	+167,000
Metal Masters	Nickel	Recycle	+168,000
Occidental Chem.	Mercury	Recycle	+383,000
DuPont Edge Moor	Manganese Cpds.	Disposal	+452,000
Valero	Vanadium Cpds.	Recycle	+604,000
Johnson Controls	Lead Compounds	Recycle	+865,000

Off-Site Transfers, Adjusted, 1995-2005



Figures 25 and 26 show the trends in amounts of TRI chemicals reported in wastes transferred off-site for facilities and chemicals reporting since 1995. The lower portion of Figure 25 (0.0 - 5.0 million pounds) is expanded in Figure 26. The amount of chemicals reported as transferred off-site since 1999 show a relatively flat trend through 2005, and the same general trend is noted for the adjusted amounts. For comparison, please look at the corresponding unadjusted trends on page 45 and the amounts in Tables 12-13. As shown in Table 13, over 50% of all off-site transfers are to recycling operations, so the total trend in Figure 25 is strongly influenced by the trend in amounts sent off-site for recycling.

The total adjusted net change in off-site transfers reported in 2005 was an increase of 10% (1.66 million pounds) since 2004, but the total adjusted trend is lower by 29% (-7.77 million pounds) since 1995. Amounts sent to off-site recycle increased by 12.8% (1,161,000 pounds) in 2005, disposal increased 13.7% (486,000 pounds), but this was partially balanced by a decrease of -1.7% (-46,000 pounds)

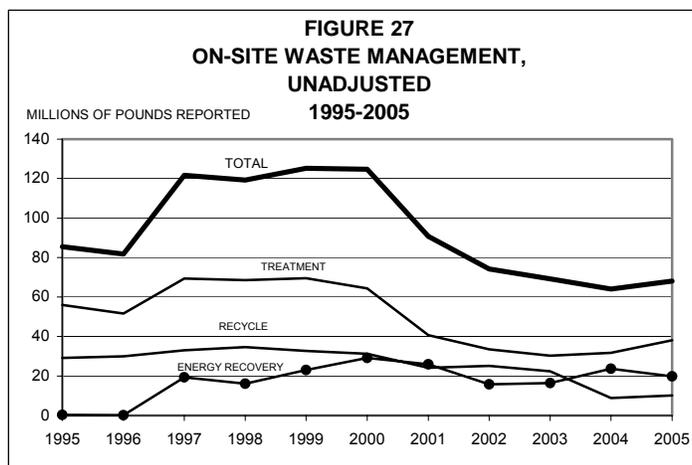
in the amount sent off-site for energy recovery. Reported amounts sent off-site to POTWs and treatment showed smaller increases.

Unlike on-site releases where the amount of adjustment was 64% of the total because of the large reported releases to on-site air by the new facilities, off-site transfers are largely reported by original facilities, and the adjustment contributed by new facilities is only 7% of the total amount. Most of the adjusted amount, 1,019,000 pounds, was the reported off-site transfer for recycling of vanadium compounds in ash from the Valero refinery. Although Valero is not a new facility, vanadium compounds was newly listed in 2000, and Valero closed its on-site landfill and initiated off-site transfer of ash in 2005.

The total changes were balanced by other smaller increases and decreases from other reports at other facilities.

On-Site Waste Management, Unadjusted, 1995-2005

In some facilities, wastes were reported as 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 of a threat to the environment as the other on-site categories since these amounts are managed and not



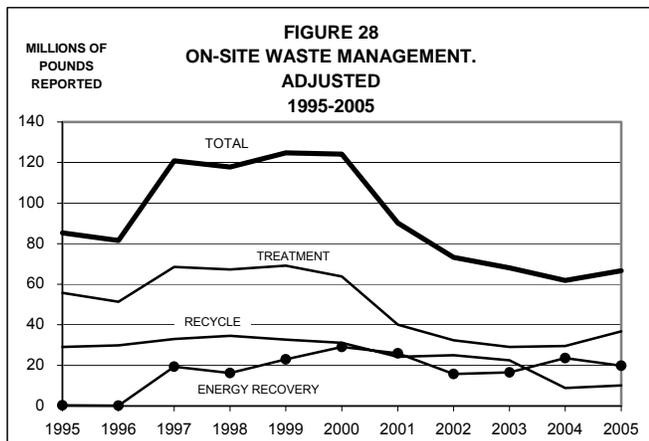
disposed of, or released on-site. There is, of course, the risk that these chemicals may be released accidentally on-site to the environment during the waste management process. Figure 27 shows the trends for the on-site waste management activities since 1995. The increase in 1997 was due to two reports from Valero: The first was an increase of 16,000,000 pounds for on-site treatment of methanol, and the second was an increase of 17,000,000 pounds for on-site energy recovery of ammonia. The decrease in 2001 was due to a decrease of 7,500,000 pounds in formaldehyde energy recovery, a decrease of 2,100,000 pounds in methanol treatment, and a decrease of 8,000,000 pounds in MTBE treatment at Valero, and a decrease of 8,000,000 pounds in hydrochloric acid treatment at DuPont Edge Moor.

Significant changes reported for on-site waste management trends in 2005 are:

FACILITY	CHEMICAL	ON-SITE WASTE MANAGEMENT METHOD	AMOUNT OF CHANGE (pounds)
Valero	Ammonia	Energy Recovery	-7,336,000
Indian River Power Plant	Hydrochloric acid	Treatment	-1,087,000
Valero	Hydrogen Cyanide	Treatment	-989,000
Occidental Chemical	Chlorine	Treatment	-571,000
Noramco	Toluene	Recycle	-349,000
Medal	n-Hexane	Recycle	+399,000
Indian River Power Plant	Ammonia	Treatment	+400,000
Noramco	Methanol	Recycle	+430,000
Medal	Methanol	Recycle	+462,000
Valero	Carbon Disulfide	Treatment	+2,131,000
DuPont Edge Moor	Hydrochloric Acid	Treatment	+2,168,000
Valero	Carbonyl Sulfide	Energy Recovery, Treatment	+8,183,000

These changes were balanced by other smaller increases and decreases from other reports. Total unadjusted pounds for on-site waste management have increased by 6.3% since 2004, but decreased 20% since 1995. The on-site waste management amount totals are in Tables 12 and 13 and the corresponding adjusted values on page 48.

On-Site Waste Management, Adjusted, 1995-2005



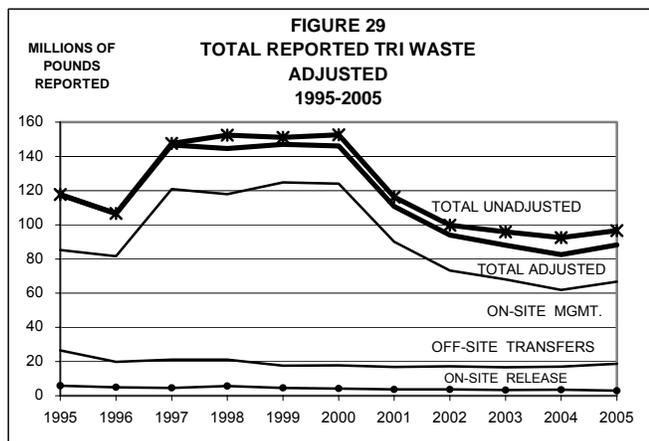
The reported trends for the three categories of on-site management and their total are shown in Figure 28 and the amounts in Table 13 on page 43. The total amount of waste managed on-site in 2005 was up 4.8 million pounds (7.7%) from 2004. Recycle amounts increased 15% (1,307,000 pounds), while energy recovery decreased 16% (3,810,000 pounds), and treatment increased 25% (7,289,000 pounds). Since 1995, on-site waste management amounts have decreased 22% (18.6 million pounds). Although energy recovery amounts

increased by 19.5 million pounds since 1995, recycle amounts decreased by 19.0 million pounds and treatment also decreased by 19.0 million pounds.

As with off-site transfers, the adjustment for reporting requirements for on-site waste management activities is small, 1.4 million pounds out of the 68 million pounds reported, or about 2% of the total. Almost all of this adjustment is from the new electric generating facilities for on-site treatment of products of combustion or pollution control emissions. Because of this small adjustment, Figures 27 and 28 are almost identical. For comparison, please look at the corresponding unadjusted and adjusted values in Tables 12 and 13 on pages 41 and 43.

Total Waste, Adjusted, 1995-2005

Figure 29 shows the adjusted totals and their grand total for the three waste categories taken from Figures 21, 25, and 28. This total reported waste amount is largely driven by on-site waste management, which makes up 69% of total TRI waste. Pounds for total reported TRI waste increased by 7.1% (5.8 million pounds) since 2004 but are down 25% (29.2 million pounds) since 1995.



Unadjusted individual amounts for 2005, not shown in Figure 29, are higher than the corresponding adjusted amounts, particularly for on-site air releases (+4.7 million pounds). The total adjusted TRI waste amount shown above is higher than the corresponding unadjusted amount by 8.2 million pounds. For comparison, look at the corresponding values in Tables 12 and 13, pages 41-43. Explanation for some of the changes in 1997 and 2001 are in the text at the top of page 47.

Adjusted Trend, 1998-2005

The second set of trends is for the 1998-2005 period. The new industry segments added in 1998 that were excluded in the 1995-2005 trends are included here. What are excluded in these adjusted trends are the PBT reports and other chemicals that were added or had reporting thresholds reduced in 2000-2001. However, the amount of these adjustments is small, with adjustments in more than half of the excluded reports being zero and all but one adjustment less than 5%. Because the facilities added in 1998 are included here, the totals in Table 14 are higher than those in Table 13 on page 43. For comparison, look at the corresponding unadjusted values for on-site releases and waste management on pages 40-41.

TABLE 14
1998-2005 TRI DATA SUMMARY
(IN POUNDS)

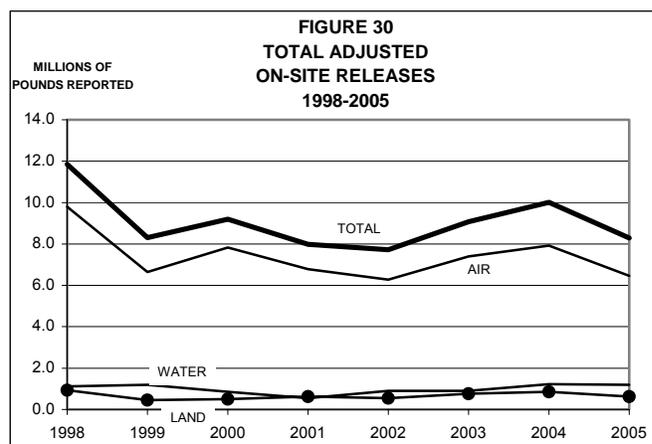
ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS AFTER 1998

	1998	1999	2000	2001	2002	2003	2004	2005
No. of facilities	79	76	80	80	76	77	68	66
No. of Form A's	70	72	61	57	55	55	52	53
No. of Form R's	271	254	278	283	257	267	252	238
No. of Chemicals	105	101	102	99	98	95	94	95
On-site Releases								
Air	9,787,574	6,651,166	7,827,472	6,779,996	6,271,189	7,396,828	7,926,683	6,462,563
Water	1,126,527	1,197,861	864,760	558,611	900,317	912,493	1,223,242	1,202,793
Land	937,708	462,579	500,395	636,925	556,219	765,842	853,571	626,373
Total On-Site Releases	11,851,809	8,311,606	9,192,627	7,975,532	7,727,724	9,075,163	10,003,496	8,291,729
Off-site Transfers								
POTWs	3,286,297	2,996,401	2,199,804	1,575,700	1,201,157	1,452,231	1,466,458	1,514,235
Recycle	11,963,926	9,295,315	8,649,611	8,578,821	8,964,241	8,111,171	9,415,300	10,229,084
Energy Recovery	1,491,543	1,389,936	2,543,840	2,642,626	2,538,090	2,834,075	2,755,903	2,709,850
Treatment	611,996	894,822	900,353	172,939	398,571	370,126	179,968	199,481
Disposal	3,983,506	3,056,466	3,712,460	3,775,364	4,070,123	3,955,520	3,815,383	4,259,498
Total Off-site Transfers	21,337,268	17,632,940	18,006,068	16,745,450	17,172,182	16,723,123	17,633,011	18,912,148
On-site Waste Mgmt.								
Recycle	34,549,050	32,671,856	31,188,654	24,133,520	25,033,532	22,404,664	8,772,132	10,079,025
Energy Recovery	16,155,665	22,981,591	29,095,220	25,863,740	15,740,469	16,455,440	23,595,635	19,786,104
Treatment	68,126,327	69,501,151	64,403,879	40,733,844	33,392,400	30,305,396	31,654,035	38,176,580
Total On-Site Waste Mgmt.	118,831,042	125,154,598	124,687,753	90,731,104	74,166,400	69,165,500	64,021,802	68,041,709
Total Waste	152,020,119	151,099,144	151,886,448	115,452,086	99,066,307	94,963,786	91,658,310	95,245,586

ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS
SOURCE: DNR/EC 2005 DATABASE, DECEMBER 1, 2006

On-Site Release, Adjusted, 1998-2005

Figure 30 shows the trend for reported on-site releases adjusted for new facilities and their chemicals added after 1998. The amount of adjustment is a relatively small, 145,000 pounds of land releases from newly listed vanadium and lead compounds at electric generating facilities. As in unadjusted trends, the total is almost totally influenced by the reported releases to air. Similar to the unadjusted on-site trend (Figure 19), the adjusted trend here for 1998-2005 is also down, primarily because of the changes reported on pages 40 and 42.

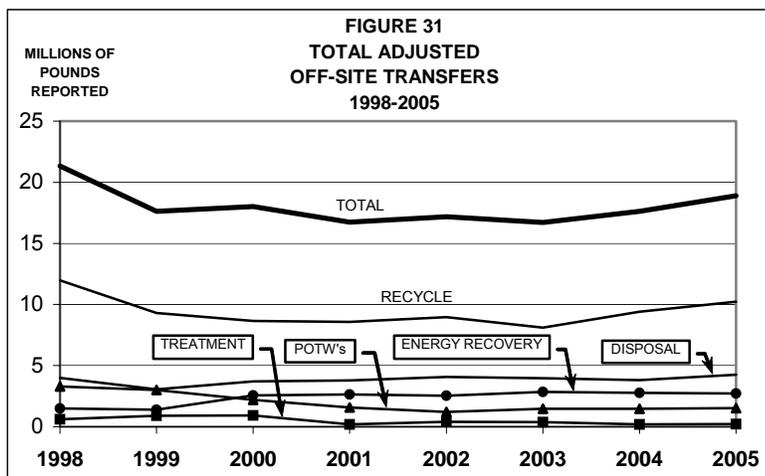


There was a decrease of 1,712,000 pounds (17%) in total reported on-site releases for this group in 2005, and there has been a net decrease of 3,560,000 pounds (30%) in reported on-site releases over the 1998-2005 time period. In addition to the notes in the facility profiles on pages 16-32 and the tables on pages 41 and 43 about how on-site waste releases have changed this year, reports of significant changes for facilities and/or chemicals added in 1998 and reporting in 2005 are:

FACILITY	CHEMICAL	MEDIA	AMOUNT (POUNDS)
Indian River Power Plant	Arsenic Compounds	Land	+30,000
Indian River Power Plant	Copper Compounds	Land	+19,000
Indian River Power Plant	Vanadium Compounds	Land	+18,000
Edgemoor/Hay Road Power Plants	Ammonia	Air	-23,000
INVISTA Seaford	Hydrochloric Acid	Air	-40,000
Edgemoor/Hay Road Power Plants	Hydrochloric Acid	Air	-127,000

Other facilities reported smaller amounts of increases and decreases to produce a net decrease of 1,712,000 pounds for 2005.

Off-Site Transfers, Adjusted, 1998-2005

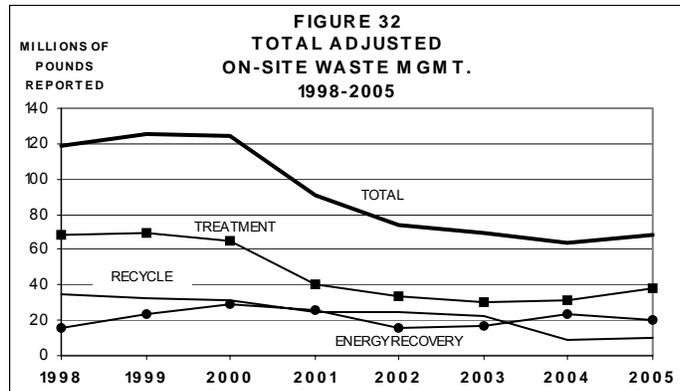


The adjusted off-site transfer total reported amount increased 7.3% (1.28 million pounds) in 2005. Table 14 and Figure 31 show the amounts transferred off-site, adjusted for the new reporting requirements starting in 1998. Off-site transfers also increased 5% in 2005 but have decreased 11% since 1998, again largely influenced by the amounts sent off-site for recycling. The increase in 2005 was primarily because of the increases in the amounts in the

reports shown in the table at the bottom of page 45. There are no significant facility notes, in addition to the previous notes in the facility profiles or on pages 45-46 for off-site transfers, for this time period.

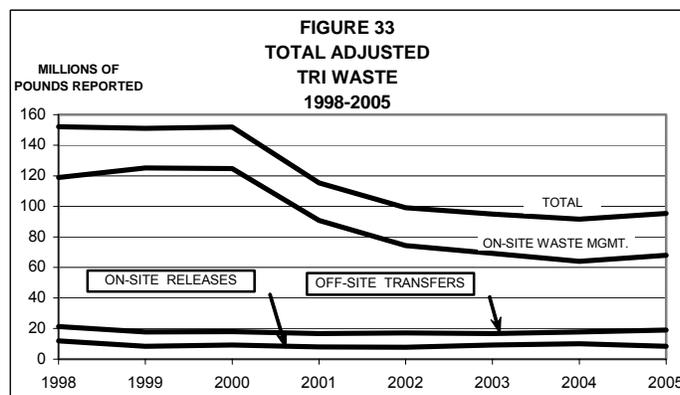
On-Site Waste Management, Adjusted, 1998-2005

The trend of on-site management of TRI chemicals in waste shows a stabilizing trend in Figure 32, down 7.5% in 2004 and up 7.3% in 2005, virtually mirroring the unadjusted trend. Only 414 pounds were adjusted out for new chemicals added since 1998 in this trend. There are no significant notes for the new facilities added in 1998, in addition to the previous 1995-2005 facility notes for on-site waste management on pages 47-48.



Total Reported TRI Waste, Adjusted, 1998-2005

Figure 33 shows the sum of reported On-site Releases, Off-Site Transfers, On-site Waste Management adjusted for reporting in 1998-2005, and their grand total. The 2004-2005 trend is up by 3.6 million pounds, having declined by 3.3 million pounds in 2004. The 1998-2005 trend is down by 57 million pounds (37%), largely influenced by the trend of On-Site Waste Management.



For comparison, please look at the corresponding values in Tables 12 and 14, pages 41 and 49. Explanations for some of the changes that happened in 2001 are in the text at the top of page 47.

Receiving TRI Chemicals in Wastes

When a facility transfers TRI chemical waste off-site, these wastes go to a receiving facility. Table 15 shows the total amounts of TRI chemicals reported as sent to Delaware facilities from other facilities, both in-state and out-of-state. Some of the receiving facilities in Delaware report to the TRI program as well, but many do not, based on the reporting requirements shown on pages 2 and 3. Only 1.5% of the TRI chemical wastes transferred to Delaware facilities are transferred to a TRI facility. 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.

TABLE 15
SUMMARY OF REPORTED TRANSFERS IN 2005
TRI CHEMICALS TRANSFERRED TO DELAWARE FACILITIES
FROM OTHER FACILITIES

(IN POUNDS)

DELAWARE RECEIVING FACILITY	TOTAL TRANSFERS TO DELAWARE FROM DELAWARE FACILITIES	TOTAL TRANSFERS TO DELAWARE FROM OUT OF STATE FACILITIES	TOTAL TRANSFERS RECEIVED BY DELAWARE FACILITIES
ASHWORKS DELAWARE CONCRETE PUMP SALES	0	421	421
CANNON IRON & METAL, INC	6,100	0	6,100
CLAYMONT STEEL *	0	22,174	22,174
CLEAN EARTH OF NEW CASTLE	0	11,906	11,906
DELAWARE RECYCLABLE PRODUCTS	29	0	29
DELAWARE SOLID WASTE AUTHORITY CHERRY ISLAND	8,761	0	8,761
DELAWARE SOLID WASTE AUTHORITY GEORGETOWN	0	0	0
DELAWARE SOLID WASTE AUTHORITY SANDTOWN	4,145	0	4,145
DUPONT EXPERIMENTAL STATION	0	287,915	287,915
FIRST STATE RECYCLING	0	350	350
HALKO MFG. CO. *	0	10,100	10,100
INDUSTRIAL RESOURCE NETWORK, INC.	1,005	1,200	2,205
INTERNATIONAL PETROLEUM CORP.	0	5,436	5,436
KENT COUNTY WASTEWATER TREATMENT PLANT	93,142	0	93,142
KROEGERS SALVAGE	0	1	1
NEW CASTLE DEPT. OF PUBLIC WORKS	63,042	0	63,042
SEAFORD MUNICIPAL WASTEWATER TREATMENT PLANT	1,571	0	1,571
SOUTHERN METAL PROCESSING	2,200	0	2,200
TILCON DELAWARE INC.	64	0	64
UNIQEMA INC. *	5,607	0	5,607
US FILTER	0	0	0
VFL TECHNOLOGY CORPORATION	395	44,759	45,154
WILMINGTON WASTEWATER TREATMENT PLANT	1,347,064	18,623	1,365,687
TOTAL TRI TRANSFERS INTO DELAWARE REPORTED	1,533,124	402,886	1,936,010

Source: U.S. EPA 2005 Data Run, December 1, 2006

* TRI Reporting Facility

The top receiving facility is the Wilmington Wastewater Treatment Plant, receiving off-site TRI chemicals in wastewater. The DuPont Experimental Station received the second largest amount, a variety of chemicals for incineration from other DuPont facilities, all from out-of-state. The Kent County Wastewater Treatment Plant received the third largest amount, primarily from TRI-reporting industrial customers in the region. The fourth largest receiver of TRI chemicals in wastes is the New Castle Department of Public Works, receiving waste water from TRI-reporting customers in the region. These four receiving facilities accounted for 93.5% of all TRI chemicals received from in-state and out-of-state TRI facilities.

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 the 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 are aware of the public availability of the data in this and other EPCRA reports and 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 and identified 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, and is aimed at helping the company to reduce any and all waste streams, including the priority chemicals.

During 2006, DNREC's Air Quality Management Section monitored ambient air quality at nine locations around the State. For more information, please refer to the "For Further Information" section under the [2005 Delaware Air Quality Report](#) on page 56 of this report.

DNREC has developed a new Regulation (Regulation 1146) that will reduce air emissions from Delaware's coal and residual oil-fired power plants. The reason for the new regulation is to protect public health, safety, and welfare from pollutants which include nitrogen oxides (NO_x), sulfur oxides (SO_x), and mercury. A review committee made up of DNREC personnel, persons with environmental interests, persons impacted by the emissions from power plants, and power plant owners and operators assisted with the development of the regulation.

NATIONAL PERSPECTIVE

The national 2005 TRI report has not been released by the U.S. EPA as of the writing of this report. However, placing the 2005 Delaware reports alongside the 2004 EPA reports yields some rankings that provide a perspective for Delaware in the national TRI picture. Changes in the 2005 national values may change these rankings.

This data shows that Delaware ranks 44th in the nation in total on-site releases for all TRI chemicals and 46th for on-site releases of dioxins. For on-site releases, 65 facilities in the nation each released more individually than all the facilities in Delaware combined, and for dioxins, 62 facilities each released more dioxins than all the facilities in Delaware combined. No Delaware facilities were in the top 100 for on-site releases of dioxins. Delaware provided 0.23% of the total on-site release amounts nationwide.

Some facilities in Delaware do rank near the top of the national rankings for specific releases. DuPont Edge Moor ranks #1 in the nation for off-site transfer of dioxin and dioxin-like compounds. Formosa Plastics ranks #4 in the nation for on-site release of vinyl chloride and #15 for on-site release of vinyl acetate. Valero ranks #36 for on-site release of hydrogen cyanide and #33 for cyanide compounds. Although no Delaware facility is in the top 100 for on-site release of mercury compounds, Occidental Chemical ranks #28 in the nation for total on-site release of elemental mercury and #11 for mercury on-site air release. Occidental Chemical closed their mercury-related chlor-alkali operation as of November, 2005, so their TRI mercury report amounts are expected to fall sharply in the 2006 reporting year. DaimlerChrysler ranks #30 for on-site release of n-methyl-2-pyrrolidone. The Indian River Power Plant ranks #53 for on-site release of hydrochloric acid. Delaware is ranked #21 in State rankings for on-site release of hydrochloric acid. The Indian River Power Plant ranks #72 within the coal and oil-fired electric generating facilities group (SIC 4911, 4931, and 4939) for total on-site release of all TRI chemicals.

Again, these comparisons are made using the 2005 Delaware TRI data and the 2004 National TRI data, so changes in the 2005 national amounts may change these rankings.

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 2005 TRI report may be viewed at: <http://www.serc.delaware.gov/reports.shtml>. 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://www.serc.delaware.gov/services/search/index.shtml>.

The reports submitted by facilities are available for review through the Freedom of Information Act (FOIA) process from DNREC's EPCRA Reporting Program 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 2004 TRI data, and later this year to 2005 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 2005 edition of this report will be available early 2007 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 1-800-424-9346.

Envirofacts Electronic Warehouse - Envirofacts is an EPA-developed website that provides public access to multiple environmental databases, including TRI. Links are available to data about hazardous waste, water permits, drinking water, Superfund sites, air, water, toxics, 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 (RTK NET) - Searchable nationwide TRI data is available through RTK NET. RTK NET 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 .

2005 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, publications, and reports 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://www.serc.delaware.gov/epcra.shtml> .

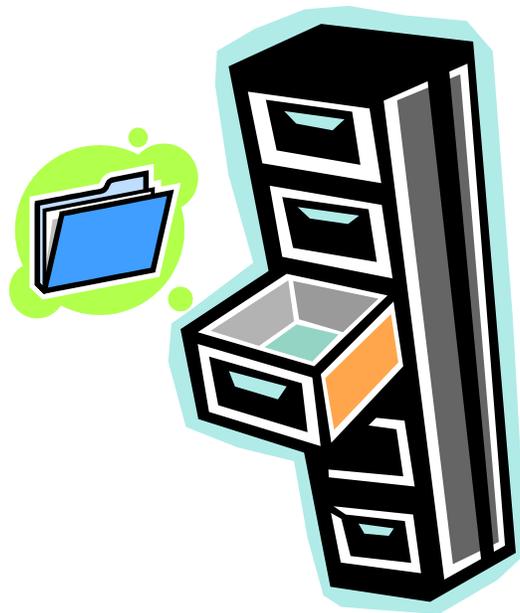
Questions or comments regarding the TRI program are welcome. Please direct questions, comments, or requests to:

TRI Coordinator
EPCRA Reporting Program
Emergency Prevention and Response Branch
Division of Air and Waste Management, DNREC
156 South State Street
Dover, DE 19901
Tel. (302) 739-9405, Fax (302) 739-3106
e-mail: john.parker@state.de.us



APPENDICES

2005



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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. 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. Presidents have 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



APPENDIX A

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).

In Delaware, the Extremely Hazardous Substances Risk Management Act, originally passed in 1988 and amended in 1998, adopted 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 NEWPORT

ROBERT LYDUM
538 FIRST STATE BLVD.
NEWPORT DE 19804
302-633-8065

ALLENS FAMILY FOODS

TOM BRINSON
ROUTE 5
HARBESON DE 19951
410-943-3989

ALLENS HATCHERY

TOM BRINSON
ROUTE 13A
DELMAR DE 19940
410-943-3989

ARLON

CURTIS EBERSOLD
1100 GOVERNOR LEA ROAD
BEAR DE 19701
302-595-1225

BLADES BULK PLANT

SCOTT GRENSHAW
40 S. MARKET STREET
SEAFORD, DE 19973
302-629-3001

CAMDEL METALS

JOHN P. COATES
12244 WILLOW GROVE ROAD
CAMDEN DE 19934
610-539-3900

CARL KING

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

CHROME DEPOSIT

JOHN BLASKO
9 TYLER WAY
NEWARK DE 19713
302-368-7525

CIBA SPECIALTY CHEMICALS

NICHOLAS R. SAPONE
205 S. JAMES STREET
NEWPORT DE 19804
302-992-5600

CLARIANT

BILL CRAWFORD
745 MCCOLLEY ST.
MILFORD DE 19963
508-829-6321

CLAYMONT STEEL

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

CUSTOM DECORATIVE MOULDINGS

BRIAN HOY
12136 SUSSEX HIGHWAY
GREENWOOD DE 19950
302-349-4937

CYTEC INDUSTRIES

JULIUS KLIMOWICZ
237 CHERRY LANE
NEW CASTLE DE 19720
302-574-1002

DAIMLER CHRYSLER

MICHELLE VETTERLEIN
550 SOUTH COLLEGE ST.
NEWARK DE 19713
302-453-5705

DENTSPLY CAULK - LAKEVIEW

PHIL STEWART
38 WEST CLARKE AVE
MILFORD DE 19963
302-422-4511

DENTSPLY CAULK - WEST

PHIL STEWART
779 EAST MASTEN CIRCLE
MILFORD DE 19963
302-422-4511

DOVER AFB

SUSAN WALLS
436 CES/CC
DOVER AFB DE 19902
302-677-6839

DOW REICHHOLD

J. LOUIS GRAHAM
144 FORKBRANCH ROAD
DOVER DE 19904
302-736-9197



APPENDIX B

TRI FACILITY ADDRESSES AND PUBLIC CONTACTS

DUPONT EDGE MOOR

THOMAS S. ANDERSEN
104 HAY ROAD
EDGE MOOR DE 19809
302-761-2298

DUPONT RED LION

JOHN M. JEFFRIES
766 GOVERNER LEA ROAD
DELAWARE CITY DE 19706
302-834-5901

E-A-R SPECIALTY COMPOSITES

GEORGE KLETT
650 DAWSON DR.
NEWARK DE 19713
302-286-2415

EDGE MOOR/HAY ROAD POWER PLANTS

BILL YINGLING
200 HAY ROAD
WILMINGTON DE 19809
302-283-5811

FORMOSA PLASTICS

KIMBERLY BENNETT
780 SCHOOLHOUSE ROAD
DELAWARE CITY DE 19706-0320
302-836-2256

FUJIFILM INAGING COLORANTS

STEVE POORMAN
233 CHERRY LANE
DELAWARE CITY DE 19720
302-472-1218

GAC SEAFORD

PAUL E. LUTH
25938 NANTICOKE STREET
SEAFORD DE 19973
813-248-2101

GE ENERGY

MICHAEL NEWKIRK
231 LAKE DRIVE
NEWARK DE 19702
302-451-2617

GENERAL MOTORS

SHARON MORTON
810 BOXWOOD ROAD
WILMINGTON DE 19804
313-665-3160

HALKO MANUFACTURING

ANDREW HALKO
500 DUCK CREEK ROAD
CLAYTON DE 19938
302-653-6627

HANOVER FOODS

WILLIAM D.SIMPSON
RT. 6 AND DUCK CREEK RD.
CLAYTON DE 19938
302-653-9281

HIRSH INDUSTRIES

DON JOHNSON
1525 MCKEE RD.
DOVER DE 19904
302-678-3454

HONEYWELL

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

IKO

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

INDIAN RIVER POWER PLANT

MEREDITH MOORE
29416 POWER PLANT ROAD
MILLSBORO DE 19966-0408
609-524-4522

INSTEEL WIRE

W.GARY LOGAN
800 NEW CASTLE AVENUE
WILMINGTON DE 19801
302-656-3121

INTERVET

RONALD VEROSKO
29160 INTERVET LANE
MILLSBORO DE 19966
302-934-4265

INVISTA SEAFORD

RENEE PHILLIPS
25876 DUPONT RD
SEAFORD DE 19973
302-629-1027

APPENDIX B

TRI FACILITY ADDRESSES AND PUBLIC CONTACTS



JOHNSON CONTROLS

ROBERT BROWNRIGG
700 NORTH BROAD STREET
MIDDLETOWN DE 19709
302-378-9885

JOHNSON POLYMER

STEPHEN DANLEY
100 INDUSTRIAL BLVD.
SEAFORD DE 19973
302-629-6200

JUSTIN TANKS

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

KUEHNE CHEMICAL CO.

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

MACDERMID

MICHAEL R. LENKIEWICZ
701 INDUSTRIAL DRIVE
MIDDLETOWN DE 19709
302-378-3100

MARBLE WORKS

MIKE MARVEL
12982 MENNONITE SCHOOL ROAD
GREENWOOD DE 19950-0929
302-349-5445

MCKEE RUN POWER PLANT

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

MEDAL

STEVE FORBES
305 WATER STREET
NEWPORT DE 19804
302-225-2137

METAL MASTERS

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

MOUNTAIRE FARMS FEED MILL

JEFFREY SMITH
11 DAISEY STREET
FRANKFORD DE 19945
302-934-3094

MOUNTAIRE FARMS OF DELAWARE

JEFFREY SMITH
29106 JOHN J WILLIAMS HIGHWAY
MILLSBORO DE 19966
302-934-3094

NORAMCO

ROBERT BREDE
500 SWEDES LANDING RD.
WILMINGTON DE 19801
302-888-4477

NRG DOVER

MEREDITH MOORE
1280 WEST NORTH STREET
DOVER DE 19904-7756
609-524-4522

OCCIDENTAL CHEMICAL

STACEY MORRIS
1657 RIVER ROAD
NEW CASTLE DE 19720-5194
302-834-3810

ORIENT

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

PERDUE BRIDGEVILLE

JULIE DEYOUNG
16447 ADAMS ROAD
BRIDGEVILLE DE 19933
410-543-3166

PERDUE GEORGETOWN

JULIE DEYOUNG
200 SAVANNAH ROAD
GEORGETOWN DE 19947
410-543-3166

PICTSWEET

BILL ENNIS
18215 WESLEY CHURCH ROAD
BRIDGEVILLE DE 19933
731-663-7600



APPENDIX B

TRI FACILITY ADDRESSES AND PUBLIC CONTACTS

PINNACLE FOODS

LYNN JENKINES
29984 PINNACLE WAY
MILLSBORO DE 19966
856-986-6898

PPG DOVER

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

PPG INDUSTRIES WORKS 32

BILL HESCOX
300 RUTHAR DRIVE
NEWARK DE 19711
302-454-1599

PREMCO

MARY JANE BEACH
DELAWARE CITY REFINERY
DELAWARE CITY DE 19706-7000
302-834-6070

PRINCE MINERALS

PAUL SMART
301 PIGEON POINT ROAD
NEW CASTLE DE 19720
646-747-4175

ROHM & HAAS

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

ROHM & HAAS BUILDING 7

DANA THURESSON
50 BELLEVUE ROAD
NEWARK DE 19713
302-366-0500

ROHM & HAAS TECH CENTER

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

ROLLER SERVICE

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

SARA LEE APPAREL

KAY CARTER
RIDGLEY STREET
DOVER DE 19904
336-519-5061

SERVICE ENERGY DOVER

DON STEINER
3799 NORTH DUPONT HIGHWAY
DOVER DE 19901
302-422-7433

SPATZ FIBERGLASS

DAVID M. JACKSON
505 NEW CHURCHMANS ROAD
NEW CASTLE DE 19720
302-322-3311

SPI PHARMA

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

SPI POLYOLS

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

SUNOCO MARCUS HOOK

DONALD ZOLADKIEWICZ
100 GREEN STREET
MARCUS HOOK PA 19061-0426
610-859-1038

SUNROC

PAUL BEDELL
60 STARLIFTER DR
DOVER DE 19901
614-861-1350

UNIQEMA

THRESA GARROD
231 & 315 CHERRY LANE
NEW CASTLE DE 19720
302-574-1177

VP RACING FUELS

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

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
AGILENT TECHNOLOGIES NEWPORT								
		2,140	0	0	2,140	10,573	0	
		2,830	0	0	2,830	21,525	0	
		2,746	0	0	2,746	121,791	0	
	Facility Total	7,716	0	0	7,716	153,889	0	
ALLEN FAMILY FOODS								
	1	0	0	0	0	0	0	
	1	0	0	0	0	0	0	
	Facility Total	0	0	0	0	0	0	
ALLEN'S HATCHERY								
	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	
ARLON								
		0	0	0	0	33,285	0	
		11,932	0	0	11,932	4,814	161,580	
	Facility Total	11,932	0	0	11,932	38,099	161,580	
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	

APPENDIX C

1. All amounts are in pounds

2. Source: DNREC 2005 Database 12-01-06

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

C - 1

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
CAMDEL METALS								
		0	0	0	0	29	0	
		0	0	0	0	4	0	
		0	0	0	0	18	0	
		15,333	0	0	15,333	2,228	0	
	Facility Total	15,333	0	0	15,333	2,279	0	
CARL KING								
	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	
	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	
CHROME DEPOSIT								
		0	0	0	0	755	1,300	
		0	0	0	0	6,800	0	
	Facility Total	0	0	0	0	7,555	1,300	
CIBA SPECIALTY CHEMICALS								
		27	0	0	27	117,270	1,219	
		100	0	0	100	63,029	2,321	
		68	0	0	68	20,197	5,089	
		26,484	0	0	26,484	2,106,493	640,208	
		0	0	0	0	35,012	0	
		0	0	0	0	0	35,577	
		5	0	0	5	20,165	2,735	
		1,436	0	0	1,436	1,253	6,683	
	Facility Total	28,120	0	0	28,120	2,363,419	693,832	

APPENDIX C

1. All amounts are in pounds
2. Source: DNREC 2005 Database, 12-01-06
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APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
CLARIANT								
CHROMIUM COMPOUNDS		5	0	0	5	277	0	
	Facility Total	5	0	0	5	277	0	
CLAYMONT STEEL								
CHROMIUM COMPOUNDS		130	3	68	201	35,230	0	
COPPER COMPOUNDS		151	7	22	180	36,633	0	
LEAD COMPOUNDS		372	3	38	413	295,354	0	
MANGANESE COMPOUNDS		978	21	435	1,434	167,612	0	
MERCURY COMPOUNDS		361	0	0	361	28	0	
NICKEL COMPOUNDS		88	8	26	122	4,311	0	
ZINC COMPOUNDS		2,606	17	144	2,767	1,755,659	0	
	Facility Total	4,686	59	733	5,478	2,294,827	0	
CUSTOM DECORATIVE MOULDINGS								
DIISOCYANATES	1	0	0	0	0	0	0	
	Facility Total	0	0	0	0	0	0	
CYTEC INDUSTRIES INC.								
ETHYLENE GLYCOL		7	0	0	7	9,146	0	
METHANOL		6,674	0	0	6,674	294,573	0	
	Facility Total	6,681	0	0	6,681	303,719	0	

APPENDIX C

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2. Source: DNREC 2005 Database, 12-01-06

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APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
DAIMLER CHRYSLER								
1,2,4-TRIMETHYLBENZENE		17,700	0	0	17,700	3,839	16,000	
BENZENE	1	0	0	0	0	0	0	
CERTAIN GLYCOL ETHERS		92,000	0	0	92,000	131,235	990	
ETHYLBENZENE		3,500	0	0	3,500	3,600	0	
ETHYLENE GLYCOL		153	0	0	153	210	0	
MANGANESE COMPOUNDS		0	0	0	0	3,848	0	
METHANOL		850	0	0	850	54	0	
METHYL ISOBUTYL KETONE		18,400	0	0	18,400	20,000	0	
N-BUTYL ALCOHOL		25,400	0	0	25,400	4,659	24,000	
N-HEXANE		1,023	0	0	1,023	0	0	
NITRATE COMPOUNDS		0	0	0	0	37,057	0	
NITRIC ACID		37	0	0	37	0	3,700	
N-METHYL-2-PYRROLIDONE		20,500	0	0	20,500	1,497	14,000	
SODIUM NITRITE		1,200	0	0	1,200	0	3,300	
TOLUENE		2,500	0	0	2,500	77	0	
XYLENE (MIXED ISOMERS)		22,900	0	0	22,900	20,061	0	
ZINC COMPOUNDS		1	0	0	1	11,920	0	
Facility Total		206,164	0	0	206,164	238,057	61,990	
DENTSPLY CAULK LAKEVIEW								
LEAD		0	0	0	0	61	0	
MERCURY		0	0	0	0	9,626	0	
SILVER		0	0	0	0	983	0	
Facility Total		0	0	0	0	10,670	0	
DENTSPLY CAULK WEST								
METHANOL		0	0	0	0	12,743	0	
METHYL METHACRYLATE		333	0	0	333	605	0	
TOLUENE		1,922	0	0	1,922	24,972	0	
Facility Total		2,254	0	0	2,254	38,321	0	
DOVER AFB								
NAPHTHALENE		8	0	0	8	0	0	
Facility Total		8	0	0	8	0	0	

APPENDIX C

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Form A does not report amounts.

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
DOW REICHHOLD								
1,3-BUTADIENE		4,995	0	0	4,995	0	1,200,000	
ACROLONITRILE		2,096	0	0	2,096	5	384,000	
ACRYLIC ACID		1,120	0	0	1,120	0	0	
BUTYL ACRYLATE		141	0	0	141	14	230	
ETHYL ACRYLATE		91	0	0	91	0	550	
FORMALDEHYDE		1,965	0	0	1,965	0	0	
METHYL METHACRYLATE		773	0	0	773	0	10,300	
N-METHYLOLACRYLAMIDE		219	0	0	219	0	0	
STYRENE		1,781	0	0	1,781	308	65,248	
VINYL ACETATE		983	0	0	983	28	25,000	
Facility Total		14,164	0	0	14,164	355	1,685,328	
DUPONT EDGE MOOR								
BARIUM COMPOUNDS		2	10,894	0	10,896	30,511	0	
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0	
CARBONYL SULFIDE		229,165	0	0	229,165	0	0	
CHLORINE		861	0	0	861	0	2,685,608	
CHROMIUM COMPOUNDS		1	45	0	46	221,535	0	
COBALT COMPOUNDS		3	128	0	131	14,795	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	39	0	
HEXACHLOROBENZENE		0	0	0	0	886	0	
HYDROCHLORIC ACID		6,911	0	0	6,911	193	16,363,941	
LEAD COMPOUNDS		1	129	0	130	66,402	0	
MANGANESE COMPOUNDS		2	131,614	0	131,616	3,569,626	0	
NICKEL COMPOUNDS		39	188	0	227	37,918	0	
OCTACHLOROSTYRENE		0	0	0	0	143	0	
PENTACHLOROBENZENE		0	0	0	0	13	0	
PHOSGENE		407	0	0	407	0	169,042	
POLYCHLORINATED BIPHENYLS		0	0	0	0	15	0	
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0	
TITANIUM TETRACHLORIDE		375	0	0	375	0	1,587,195	
TOLUENE		1,375	0	0	1,375	0	0	
VANADIUM COMPOUNDS		15	253	0	268	79,856	0	
ZINC COMPOUNDS		20	126	0	146	41,863	0	
Facility Total		239,177	143,377	0	382,554	4,063,796	20,805,786	

APPENDIX C

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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Form A does not report amounts.

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
DUPONT RED LION PLANT								
		2,148	0	0	2,148	0	0	
	Facility Total	2,148	0	0	2,148	0	0	
E-A-R SPECIALTY COMPOSITES								
		1	0	0	1	1,400	0	
		5	0	0	5	1,900	0	
	Facility Total	6	0	0	6	3,300	0	
EDGE MOOR/HAY ROAD POWER PLANTS								
		2,818	1	0	2,819	220	0	
		5,783	1,130	0	6,913	109,082	0	
		0	0	0	0	0	0	
		1,044	563	0	1,607	27,306	0	
		921	0	0	921	22,579	0	
		1,368	428	0	1,796	28,708	0	
		0	0	0	0	0	0	
		1,274,527	0	0	1,274,527	0	0	
		78,672	0	0	78,672	0	8,456	
		1,232	1,680	0	2,912	9,630	0	
		2,016	585	0	2,601	24,889	0	
		143	0	0	143	55	0	
		5,573	1,127	0	6,700	22,120	0	
		0	21	0	21	0	0	
		14	0	0	14	0	0	
		89	0	0	89	0	0	
		118,276	0	0	118,276	0	125,171	
		2,285	0	0	2,285	49,587	0	
	Facility Total	1,494,761	5,535	0	1,500,296	294,176	133,627	

APPENDIX C

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2. Source: DNREC 2005 Database, 12-01-06

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APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
FORMOSA PLASTICS								
		62,132	0	0	62,132	0	0	
		45,397	0	0	45,397	0	0	
		71,589	12	0	71,601	0	201,858	
	Facility Total	179,118	12	0	179,130	0	201,858	
FUJIFILM IMAGING COLORANTS								
		1	0	0	1	1,073	0	
		0	0	0	0	648	0	
		0	0	0	0	151	0	
	Facility Total	1	0	0	1	1,872	0	
GAC SEAFORD								
	1	0	0	0	0	0	0	
	Facility Total	0	0	0	0	0	0	
GE ENERGY								
		0	0	0	0	1,230	0	
	Facility Total	0	0	0	0	1,230	0	
GENERAL MOTORS								
		14,140	0	0	14,140	15,520	1,700	
		0	0	0	0	0	0	
		4,200	0	0	4,200	24,630	7,000	
		0	0	0	0	0	0	
		100	0	0	100	150	0	
		3,088	0	0	3,088	6,418	680	
		0	0	0	0	36,000	0	
		0	0	0	0	0	16,000	
		0	0	0	0	0	0	
		0	0	0	0	0	11,000	
		57,580	0	0	57,580	123,119	1,600	
	Facility Total	79,108	0	0	79,108	205,837	37,980	

APPENDIX C

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APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
HALKO MFG.								
			0	0	0	0	0	46,616
			0	0	0	0	0	46,616
HANOVER FOODS								
			19,760	0	0	19,760	0	0
			19,760	0	0	19,760	0	0
HIRSH INDUSTRIES								
			13,535	0	0	13,535	0	0
			13,535	0	0	13,535	0	0
HONEYWELL								
			10	0	0	10	8,369	0
			6,100	0	0	6,100	752	0
			1,673	0	0	1,673	4,051	0
	1		0	0	0	0	0	0
	1		0	0	0	0	0	0
			487	0	0	487	221	0
			0	0	0	0	0	0
	1		0	0	0	0	0	0
			10	0	0	10	2,633	0
			27,950	0	0	27,950	45,264	0
	1		0	0	0	0	0	0
			36,230	0	0	36,230	61,290	0
IKO WILMINGTON								
			0	0	0	0	96	3
			0	0	0	0	96	3

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2. Source: DNREC 2005 Database, 12-01-06

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APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
INDIAN RIVER POWER PLANT								
AMMONIA		15,000	0	0	15,000	9,700	830,000	
ARSENIC COMPOUNDS		755	5	29,000	29,760	0	0	
BARIUM COMPOUNDS		3,205	750	280,000	283,955	0	0	
BENZO(G,H,I)PERYLENE		0	0	0	0	0	0	
CHROMIUM COMPOUNDS		755	250	57,000	58,005	0	0	
COBALT COMPOUNDS		255	5	18,000	18,260	0	0	
COPPER COMPOUNDS		255	2,800	58,000	61,055	0	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0	
HYDROCHLORIC ACID		2,800,000	0	0	2,800,000	0	13,000	
HYDROGEN FLUORIDE		200,000	0	0	200,000	0	26,000	
LEAD COMPOUNDS		638	0	23,062	23,700	4	0	
MANGANESE COMPOUNDS		755	5	70,000	70,760	0	0	
MERCURY COMPOUNDS		172	0	33	205	0	0	
NAPHTHALENE	1	0	0	0	0	0	0	
NICKEL COMPOUNDS		755	250	45,000	46,005	0	0	
POLYCYCLIC AROMATIC COMPOUNDS		2	0	0	2	0	0	
SULFURIC ACID		110,000	0	0	110,000	0	350,000	
VANADIUM COMPOUNDS		1,205	5	100,000	101,210	0	0	
ZINC COMPOUNDS		1,605	750	61,000	63,355	0	0	
		Facility Total	3,135,357	4,820	741,095	3,881,272	9,704	1,219,000
INSTEEL WIRE								
LEAD COMPOUNDS		0	0	0	0	752	0	
		Facility Total	0	0	0	752	0	
INTERVET								
MERCURY COMPOUNDS		0	0	0	0	2	0	
		Facility Total	0	0	0	2	0	

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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Form A does not report amounts.

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
INVISTA SEAFORD								
		250	0	250	500	0	0	
		0	0	0	0	0	0	
		250	0	3,100	3,350	2,205	0	
		0	0	0	0	0	0	
		160,000	0	0	160,000	0	10,000	
		53	0	3,400	3,453	7	0	
		30	0	26	56	0	0	
		10	0	0	10	5	0	
		0	310,000	0	310,000	2,400	0	
		0	0	0	0	1	0	
		0	250	0	250	2,300	420,000	
		120,000	0	0	120,000	0	0	
		250	250	4,200	4,700	250	0	
	Facility Total	280,843	310,500	10,976	602,319	7,168	430,000	
JOHNSON CONTROLS								
		104	4	0	108	4,793,043	0	
	Facility Total	104	4	0	108	4,793,043	0	
JOHNSON POLYMER								
		3,616	0	0	3,616	626	0	
		176	0	0	176	15	58	
		10	0	0	10	1,668	0	
		178	0	0	178	5	932	
		285	0	0	285	5	1,746	
		412	0	0	412	32	1,317	
	Facility Total	4,677	0	0	4,677	2,351	4,053	
JUSTIN TANKS								
		30,062	0	0	30,062	360	0	
	Facility Total	30,062	0	0	30,062	360	0	

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APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
KUEHNE COMPANY								
CHLORINE		471	0	0	471	0	0	
	Facility Total	471	0	0	471	0	0	
MACDERMID								
TOLUENE DIISOCYANATE (MIXED ISOMERS)		14	0	0	14	0	519	
	Facility Total	14	0	0	14	0	519	
MARBLE WORKS								
STYRENE		2,879	0	0	2,879	0	0	
	Facility Total	2,879	0	0	2,879	0	0	
MCKEE RUN								
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	
MEDAL								
METHANOL		640	0	0	640	30,737	1,712,330	
N-HEXANE		740	0	0	740	0	1,478,830	
N-METHYL-2-PYRROLIDONE		600	0	0	600	73,854	0	
	Facility Total	1,980	0	0	1,980	104,591	3,191,160	
METAL MASTERS								
CHROMIUM		5	0	0	5	230,351	0	
NICKEL		5	0	0	5	232,350	0	
	Facility Total	10	0	0	10	462,701	0	
MOUNTAIRE FARMS FRANKFORD MILL								
ARSENIC COMPOUNDS	1	0	0	0	0	0	0	
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	

APPENDIX C

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APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
MOUNTAIRE FARMS OF DELAWARE								
COPPER COMPOUNDS	1	0	0	0	0	0	0	0
MANGANESE COMPOUNDS	1	0	0	0	0	0	0	0
ZINC COMPOUNDS	1	0	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0	0
NORAMCO								
DICHLOROMETHANE		1,671	0	0	1,671	56,687	733,349	
FORMIC ACID		7	0	0	7	6,785	0	
METHANOL		1,514	0	0	1,514	778,871	479,889	
N,N-DIMETHYLANILINE		0	0	0	0	21,244	0	
N-BUTYL ALCOHOL		15	0	0	15	64,494	0	
TOLUENE		1,025	0	0	1,025	845,446	965,791	
Facility Total		4,232	0	0	4,232	1,773,527	2,179,029	
NRG DOVER								
HYDROCHLORIC ACID		32,000	0	0	32,000	0	0	
LEAD COMPOUNDS		3	0	0	3	388	0	
MERCURY COMPOUNDS		8	0	0	8	7	0	
SULFURIC ACID		6,800	0	0	6,800	0	20,000	
Facility Total		38,811	0	0	38,811	395	20,000	
OCCIDENTAL CHEMICAL								
CHLORINE		29	0	0	29	369	1,397,980	
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0	
MERCURY		261	17	0	278	383,935	4,000	
Facility Total		290	17	0	308	384,304	1,401,980	

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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

C - 12

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
ORIENT								
		2,955	0	0	2,955	5	11,486	
		0	0	0	0	0	0	
		242	0	0	242	3	0	
		3,197	0	0	3,197	8	11,486	
PERDUE BRIDGEVILLE								
		0	0	0	0	0	0	
	1	0	0	0	0	0	0	
	1	0	0	0	0	0	0	
		0	0	0	0	0	0	
	1	0	0	0	0	0	0	
		0	0	0	0	0	0	
PERDUE GEORGETOWN								
		0	0	0	0	0	0	
		0	385,000	90	385,090	0	0	
		0	0	0	0	0	0	
		0	385,000	90	385,090	0	0	
PICTSWEET								
		200	0	0	200	0	0	
		200	0	0	200	0	0	
PINNACLE FOODS								
		0	0	0	0	0	0	
		2	0	0	2	0	0	
		2	0	0	2	0	0	
PPG DOVER								
		5	0	0	5	1,255	0	
		0	0	0	0	1,000	0	
		5	0	0	5	14,267	0	
		0	0	0	0	0	0	
		255	0	0	255	1,791	0	
		265	0	0	265	18,313	0	

APPENDIX C

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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

Form A does not report amounts.

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
PPG INDUSTRIES WORKS 32								
LEAD		0	0	0	0	0	0	0
	Facility Total	0	0	0	0	0	0	0
PREMCO								
1,2,4-TRIMETHYLBENZENE		1,788	0	0	1,788	0	332,761	
1,3-BUTADIENE		794	0	0	794	0	48	
2,4-DIMETHYLPHENOL		0	518	0	518	0	51,305	
AMMONIA		35,758	3,146	0	38,904	0	14,558,667	
ANTHRACENE		0	0	0	0	0	10	
BENZENE		3,025	593	0	3,618	166	179,730	
BENZO(G,H,I)PERYLENE		57	4	0	61	0	411	
CARBON DISULFIDE		1,583	0	0	1,583	0	2,168,717	
CARBONYL SULFIDE		38,388	0	0	38,388	0	9,211,237	
CHROMIUM COMPOUNDS		355	7	0	362	79,862	0	
COPPER COMPOUNDS		2,075	1,590	0	3,665	0	0	
CRESOL (MIXED ISOMERS)		3	55,312	0	55,315	2,983	320,952	
CUMENE		148	0	0	148	0	27	
CYANIDE COMPOUNDS		6,480	1,020	0	7,500	0	385,605	
CYCLOHEXANE		12,387	0	0	12,387	0	1,711	
DIOXIN AND DIOXIN-LIKE COMPOUNDS		0	0	0	0	0	0	
ETHYLBENZENE		1,826	1,200	0	3,026	38	8,998	
ETHYLENE		604	0	0	604	0	3,462	
ETHYLENE GLYCOL		0	441	0	441	0	43,640	
FORMIC ACID		0	0	0	0	0	310,391	
HYDROCHLORIC ACID		33,278	0	0	33,278	0	394,763	
HYDROGEN CYANIDE		6,480	1,020	0	7,500	0	385,605	
LEAD COMPOUNDS		206	10	0	216	295	0	
MANGANESE COMPOUNDS		1,257	0	0	1,257	97,836	0	
MERCURY COMPOUNDS		21	0	0	21	0	0	
METHANOL		9,018	259	0	9,277	0	14,972	
METHYL TERT-BUTYL ETHER		19,755	654	0	20,409	0	74,597	
MOLYBDENUM TRIOXIDE		121	415	0	536	2,626	0	

APPENDIX C

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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

Form A does not report amounts.

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
Premcor, Continued								
NAPHTHALENE		861	1	0	862	0	694	
N-BUTYL ALCOHOL		1	8	0	9	0	752	
N-HEXANE		48,862	0	0	48,862	0	3,995	
NICKEL COMPOUNDS		624	1,591	0	2,215	257,703	0	
NITRATE COMPOUNDS		0	234,230	0	234,230	0	538,990	
PHENANTHRENE		14	0	0	14	0	20	
PHENOL		110	44,595	0	44,705	0	234,677	
POLYCYCLIC AROMATIC COMPOUNDS		319	3	0	322	0	338	
PROPYLENE		10,739	0	0	10,739	0	544,950	
SODIUM NITRITE		4	896	0	900	0	1,459,268	
STYRENE		49	0	0	49	0	23	
SULFURIC ACID		257,680	0	0	257,680	0	0	
TETRACHLOROETHYLENE		19	0	0	19	0	0	
TOLUENE		10,326	4,555	0	14,881	54	122,338	
VANADIUM COMPOUNDS		2,975	7,053	0	10,028	1,018,658	0	
XYLENE (MIXED ISOMERS)		5,453	0	0	5,453	121	78,705	
ZINC COMPOUNDS		2,391	2,394	0	4,785	140	0	
Facility Total		515,834	361,516	0	877,350	1,460,481	31,432,359	
PRINCE MINERALS								
BARIUM		250	250	0	500	0	0	
LEAD		5	5	0	10	0	0	
MANGANESE COMPOUNDS		1,778	372	0	2,150	0	0	
NICKEL		5	250	0	255	0	0	
Facility Total		2,038	877	0	2,915	0	0	
ROHM & HAAS								
DIISOCYANATES	1	0	0	0	0	0	0	
N,N-DIMETHYLFORMAMIDE		3,218	0	0	3,218	595,112	4,320,113	
PHTHALIC ANHYDRIDE	1	0	0	0	0	0	0	
Facility Total		3,218	0	0	3,218	595,112	4,320,113	

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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Form A does not report amounts.

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
ROHM & HAAS BUILDING 7								
			1,337	0	0	1,337	12,111	0
			1,337	0	0	1,337	12,111	0
ROHM & HAAS TECH CENTER								
	1	0	0	0	0	0	0	0
		2	0	0	2	2	17,752	0
		1,762	0	0	1,762	1,762	140,132	0
		1,764	0	0	1,764	1,764	157,884	0
ROLLER SERVICE								
	1	0	0	0	0	0	0	0
		0	0	0	0	0	0	0
SARA LEE APPAREL								
		0	0	0	0	0	90,944	0
		1	0	0	1	1	0	0
		0	0	0	0	0	2,580	0
		1	0	0	1	1	93,524	0
SERVICE ENERGY DOVER								
	1	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0
		0	0	0	0	0	0	0
SPATZ FIBERGLASS								
		4,652	0	0	4,652	4,652	0	0
		4,652	0	0	4,652	4,652	0	0

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
SPI PHARMA								
CHLORINE	1	0	0	0	0	0	0	0
NITRIC ACID	1	0	0	0	0	0	0	0
Facility Total		0	0	0	0	0	0	0
SPI POLYOLS								
NICKEL COMPOUNDS		10	1	0	11	96,313	0	0
NITRATE COMPOUNDS	1	0	0	0	0	0	0	0
NITRIC ACID	1	0	0	0	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS		0	0	0	0	0	0	0
Facility Total		10	1	0	11	96,313	0	0
SUNOCO								
BENZENE		4,950	0	0	4,950	0	0	0
ETHYLENE		62,433	0	0	62,433	0	0	0
ETHYLENE OXIDE		5,583	0	0	5,583	0	0	0
XYLENE (MIXED ISOMERS)		112	0	0	112	0	0	0
Facility Total		73,078	0	0	73,078	0	0	0
SUNROC								
CHROMIUM		0	0	0	0	1,600	0	0
COPPER		0	0	0	0	4,500	0	0
Facility Total		0	0	0	0	6,100	0	0
UNIQEMA								
4,4'-ISOPROPYLIDENEDIPHENOL		1,229	80	0	1,309	5,306	0	0
BIS(2-CHLOROETHYL) ETHER		12	0	0	12	1,793	0	0
CERTAIN GLYCOL ETHERS		18	0	0	18	2,165	926	0
DIETHANOLAMINE		13	0	0	13	481	206	0
DIETHYL SULFATE		100	0	0	100	79	34	0
ETHYLENE OXIDE		2,576	0	0	2,576	0	0	0
MALEIC ANHYDRIDE		2	0	0	2	80	0	0
NAPHTHALENE		6	0	0	6	1,643	704	0
N-BUTYL ALCOHOL		123	0	0	123	7,102	472	0
PHENOL		50	0	0	50	425	182	0
PROPYLENE OXIDE		1,550	0	0	1,550	0	0	0
Facility Total		5,679	80	0	5,759	19,074	2,524	0

APPENDIX C

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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

Form A does not report amounts.

APPENDIX C

2005 On-Site Releases by Facility And Chemical

(in pounds)

FACILITIES ARRANGED ALPHABETICALLY	FORM A	ON SITE RELEASES				TOTAL	OFF SITE TRANSFERS	ON SITE WASTE MGMT.
		AIR	WATER	LAND				
VP RACING FUELS								
BENZENE	1	0	0	0	0	0	0	0
LEAD COMPOUNDS		0	0	0	0	10	0	0
METHANOL		115	0	0	115	1,530	0	0
METHYL TERT-BUTYL ETHER	1	0	0	0	0	0	0	0
TOLUENE		45	0	0	45	1,115	0	0
XYLENE (MIXED ISOMERS)	1	0	0	0	0	0	0	0
Facility Total		160	0	0	160	2,655	0	0
State Totals	53	6,472,074	1,211,798	752,894	8,436,766	20,083,537	68,042,123	

APPENDIX C

1. All amounts are in pounds

2. Source: DNREC 2005 Database, 12-01-06

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

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
AGILENT TECHNOLOGIES NEWPORT										
ACETONITRILE	0	0	10,573	0	0	10,573	0	0	0	0
METHANOL	0	0	21,525	0	0	21,525	0	0	0	0
TOLUENE	0	0	121,791	0	0	121,791	0	0	0	0
Facility Total	0	0	153,889	0	0	153,889	0	0	0	0
ALLEN FAMILY FOODS										
AMMONIA	0	0	0	0	0	0	0	0	0	0
CHLORINE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
ALLEN'S HATCHERY										
ARSENIC	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
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
ARLON										
COPPER	0	33,000	0	0	285	33,285	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	0	4,814	0	4,814	0	161,580	0	161,580
Facility Total	0	33,000	0	4,814	285	38,099	0	161,580	0	161,580
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

APPENDIX D

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
CAMDEL METALS										
CHROMIUM	0	0	0	0	29	29	0	0	0	0
MANGANESE	0	0	0	0	4	4	0	0	0	0
NICKEL	0	0	0	0	18	18	0	0	0	0
TRICHLOROETHYLENE	0	0	0	2,228	0	2,228	0	0	0	0
Facility Total	0	0	0	2,228	51	2,279	0	0	0	0
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
NAPHTHALENE	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
CHROME DEPOSIT										
CHROMIUM COMPOUNDS	0	0	0	0	755	755	1,300	0	0	1,300
LEAD COMPOUNDS	0	5,000	0	0	1,800	6,800	0	0	0	0
Facility Total	0	5,000	0	0	2,555	7,555	1,300	0	0	1,300
CIBA SPECIALTY CHEMICALS										
ANILINE	27,107	124	88,828	1,211	0	117,270	0	0	1,219	1,219
BIPHENYL	34,870	94	27,435	630	0	63,029	0	0	2,321	2,321
CYCLOHEXANE	0	20,197	0	0	0	20,197	0	0	5,089	5,089
METHANOL	579,169	1,517,728	96	9,500	0	2,106,493	334,688	0	305,520	640,208
NITRATE COMPOUNDS	35,012	0	0	0	0	35,012	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	35,577	35,577
P-CHLOROANILINE	2,085	124	17,955	0	1	20,165	0	0	2,735	2,735
XYLENE (MIXED ISOMERS)	289	0	48	916	0	1,253	0	0	6,683	6,683
Facility Total	678,532	1,538,267	134,362	12,257	1	2,363,419	334,688	0	359,144	693,832

APPENDIX D

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
CLARIANT										
CHROMIUM COMPOUNDS	0	0	0	0	277	277	0	0	0	0
Facility Total	0	0	0	0	277	277	0	0	0	0
CLAYMONT STEEL										
CHROMIUM COMPOUNDS	0	34,297	0	0	933	35,230	0	0	0	0
COPPER COMPOUNDS	0	34,646	0	0	1,987	36,633	0	0	0	0
LEAD COMPOUNDS	0	295,303	0	0	51	295,354	0	0	0	0
MANGANESE COMPOUNDS	0	162,766	0	0	4,846	167,612	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	28	28	0	0	0	0
NICKEL COMPOUNDS	0	3,488	0	0	823	4,311	0	0	0	0
ZINC COMPOUNDS	0	1,755,543	0	0	116	1,755,659	0	0	0	0
Facility Total	0	2,286,043	0	0	8,784	2,294,827	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
CYTEC INDUSTRIES INC.										
ETHYLENE GLYCOL	9,146	0	0	0	0	9,146	0	0	0	0
METHANOL	278,026	0	16,547	0	0	294,573	0	0	0	0
Facility Total	287,172	0	16,547	0	0	303,719	0	0	0	0

APPENDIX D

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
DAIMLER CHRYSLER										
1,2,4-TRIMETHYLBENZENE	0	39	3,800	0	0	3,839	0	0	16,000	16,000
BENZENE	0	0	0	0	0	0	0	0	0	0
CERTAIN GLYCOL ETHERS	130,000	230	910	95	0	131,235	0	0	990	990
ETHYLBENZENE	0	0	3,600	0	0	3,600	0	0	0	0
ETHYLENE GLYCOL	210	0	0	0	0	210	0	0	0	0
MANGANESE COMPOUNDS	48	900	0	0	2,900	3,848	0	0	0	0
METHANOL	0	0	54	0	0	54	0	0	0	0
METHYL ISOBUTYL KETONE	0	0	20,000	0	0	20,000	0	0	0	0
N-BUTYL ALCOHOL	0	59	4,600	0	0	4,659	0	0	24,000	24,000
N-HEXANE	0	0	0	0	0	0	0	0	0	0
NITRATE COMPOUNDS	37,000	56	0	0	1	37,057	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	3,700	3,700
N-METHYL-2-PYRROLIDONE	0	36	1,400	61	0	1,497	0	0	14,000	14,000
SODIUM NITRITE	0	0	0	0	0	0	0	0	3,300	3,300
TOLUENE	0	0	77	0	0	77	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	20,000	61	0	20,061	0	0	0	0
ZINC COMPOUNDS	320	4,500	0	0	7,100	11,920	0	0	0	0
Facility Total	167,578	5,820	54,441	217	10,001	238,057	0	0	61,990	61,990
DENTSPLY CAULK LAKEVIEW										
LEAD	0	61	0	0	0	61	0	0	0	0
MERCURY	0	9,626	0	0	0	9,626	0	0	0	0
SILVER	0	983	0	0	0	983	0	0	0	0
Facility Total	0	10,670	0	0	0	10,670	0	0	0	0
DENTSPLY CAULK WEST										
METHANOL	0	0	12,743	0	0	12,743	0	0	0	0
METHYL METHACRYLATE	0	605	0	0	0	605	0	0	0	0
TOLUENE	0	24,972	0	0	0	24,972	0	0	0	0
Facility Total	0	25,577	12,743	0	0	38,321	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

APPENDIX D

2005 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	RE- CYCLE	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	1,200,000	1,200,000	
ACROLONITRILE	4	0	0	0	1	5	0	0	384,000	384,000	
ACRYLIC ACID	0	0	0	0	0	0	0	0	0	0	
BUTYL ACRYLATE	0	0	14	0	0	14	0	0	230	230	
ETHYL ACRYLATE	0	0	0	0	0	0	0	0	550	550	
FORMALDEHYDE	0	0	0	0	0	0	0	0	0	0	
METHYL METHACRYLATE	0	0	0	0	0	0	0	0	10,300	10,300	
N-METHYLOLACRYLAMIDE	0	0	0	0	0	0	0	0	0	0	
STYRENE	308	0	0	0	0	308	0	0	65,248	65,248	
VINYL ACETATE	0	0	28	0	0	28	0	0	25,000	25,000	
Facility Total	312	0	42	0	1	355	0	0	1,685,328	1,685,328	
DUPONT EDGE MOOR											
BARIUM COMPOUNDS	0	0	0	0	30,511	30,511	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	2,685,608	2,685,608	
CHROMIUM COMPOUNDS	0	0	0	0	221,535	221,535	0	0	0	0	
COBALT COMPOUNDS	0	0	0	0	14,795	14,795	0	0	0	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	39	39	0	0	0	0	
HEXACHLORO BENZENE	0	0	0	9	877	886	0	0	0	0	
HYDROCHLORIC ACID	0	0	0	1	192	193	0	0	16,363,940	16,363,941	
LEAD COMPOUNDS	0	120	0	0	66,282	66,402	0	0	0	0	
MANGANESE COMPOUNDS	0	0	0	0	3,569,626	3,569,626	0	0	0	0	
NICKEL COMPOUNDS	0	0	0	0	37,918	37,918	0	0	0	0	
OCTACHLOROSTYRENE	0	0	0	2	142	143	0	0	0	0	
PENTACHLORO BENZENE	0	0	0	0	13	13	0	0	0	0	
PHOSGENE	0	0	0	0	0	0	0	0	169,042	169,042	
POLYCHLORINATED BIPHENYLS	0	0	0	0	15	15	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	1,587,195	1,587,195	
TOLUENE	0	0	0	0	0	0	0	0	0	0	
VANADIUM COMPOUNDS	0	0	0	0	79,856	79,856	0	0	0	0	
ZINC COMPOUNDS	0	0	0	0	41,863	41,863	0	0	0	0	
Facility Total	0	120	0	12	4,063,664	4,063,796	0	0	20,805,786	20,805,786	

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2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
DUPONT RED LION PLANT										
SULFURIC ACID	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
E-A-R SPECIALTY COMPOSITES										
DIISOCYANATES	0	0	0	1,400	0	1,400	0	0	0	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)	0	0	0	1,900	0	1,900	0	0	0	0
Facility Total	0	0	0	3,300	0	3,300	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS										
AMMONIA	215	0	0	0	5	220	0	0	0	0
BARIUM COMPOUNDS	0	0	0	0	109,082	109,082	0	0	0	0
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
CHROMIUM COMPOUNDS	6	0	0	0	27,300	27,306	0	0	0	0
COBALT COMPOUNDS	0	0	0	0	22,579	22,579	0	0	0	0
COPPER COMPOUNDS	72	6,983	0	0	21,653	28,708	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID	0	0	0	0	0	0	0	0	0	0
HYDROGEN FLUORIDE	0	0	0	0	0	0	0	0	8,456	8,456
LEAD COMPOUNDS	4	0	0	0	9,626	9,630	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	24,889	24,889	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	55	55	0	0	0	0
NICKEL COMPOUNDS	33	0	0	0	22,087	22,120	0	0	0	0
NITRATE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
PENTACHLOROBENZENE	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	0	0	0	0	0	0	0	0	125,171	125,171
VANADIUM COMPOUNDS	0	0	0	0	49,587	49,587	0	0	0	0
Facility Total	330	6,983	0	0	286,863	294,176	0	0	133,627	133,627

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2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
FORMOSA PLASTICS										
AMMONIA	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	201,858	201,858
Facility Total	0	0	0	0	0	0	0	0	201,858	201,858
FUJIFILM IMAGING COLORANTS										
CERTAIN GLYCOL ETHERS	805	0	268	0	0	1,073	0	0	0	0
COPPER COMPOUNDS	296	0	0	0	352	648	0	0	0	0
NITRATE COMPOUNDS	121	0	30	0	0	151	0	0	0	0
Facility Total	1,222	0	298	0	352	1,872	0	0	0	0
GAC SEAFORD										
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
GE ENERGY										
LEAD COMPOUNDS	3	1,221	0	0	6	1,230	0	0	0	0
Facility Total	3	1,221	0	0	6	1,230	0	0	0	0
GENERAL MOTORS										
1,2,4-TRIMETHYLBENZENE	0	15,000	440	0	80	15,520	0	0	1,700	1,700
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
CERTAIN GLYCOL ETHERS	21,000	0	3,400	0	230	24,630	0	0	7,000	7,000
DIISOCYANATES	0	0	0	0	0	0	0	0	0	0
ETHYLENE GLYCOL	150	0	0	0	0	150	0	0	0	0
METHANOL	0	6,100	310	0	8	6,418	0	0	680	680
NITRATE COMPOUNDS	36,000	0	0	0	0	36,000	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	16,000	16,000
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
SODIUM NITRITE	0	0	0	0	0	0	0	0	11,000	11,000
XYLENE (MIXED ISOMERS)	0	120,000	3,100	0	19	123,119	0	0	1,600	1,600
Facility Total	57,150	141,100	7,250	0	337	205,837	0	0	37,980	37,980

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2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
HALKO MFG.										
LEAD	0	0	0	0	0	0	46,616	0	0	46,616
Facility Total	0	0	0	0	0	0	46,616	0	0	46,616
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
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
HONEYWELL										
1,3-DICHLOROPROPYLENE	0	0	8,256	103	10	8,369	0	0	0	0
AMMONIA	752	0	0	0	0	752	0	0	0	0
BORON TRIFLUORIDE	0	0	1,171	2,880	0	4,051	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
HYDROGEN FLUORIDE	0	0	0	0	221	221	0	0	0	0
LEAD COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
METHANOL	27	0	644	1,960	2	2,633	0	0	0	0
N-HEXANE	188	0	14,188	29,678	1,210	45,264	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0
Facility Total	967	0	24,259	34,621	1,443	61,290	0	0	0	0
IKO WILMINGTON										
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	96	96	3	0	0	3
Facility Total	0	0	0	0	96	96	3	0	0	3

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2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
INDIAN RIVER POWER PLANT											
AMMONIA	9,700	0	0	0	0	9,700	0	0	830,000	830,000	
ARSENIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
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	
COBALT 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	0	0	0	0	0	0	0	0	13,000	13,000	
HYDROGEN FLUORIDE	0	0	0	0	0	0	0	0	26,000	26,000	
LEAD COMPOUNDS	4	0	0	0	0	4	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	
NAPHTHALENE	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	0	0	0	0	0	0	0	0	350,000	350,000	
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	9,704	0	0	0	0	9,704	0	0	1,219,000	1,219,000	
INSTEEL WIRE											
LEAD COMPOUNDS	0	752	0	0	0	752	0	0	0	0	
Facility Total	0	752	0	0	0	752	0	0	0	0	
INTERVET											
MERCURY COMPOUNDS	0	0	0	0	2	2	0	0	0	0	
Facility Total	0	0	0	0	2	2	0	0	0	0	

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2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
INVISTA 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
CHROMIUM COMPOUNDS	0	0	0	0	2,205	2,205	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
HYDROCHLORIC ACID	0	0	0	0	0	0	0	0	10,000	10,000
LEAD COMPOUNDS	0	0	0	0	7	7	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	0	0	0	5	0	5	0	0	0	0
NITRATE COMPOUNDS	0	0	0	2,400	0	2,400	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	1	0	1	0	0	0	0
SODIUM NITRITE	0	0	0	2,300	0	2,300	0	0	420,000	420,000
SULFURIC ACID	0	0	0	0	0	0	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	250	250	0	0	0	0
Facility Total	0	0	0	4,706	2,462	7,168	0	0	430,000	430,000
JOHNSON CONTROLS										
LEAD COMPOUNDS	0	4,793,043	0	0	0	4,793,043	0	0	0	0
Facility Total	0	4,793,043	0	0	0	4,793,043	0	0	0	0
JOHNSON POLYMER										
AMMONIA	466	0	0	0	160	626	0	0	0	0
BUTYL ACRYLATE	5	0	0	10	0	15	0	0	58	58
CERTAIN GLYCOL ETHERS	1,070	0	0	0	598	1,668	0	0	0	0
ETHYL ACRYLATE	5	0	0	0	0	5	0	0	932	932
METHYL METHACRYLATE	5	0	0	0	0	5	0	0	1,746	1,746
STYRENE	12	0	0	0	20	32	0	0	1,317	1,317
Facility Total	1,563	0	0	10	778	2,351	0	0	4,053	4,053
JUSTIN TANKS										
STYRENE	0	0	0	0	360	360	0	0	0	0
Facility Total	0	0	0	0	360	360	0	0	0	0

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2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
KUEHNE COMPANY											
CHLORINE	0	0	0	0	0	0	0	0	0	0	
Facility Total	0	0	0	0	0	0	0	0	0	0	
MACDERMID											
TOLUENE DIISOCYANATE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	519	519	
Facility Total	0	0	0	0	0	0	0	0	519	519	
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											
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	30,737	0	30,737	1,712,330	0	0	1,712,330	
N-HEXANE	0	0	0	0	0	0	1,478,830	0	0	1,478,830	
N-METHYL-2-PYRROLIDONE	62,854	11,000	0	0	0	73,854	0	0	0	0	
Facility Total	62,854	11,000	0	30,737	0	104,591	3,191,160	0	0	3,191,160	
METAL MASTERS											
CHROMIUM	0	229,601	0	0	750	230,351	0	0	0	0	
NICKEL	0	232,100	0	0	250	232,350	0	0	0	0	
Facility Total	0	461,701	0	0	1,000	462,701	0	0	0	0	
MOUNTAIRE FARMS FRANKFORD MILL											
ARSENIC COMPOUNDS	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	
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
Facility Total	0	0	0	0	0	0	0	0	0	0	

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2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
MOUNTAIRE FARMS OF DELAWARE										
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	56,687	0	0	56,687	733,349	0	0	733,349
FORMIC ACID	0	0	0	6,785	0	6,785	0	0	0	0
METHANOL	16,241	0	762,630	0	0	778,871	479,889	0	0	479,889
N,N-DIMETHYLANILINE	21,244	0	0	0	0	21,244	0	0	0	0
N-BUTYL ALCOHOL	735	0	63,759	0	0	64,494	0	0	0	0
TOLUENE	0	0	845,446	0	0	845,446	965,791	0	0	965,791
Facility Total	38,220	0	1,728,522	6,785	0	1,773,527	2,179,029	0	0	2,179,029
NRG DOVER										
HYDROCHLORIC ACID	0	0	0	0	0	0	0	0	0	0
LEAD COMPOUNDS	0	0	0	0	388	388	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	7	7	0	0	0	0
SULFURIC ACID	0	0	0	0	0	0	0	0	20,000	20,000
Facility Total	0	0	0	0	395	395	0	0	20,000	20,000
OCCIDENTAL CHEMICAL										
CHLORINE	0	0	0	369	0	369	0	0	1,397,980	1,397,980
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
MERCURY	0	383,030	0	0	905	383,935	4,000	0	0	4,000
Facility Total	0	383,030	0	369	905	384,304	4,000	0	1,397,980	1,401,980

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2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
ORIENT											
ANILINE	5	0	0	0	0	5	0	0	11,486	11,486	
CHROMIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
NITROBENZENE	3	0	0	0	0	3	0	0	0	0	
Facility Total	8	0	0	0	0	8	0	0	11,486	11,486	
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	
PICTSWEET											
AMMONIA	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	
PPG DOVER											
CERTAIN GLYCOL ETHERS	250	0	0	255	750	1,255	0	0	0	0	
DIBUTYL PHTHALATE	0	0	0	750	250	1,000	0	0	0	0	
ETHYLENE GLYCOL	1,118	0	0	12,899	250	14,267	0	0	0	0	
LEAD COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
ZINC COMPOUNDS	41	0	0	0	1,750	1,791	0	0	0	0	
Facility Total	1,409	0	0	13,904	3,000	18,313	0	0	0	0	

APPENDIX D

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
PPG INDUSTRIES WORKS 32											
LEAD	0	0	0	0	0	0	0	0	0	0	
Facility Total	0	0	0	0	0	0	0	0	0	0	
PREMCO											
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	332,761	332,761	
1,3-BUTADIENE	0	0	0	0	0	0	0	0	48	48	
2,4-DIMETHYLPHENOL	0	0	0	0	0	0	0	0	51,305	51,305	
AMMONIA	0	0	0	0	0	0	0	14,540,03	18,637	14,558,667	
ANTHRACENE	0	0	0	0	0	0	0	0	10	10	
BENZENE	0	4	0	162	0	166	48	150,945	28,737	179,730	
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	411	411	
CARBON DISULFIDE	0	0	0	0	0	0	0	2,841	2,165,876	2,168,717	
CARBONYL SULFIDE	0	0	0	0	0	0	0	4,273,038	4,938,199	9,211,237	
CHROMIUM COMPOUNDS	0	79,758	0	0	104	79,862	0	0	0	0	
COPPER COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
CRESOL (MIXED ISOMERS)	0	59	0	2,919	5	2,983	3,380	60,107	257,465	320,952	
CUMENE	0	0	0	0	0	0	0	0	27	27	
CYANIDE COMPOUNDS	0	0	0	0	0	0	0	285,037	100,568	385,605	
CYCLOHEXANE	0	0	0	0	0	0	0	0	1,711	1,711	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
ETHYLBENZENE	0	0	0	0	38	38	0	0	8,998	8,998	
ETHYLENE	0	0	0	0	0	0	0	0	3,462	3,462	
ETHYLENE GLYCOL	0	0	0	0	0	0	0	0	43,640	43,640	
FORMIC ACID	0	0	0	0	0	0	0	0	310,391	310,391	
HYDROCHLORIC ACID	0	0	0	0	0	0	0	0	394,763	394,763	
HYDROGEN CYANIDE	0	0	0	0	0	0	0	285,037	100,568	385,605	
LEAD COMPOUNDS	0	1	0	0	294	295	0	0	0	0	
MANGANESE COMPOUNDS	0	97,836	0	0	0	97,836	0	0	0	0	

APPENDIX D

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
Premcor, Continued										
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0
METHANOL	0	0	0	0	0	0	0	0	14,972	14,972
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0	0	0	74,597	74,597
MOLYBDENUM TRIOXIDE	0	2,626	0	0	0	2,626	0	0	0	0
NAPHTHALENE	0	0	0	0	0	0	0	0	694	694
N-BUTYL ALCOHOL	0	0	0	0	0	0	0	0	752	752
N-HEXANE	0	0	0	0	0	0	0	0	3,995	3,995
NICKEL COMPOUNDS	0	257,702	0	0	1	257,703	0	0	0	0
NITRATE COMPOUNDS	0	0	0	0	0	0	0	0	538,990	538,990
PHENANTHRENE	0	0	0	0	0	0	0	0	20	20
PHENOL	0	0	0	0	0	0	0	27,489	207,188	234,677
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	338	338
PROPYLENE	0	0	0	0	0	0	0	0	544,950	544,950
SODIUM NITRITE	0	0	0	0	0	0	0	0	1,459,268	1,459,268
STYRENE	0	0	0	0	0	0	0	0	23	23
SULFURIC ACID	0	0	0	0	0	0	0	0	0	0
TETRACHLOROETHYLENE	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	6	0	0	48	54	0	0	122,338	122,338
VANADIUM COMPOUNDS	0	1,018,654	0	0	4	1,018,658	0	0	0	0
XYLENE (MIXED ISOMERS)	0	3	0	0	118	121	0	0	78,705	78,705
ZINC COMPOUNDS	0	135	0	0	5	140	0	0	0	0
Facility Total	0	1,456,784	0	3,081	616	1,460,481	3,428	19,624,524	11,804,407	31,432,359
PRINCE 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	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
ROHM & HAAS										
DIISOCYANATES	0	0	0	0	0	0	0	0	0	0
N,N-DIMETHYLFORMAMIDE	103,084	0	428,683	57,360	5,985	595,112	4,318,804	0	1,309	4,320,113
PHTHALIC ANHYDRIDE	0	0	0	0	0	0	0	0	0	0
Facility Total	103,084	0	428,683	57,360	5,985	595,112	4,318,804	0	1,309	4,320,113

APPENDIX D

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
ROHM & HAAS BUILDING 7										
N-METHYL-2-PYRROLIDONE	0	0	12,111	0	0	12,111	0	0	0	0
Facility Total	0	0	12,111	0	0	12,111	0	0	0	0
ROHM & HAAS TECH CENTER										
4,4'-METHYLENEBIS(2- CHLOROANILINE)	0	0	0	0	0	0	0	0	0	0
DIISOCYANATES	0	0	0	17,752	0	17,752	0	0	0	0
N-METHYL-2-PYRROLIDONE	0	0	130,702	7,340	2,090	140,132	0	0	0	0
Facility Total	0	0	130,702	25,092	2,090	157,884	0	0	0	0
ROLLER SERVICE										
DI(2-ETHYLHEXYL) PHTHALATE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
SARA LEE APPAREL										
NITRATE COMPOUNDS	90,944	0	0	0	0	90,944	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
ZINC COMPOUNDS	200	0	0	0	2,380	2,580	0	0	0	0
Facility Total	91,144	0	0	0	2,380	93,524	0	0	0	0
SERVICE ENERGY DOVER										
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
SPATZ FIBERGLASS										
STYRENE	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0

APPENDIX D

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
SPI PHARMA										
CHLORINE	0	0	0	0	0	0	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	0	0
Facility Total	0	0	0	0	0	0	0	0	0	0
SPI POLYOLS										
NICKEL COMPOUNDS	0	90,567	0	0	5,746	96,313	0	0	0	0
NITRATE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
NITRIC ACID	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	90,567	0	0	5,746	96,313	0	0	0	0
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
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	1,600	0	0	0	1,600	0	0	0	0
COPPER	0	4,500	0	0	0	4,500	0	0	0	0
Facility Total	0	6,100	0	0	0	6,100	0	0	0	0
UNIQEMA										
4,4'-ISOPROPYLIDENEDIPHENOL	5,306	0	0	0	0	5,306	0	0	0	0
BIS(2-CHLOROETHYL) ETHER	1,793	0	0	0	0	1,793	0	0	0	0
CERTAIN GLYCOL ETHERS	2,165	0	0	0	0	2,165	0	0	926	926
DIETHANOLAMINE	481	0	0	0	0	481	0	0	206	206
DIETHYL SULFATE	79	0	0	0	0	79	0	0	34	34
ETHYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
MALEIC ANHYDRIDE	0	0	0	0	80	80	0	0	0	0
NAPHTHALENE	1,643	0	0	0	0	1,643	0	0	704	704
N-BUTYL ALCOHOL	1,102	0	6,000	0	0	7,102	0	0	472	472
PHENOL	425	0	0	0	0	425	0	0	182	182
PROPYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
Facility Total	12,994	0	6,000	0	80	19,074	0	0	2,524	2,524

APPENDIX D

APPENDIX D

2005 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	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
VP RACING FUELS											
BENZENE	0	0	0	0	0	0	0	0	0	0	
LEAD COMPOUNDS	0	9	0	0	1	10	0	0	0	0	
METHANOL	0	1,512	0	0	18	1,530	0	0	0	0	
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0	0	0	0	0	
TOLUENE	0	1,108	0	0	7	1,115	0	0	0	0	
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0	
Facility Total	0	2,629	0	0	26	2,655	0	0	0	0	
STATE TOTALS	1,514,246	11,259,408	2,709,850	199,493	4,400,539	20,083,537	10,079,028	19,786,104	38,176,991	68,042,123	

APPENDIX D

APPENDIX E

2005 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	3,135,357	4,820	741,095	3,881,272	9,704	1,219,000
EDGE MOOR/HAY ROAD POWER PLANTS	1,494,761	5,535	0	1,500,296	294,176	133,627
PREMCOR	515,834	361,516	0	877,350	1,460,481	31,432,359
INVISTA SEAFORD	280,843	310,500	10,976	602,319	7,168	430,000
PERDUE GEORGETOWN	0	385,000	90	385,090	0	0
DUPONT EDGE MOOR	239,177	143,377	0	382,554	4,063,796	20,805,786
DAIMLER CHRYSLER	206,164	0	0	206,164	238,057	61,990
FORMOSA PLASTICS	179,118	12	0	179,130	0	201,858
GENERAL MOTORS	79,108	0	0	79,108	205,837	37,980
SUNOCO	73,078	0	0	73,078	0	0
NRG DOVER	38,811	0	0	38,811	395	20,000
HONEYWELL	36,230	0	0	36,230	61,290	0
JUSTIN TANKS	30,062	0	0	30,062	360	0
CIBA SPECIALTY CHEMICALS	28,120	0	0	28,120	2,363,419	693,832
HANOVER FOODS	19,760	0	0	19,760	0	0
CAMDEL METALS	15,333	0	0	15,333	2,279	0
DOW REICHHOLD	14,164	0	0	14,164	355	1,685,328
HIRSH INDUSTRIES	13,535	0	0	13,535	0	0
ARLON	11,932	0	0	11,932	38,099	161,580
AGILENT TECHNOLOGIES NEWPORT	7,716	0	0	7,716	153,889	0
CYTEC INDUSTRIES INC.	6,681	0	0	6,681	303,719	0
UNIQEMA	5,679	80	0	5,759	19,074	2,524
CLAYMONT STEEL	4,686	59	733	5,478	2,294,827	0
JOHNSON POLYMER	4,677	0	0	4,677	2,351	4,053
SPATZ FIBERGLASS	4,652	0	0	4,652	0	0
NORAMCO	4,232	0	0	4,232	1,773,527	2,179,029
ROHM & HAAS	3,218	0	0	3,218	595,112	4,320,113
ORIENT	3,197	0	0	3,197	8	11,486
PRINCE MINERALS	2,038	877	0	2,915	0	0
MARBLE WORKS	2,879	0	0	2,879	0	0
DENTSPLY CAULK WEST	2,254	0	0	2,254	38,321	0
DUPONT RED LION PLANT	2,148	0	0	2,148	0	0
MEDAL	1,980	0	0	1,980	104,591	3,191,160
ROHM & HAAS TECH CENTER	1,764	0	0	1,764	157,884	0
ROHM & HAAS BUILDING 7	1,337	0	0	1,337	12,111	0
KUEHNE COMPANY	471	0	0	471	0	0
OCCIDENTAL CHEMICAL	290	17	0	308	384,304	1,401,980
PPG DOVER	265	0	0	265	18,313	0
PICTSWEET	200	0	0	200	0	0
VP RACING FUELS	160	0	0	160	2,655	0
JOHNSON CONTROLS	104	4	0	108	4,793,043	0
MACDERMID	14	0	0	14	0	519
SPI POLYOLS	10	1	0	11	96,313	0
METAL MASTERS	10	0	0	10	462,701	0
DOVER AFB	8	0	0	8	0	0

APPENDIX E

2005 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.
E-A-R SPECIALTY COMPOSITES	6	0	0	6	3,300	0
CLARIANT	5	0	0	5	277	0
PINNACLE FOODS	2	0	0	2	0	0
FUJIFILM IMAGING COLORANTS	1	0	0	1	1,872	0
SARA LEE APPAREL	1	0	0	1	93,524	0
DENTSPLY CAULK LAKEVIEW	0.19	0	0	0.19	10,670	0
MCKEE RUN	0.17	0	0	0.17	0	0
INSTEEL WIRE	0.002	0	0	0.002	752	0
ALLEN FAMILY FOODS	0	0	0	0	0	0
ALLEN'S HATCHERY	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	7,555	1,300
CUSTOM DECORATIVE MOULDINGS	0	0	0	0	0	0
GAC SEAFORD	0	0	0	0	0	0
GE ENERGY	0	0	0	0	1,230	0
HALKO MFG.	0	0	0	0	0	46,616
IKO WILMINGTON	0	0	0	0	96	3
INTERVET	0	0	0	0	2	0
MOUNTAIRE FARMS FRANKFORD MILL	0	0	0	0	0	0
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0
PPG INDUSTRIES WORKS 32	0	0	0	0	0	0
ROLLER SERVICE	0	0	0	0	0	0
SERVICE ENERGY DOVER	0	0	0	0	0	0
SPI PHARMA	0	0	0	0	0	0
SUNROC	0	0	0	0	6,100	0
FACILITY TOTALS	6,472,074	1,211,798	752,894	8,436,766	20,083,537	68,042,123

APPENDIX F

2005 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.
1,2,4-TRIMETHYLBENZENE							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		17,700	0	0	17,700	3,839	16,000
GAC SEAFORD	1	0	0	0	0	0	0
GENERAL MOTORS		14,140	0	0	14,140	15,520	1,700
PREMCOR		1,788	0	0	1,788	0	332,761
SERVICE ENERGY DOVER	1	0	0	0	0	0	0
CHEMICAL TOTAL		33,628	0	0	33,628	19,359	350,461
1,3-BUTADIENE							
DOW REICHHOLD		4,995	0	0	4,995	0	1,200,000
PREMCOR		794	0	0	794	0	48
CHEMICAL TOTAL		5,789	0	0	5,789	0	1,200,048
1,3-DICHLOROPROPYLENE							
HONEYWELL		10	0	0	10	8,369	0
CHEMICAL TOTAL		10	0	0	10	8,369	0
2,4-DIMETHYLPHENOL							
PREMCOR		0	518	0	518	0	51,305
CHEMICAL TOTAL		0	518	0	518	0	51,305
4,4'-ISOPROPYLIDENEDIPHENOL							
UNIQEMA		1,229	80	0	1,309	5,306	0
CHEMICAL TOTAL		1,229	80	0	1,309	5,306	0
4,4'-METHYLENEBIS(2-CHLOROANILINE)							
ROHM & HAAS TECH CENTER	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0
ACETONITRILE							
AGILENT TECHNOLOGIES NEWPORT		2,140	0	0	2,140	10,573	0
CHEMICAL TOTAL		2,140	0	0	2,140	10,573	0

Source: DNREC 2005 Database, December 1, 2006
 Form A reports do not indicate amounts
 All amounts are in pounds

APPENDIX F

2005 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.
ACROLONITRILE							
DOW REICHHOLD		2,096	0	0	2,096	5	384,000
CHEMICAL TOTAL		2,096	0	0	2,096	5	384,000
ACRYLIC ACID							
DOW REICHHOLD		1,120	0	0	1,120	0	0
CHEMICAL TOTAL		1,120	0	0	1,120	0	0
AMMONIA							
ALLEN FAMILY FOODS	1	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		2,818	1	0	2,819	220	0
FORMOSA PLASTICS		62,132	0	0	62,132	0	0
HANOVER FOODS		19,760	0	0	19,760	0	0
HONEYWELL		6,100	0	0	6,100	752	0
INDIAN RIVER POWER PLANT		15,000	0	0	15,000	9,700	830,000
JOHNSON POLYMER		3,616	0	0	3,616	626	0
PICTSWEEP		200	0	0	200	0	0
PREMCOR		35,758	3,146	0	38,904	0	14,558,667
CHEMICAL TOTAL		145,384	3,147	0	148,531	11,298	15,388,667
ANILINE							
CIBA SPECIALTY CHEMICALS		27	0	0	27	117,270	1,219
ORIENT		2,955	0	0	2,955	5	11,486
CHEMICAL TOTAL		2,982	0	0	2,982	117,275	12,705
ANTHRACENE							
PREMCOR		0	0	0	0	0	10
CHEMICAL TOTAL		0	0	0	0	0	10
ANTIMONY COMPOUNDS							
INVISTA SEAFORD		250	0	250	500	0	0
CHEMICAL TOTAL		250	0	250	500	0	0
ARSENIC							
ALLEN'S HATCHERY	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0

Source: DNREC 2005 Database, December 1, 2006

Form A reports do not indicate amounts

All amounts are in pounds

APPENDIX F

2005 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.
ARSENIC COMPOUNDS							
INDIAN RIVER POWER PLANT		755	5	29,000	29,760	0	0
MOUNTAIRE FARMS FRANKFORD MILL	1	0	0	0	0	0	0
CHEMICAL TOTAL		755	5	29,000	29,760	0	0
BARIUM							
PRINCE MINERALS		250	250	0	500	0	0
CHEMICAL TOTAL		250	250	0	500	0	0
BARIUM COMPOUNDS							
DUPONT EDGE MOOR		2	10,894	0	10,896	30,511	0
EDGE MOOR/HAY ROAD POWER PLANTS		5,783	1,130	0	6,913	109,082	0
INDIAN RIVER POWER PLANT		3,205	750	280,000	283,955	0	0
CHEMICAL TOTAL		8,990	12,774	280,000	301,764	139,593	0
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
PREMCOR		3,025	593	0	3,618	166	179,730
SUNOCO		4,950	0	0	4,950	0	0
VP RACING FUELS	1	0	0	0	0	0	0
CHEMICAL TOTAL		7,975	593	0	8,568	166	179,730
BENZO(G,H,I)PERYLENE							
DUPONT EDGE MOOR		0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		0	0	0	0	0	0
GENERAL MOTORS		0	0	0	0	0	0
INDIAN RIVER POWER PLANT		0	0	0	0	0	0
INVISTA SEAFORD		0	0	0	0	0	0
MCKEE RUN		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
PREMCOR		57	4	0	61	0	411
CHEMICAL TOTAL		57	4	0	62	0	411

APPENDIX F

Source: DNREC 2005 Database, December 1, 2006

Form A reports do not indicate amounts

All amounts are in pounds

APPENDIX F

2005 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.
BIPHENYL							
CIBA SPECIALTY CHEMICALS		100	0	0	100	63,029	2,321
CHEMICAL TOTAL		100	0	0	100	63,029	2,321
BIS(2-CHLOROETHYL) ETHER							
UNIQEMA		12	0	0	12	1,793	0
CHEMICAL TOTAL		12	0	0	12	1,793	0
BORON TRIFLUORIDE							
HONEYWELL		1,673	0	0	1,673	4,051	0
CHEMICAL TOTAL		1,673	0	0	1,673	4,051	0
BUTYL ACRYLATE							
DOW REICHHOLD		141	0	0	141	14	230
JOHNSON POLYMER		176	0	0	176	15	58
CHEMICAL TOTAL		317	0	0	317	29	288
CARBON DISULFIDE							
PREMCOR		1,583	0	0	1,583	0	2,168,717
CHEMICAL TOTAL		1,583	0	0	1,583	0	2,168,717
CARBONYL SULFIDE							
DUPONT EDGE MOOR		229,165	0	0	229,165	0	0
PREMCOR		38,388	0	0	38,388	0	9,211,237
CHEMICAL TOTAL		267,553	0	0	267,553	0	9,211,237
CERTAIN GLYCOL ETHERS							
DAIMLER CHRYSLER		92,000	0	0	92,000	131,235	990
FUJIFILM IMAGING COLORANTS		1	0	0	1	1,073	0
GENERAL MOTORS		4,200	0	0	4,200	24,630	7,000
HIRSH INDUSTRIES		13,535	0	0	13,535	0	0
JOHNSON POLYMER		10	0	0	10	1,668	0
PPG DOVER		5	0	0	5	1,255	0
UNIQEMA		18	0	0	18	2,165	926
CHEMICAL TOTAL		109,769	0	0	109,769	162,026	8,916

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APPENDIX F

2005 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							
ALLEN FAMILY FOODS	1	0	0	0	0	0	0
DUPONT EDGE MOOR		861	0	0	861	0	2,685,608
KUEHNE COMPANY		471	0	0	471	0	0
OCCIDENTAL CHEMICAL		29	0	0	29	369	1,397,980
SPI PHARMA	1	0	0	0	0	0	0
CHEMICAL TOTAL		1,362	0	0	1,362	369	4,083,588
CHROMIUM							
CAMDEL METALS		0	0	0	0	29	0
METAL MASTERS		5	0	0	5	230,351	0
SUNROC		0	0	0	0	1,600	0
CHEMICAL TOTAL		5	0	0	5	231,980	0
CHROMIUM COMPOUNDS							
CHROME DEPOSIT		0	0	0	0	755	1,300
CLARIANT		5	0	0	5	277	0
CLAYMONT STEEL		130	3	68	201	35,230	0
DUPONT EDGE MOOR		1	45	0	46	221,535	0
EDGE MOOR/HAY ROAD POWER PLANTS		1,044	563	0	1,607	27,306	0
HONEYWELL	1	0	0	0	0	0	0
INDIAN RIVER POWER PLANT		755	250	57,000	58,005	0	0
INVISTA SEAFORD		250	0	3,100	3,350	2,205	0
ORIENT		0	0	0	0	0	0
PREMCOR		355	7	0	362	79,862	0
CHEMICAL TOTAL		2,540	868	60,168	63,576	367,170	1,300
COBALT COMPOUNDS							
DUPONT EDGE MOOR		3	128	0	131	14,795	0
EDGE MOOR/HAY ROAD POWER PLANTS		921	0	0	921	22,579	0
INDIAN RIVER POWER PLANT		255	5	18,000	18,260	0	0
CHEMICAL TOTAL		1,179	133	18,000	19,312	37,374	0
COPPER							
ARLON		0	0	0	0	33,285	0
SUNROC		0	0	0	0	4,500	0
CHEMICAL TOTAL		0	0	0	0	37,785	0

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APPENDIX F

2005 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.
COPPER COMPOUNDS							
ALLEN'S HATCHERY	1	0	0	0	0	0	0
CLAYMONT STEEL		151	7	22	180	36,633	0
EDGE MOOR/HAY ROAD POWER PLANTS		1,368	428	0	1,796	28,708	0
FUJIFILM IMAGING COLORANTS		0	0	0	0	648	0
HONEYWELL	1	0	0	0	0	0	0
INDIAN RIVER POWER PLANT		255	2,800	58,000	61,055	0	0
MOUNTAIRE FARMS FRANKFORD MILL	1	0	0	0	0	0	0
MOUNTAIRE FARMS OF DELAWARE	1	0	0	0	0	0	0
PERDUE BRIDGEVILLE	1	0	0	0	0	0	0
PREMCOR		2,075	1,590	0	3,665	0	0
CHEMICAL TOTAL		3,849	4,825	58,022	66,696	65,989	0
CRESOL (MIXED ISOMERS)							
PREMCOR		3	55,312	0	55,315	2,983	320,952
CHEMICAL TOTAL		3	55,312	0	55,315	2,983	320,952
CUMENE							
PREMCOR		148	0	0	148	0	27
CHEMICAL TOTAL		148	0	0	148	0	27
CYANIDE COMPOUNDS							
PREMCOR		6,480	1,020	0	7,500	0	385,605
CHEMICAL TOTAL		6,480	1,020	0	7,500	0	385,605
CYCLOHEXANE							
CARL KING	1	0	0	0	0	0	0
CIBA SPECIALTY CHEMICALS		68	0	0	68	20,197	5,089
PREMCOR		12,387	0	0	12,387	0	1,711
CHEMICAL TOTAL		12,455	0	0	12,455	20,197	6,800
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		0	0	0	0	1,000	0
CHEMICAL TOTAL		0	0	0	0	1,000	0

Source: DNREC 2005 Database, December 1, 2006

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APPENDIX F

2005 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.
DICHLOROMETHANE							
NORAMCO		1,671	0	0	1,671	56,687	733,349
CHEMICAL TOTAL		1,671	0	0	1,671	56,687	733,349
DIETHANOLAMINE							
UNIQEMA		13	0	0	13	481	206
CHEMICAL TOTAL		13	0	0	13	481	206
DIETHYL SULFATE							
UNIQEMA		100	0	0	100	79	34
CHEMICAL TOTAL		100	0	0	100	79	34
DIISOCYANATES							
CUSTOM DECORATIVE MOULDINGS	1	0	0	0	0	0	0
E-A-R SPECIALTY COMPOSITES		1	0	0	1	1,400	0
GENERAL MOTORS		0	0	0	0	0	0
ROHM & HAAS	1	0	0	0	0	0	0
ROHM & HAAS TECH CENTER		2	0	0	2	17,752	0
CHEMICAL TOTAL		3	0	0	3	19,152	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS							
DUPONT EDGE MOOR		0	0	0	0	39	0
EDGE MOOR/HAY ROAD POWER PLANTS		0	0	0	0	0	0
INDIAN RIVER POWER PLANT		0	0	0	0	0	0
INVISTA SEAFORD		0	0	0	0	0	0
OCCIDENTAL CHEMICAL		0	0	0	0	0	0
PREMCOR		0	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	39	0
ETHYL ACRYLATE							
DOW REICHHOLD		91	0	0	91	0	550
JOHNSON POLYMER		178	0	0	178	5	932
CHEMICAL TOTAL		269	0	0	269	5	1,482
ETHYLBENZENE							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		3,500	0	0	3,500	3,600	0
PREMCOR		1,826	1,200	0	3,026	38	8,998
CHEMICAL TOTAL		5,326	1,200	0	6,526	3,638	8,998

APPENDIX F

Source: DNREC 2005 Database, December 1, 2006

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All amounts are in pounds

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APPENDIX F

2005 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							
PREMCOR		604	0	0	604	0	3,462
SUNOCO		62,433	0	0	62,433	0	0
CHEMICAL TOTAL		63,037	0	0	63,037	0	3,462
ETHYLENE GLYCOL							
CYTEC INDUSTRIES INC.		7	0	0	7	9,146	0
DAIMLER CHRYSLER		153	0	0	153	210	0
GENERAL MOTORS		100	0	0	100	150	0
PPG DOVER		5	0	0	5	14,267	0
PREMCOR		0	441	0	441	0	43,640
CHEMICAL TOTAL		265	441	0	706	23,773	43,640
ETHYLENE OXIDE							
SUNOCO		5,583	0	0	5,583	0	0
UNIQEMA		2,576	0	0	2,576	0	0
CHEMICAL TOTAL		8,159	0	0	8,159	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							
NORAMCO		7	0	0	7	6,785	0
PREMCOR		0	0	0	0	0	310,391
CHEMICAL TOTAL		7	0	0	7	6,785	310,391
HEXACHLOROBENZENE							
DUPONT EDGE MOOR		0	0	0	0	886	0
CHEMICAL TOTAL		0	0	0	0	886	0
HYDROCHLORIC ACID							
DUPONT EDGE MOOR		6,911	0	0	6,911	193	16,363,941
EDGE MOOR/HAY ROAD POWER PLANTS		1,274,527	0	0	1,274,527	0	0
INDIAN RIVER POWER PLANT		2,800,000	0	0	2,800,000	0	13,000
INVISTA SEAFORD		160,000	0	0	160,000	0	10,000
NRG DOVER		32,000	0	0	32,000	0	0
PREMCOR		33,278	0	0	33,278	0	394,763
CHEMICAL TOTAL		4,306,716	0	0	4,306,716	193	16,781,704

APPENDIX F

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APPENDIX F

2005 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.
HYDROGEN CYANIDE							
PREMCOR		6,480	1,020	0	7,500	0	385,605
CHEMICAL TOTAL		6,480	1,020	0	7,500	0	385,605
HYDROGEN FLUORIDE							
EDGE MOOR/HAY ROAD POWER PLANTS		78,672	0	0	78,672	0	8,456
HONEYWELL		487	0	0	487	221	0
INDIAN RIVER POWER PLANT		200,000	0	0	200,000	0	26,000
CHEMICAL TOTAL		279,159	0	0	279,159	221	34,456
LEAD							
DENTSPLY CAULK LAKEVIEW		0	0	0	0	61	0
HALKO MFG.		0	0	0	0	0	46,616
PPG INDUSTRIES WORKS 32		0	0	0	0	0	0
PRINCE MINERALS		5	5	0	10	0	0
CHEMICAL TOTAL		5	5	0	10	61	46,616
LEAD COMPOUNDS							
CHROME DEPOSIT		0	0	0	0	6,800	0
CLAYMONT STEEL		372	3	38	413	295,354	0
DUPONT EDGE MOOR		1	129	0	130	66,402	0
EDGE MOOR/HAY ROAD POWER PLANTS		1,232	1,680	0	2,912	9,630	0
GE ENERGY		0	0	0	0	1,230	0
HONEYWELL		0	0	0	0	0	0
INDIAN RIVER POWER PLANT		638	0	23,062	23,700	4	0
INSTEEL WIRE		0	0	0	0	752	0
INVISTA SEAFORD		53	0	3,400	3,453	7	0
JOHNSON CONTROLS		104	4	0	108	4,793,043	0
NRG DOVER		3	0	0	3	388	0
PPG DOVER		0	0	0	0	0	0
PREMCOR		206	10	0	216	295	0
VP RACING FUELS		0	0	0	0	10	0
CHEMICAL TOTAL		2,609	1,827	26,500	30,936	5,173,915	0
MALEIC ANHYDRIDE							
UNIQEMA		2	0	0	2	80	0
CHEMICAL TOTAL		2	0	0	2	80	0

APPENDIX F

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APPENDIX F

2005 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.
MANGANESE							
CAMDEL METALS		0	0	0	0	4	0
CHEMICAL TOTAL		0	0	0	0	4	0
MANGANESE COMPOUNDS							
ALLEN'S HATCHERY	1	0	0	0	0	0	0
CLAYMONT STEEL		978	21	435	1,434	167,612	0
DAIMLER CHRYSLER		0	0	0	0	3,848	0
DUPONT EDGE MOOR		2	131,614	0	131,616	3,569,626	0
EDGE MOOR/HAY ROAD POWER PLANTS		2,016	585	0	2,601	24,889	0
HONEYWELL	1	0	0	0	0	0	0
INDIAN RIVER POWER PLANT		755	5	70,000	70,760	0	0
MOUNTAIRE FARMS FRANKFORD MILL	1	0	0	0	0	0	0
MOUNTAIRE FARMS OF DELAWARE	1	0	0	0	0	0	0
PERDUE BRIDGEVILLE	1	0	0	0	0	0	0
PREMCOR		1,257	0	0	1,257	97,836	0
PRINCE MINERALS		1,778	372	0	2,150	0	0
CHEMICAL TOTAL		6,786	132,597	70,435	209,818	3,863,811	0
MERCURY							
DENTSPLY CAULK LAKEVIEW		0	0	0	0	9,626	0
OCCIDENTAL CHEMICAL		261	17	0	278	383,935	4,000
CHEMICAL TOTAL		261	17	0	278	393,561	4,000
MERCURY COMPOUNDS							
CLAYMONT STEEL		361	0	0	361	28	0
EDGE MOOR/HAY ROAD POWER PLANTS		143	0	0	143	55	0
INDIAN RIVER POWER PLANT		172	0	33	205	0	0
INTERVET		0	0	0	0	2	0
INVISTA SEAFORD		30	0	26	56	0	0
NRG DOVER		8	0	0	8	7	0
PREMCOR		21	0	0	21	0	0
CHEMICAL TOTAL		735	0	59	794	92	0

APPENDIX F

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APPENDIX F

2005 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.
METHANOL							
AGILENT TECHNOLOGIES NEWPORT		2,830	0	0	2,830	21,525	0
CIBA SPECIALTY CHEMICALS		26,484	0	0	26,484	2,106,493	640,208
CYTEC INDUSTRIES INC.		6,674	0	0	6,674	294,573	0
DAIMLER CHRYSLER		850	0	0	850	54	0
DENTSPLY CAULK WEST		0	0	0	0	12,743	0
GENERAL MOTORS		3,088	0	0	3,088	6,418	680
HONEYWELL		10	0	0	10	2,633	0
MEDAL		640	0	0	640	30,737	1,712,330
NORAMCO		1,514	0	0	1,514	778,871	479,889
PREMCOR		9,018	259	0	9,277	0	14,972
VP RACING FUELS		115	0	0	115	1,530	0
CHEMICAL TOTAL		51,223	259	0	51,482	3,255,577	2,848,079
METHYL ISOBUTYL KETONE							
DAIMLER CHRYSLER		18,400	0	0	18,400	20,000	0
CHEMICAL TOTAL		18,400	0	0	18,400	20,000	0
METHYL METHACRYLATE							
DENTSPLY CAULK WEST		333	0	0	333	605	0
DOW REICHHOLD		773	0	0	773	0	10,300
JOHNSON POLYMER		285	0	0	285	5	1,746
CHEMICAL TOTAL		1,391	0	0	1,391	610	12,046
METHYL TERT-BUTYL ETHER							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
PREMCOR		19,755	654	0	20,409	0	74,597
VP RACING FUELS	1	0	0	0	0	0	0
CHEMICAL TOTAL		19,755	654	0	20,409	0	74,597
MOLYBDENUM TRIOXIDE							
PREMCOR		121	415	0	536	2,626	0
CHEMICAL TOTAL		121	415	0	536	2,626	0
N,N-DIMETHYLANILINE							
NORAMCO		0	0	0	0	21,244	0
CHEMICAL TOTAL		0	0	0	0	21,244	0

APPENDIX F

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APPENDIX F

2005 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,N-DIMETHYLFORMAMIDE							
ROHM & HAAS		3,218	0	0	3,218	595,112	4,320,113
CHEMICAL TOTAL		3,218	0	0	3,218	595,112	4,320,113
NAPHTHALENE							
CARL KING	1	0	0	0	0	0	0
DOVER AFB		8	0	0	8	0	0
INDIAN RIVER POWER PLANT	1	0	0	0	0	0	0
INVISTA SEAFORD		10	0	0	10	5	0
PREMCOR		861	1	0	862	0	694
UNIQEMA		6	0	0	6	1,643	704
CHEMICAL TOTAL		885	1	0	886	1,648	1,398
N-BUTYL ALCOHOL							
DAIMLER CHRYSLER		25,400	0	0	25,400	4,659	24,000
NORAMCO		15	0	0	15	64,494	0
PREMCOR		1	8	0	9	0	752
UNIQEMA		123	0	0	123	7,102	472
CHEMICAL TOTAL		25,539	8	0	25,547	76,255	25,224
N-HEXANE							
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		1,023	0	0	1,023	0	0
HONEYWELL		27,950	0	0	27,950	45,264	0
MEDAL		740	0	0	740	0	1,478,830
PREMCOR		48,862	0	0	48,862	0	3,995
CHEMICAL TOTAL		78,575	0	0	78,575	45,264	1,482,825
NICKEL							
CAMDEL METALS		0	0	0	0	18	0
METAL MASTERS		5	0	0	5	232,350	0
PRINCE MINERALS		5	250	0	255	0	0
CHEMICAL TOTAL		10	250	0	260	232,368	0

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APPENDIX F

2005 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							
CLAYMONT STEEL		88	8	26	122	4,311	0
DUPONT EDGE MOOR		39	188	0	227	37,918	0
EDGE MOOR/HAY ROAD POWER PLANTS		5,573	1,127	0	6,700	22,120	0
INDIAN RIVER POWER PLANT		755	250	45,000	46,005	0	0
PREMCOR		624	1,591	0	2,215	257,703	0
SPI POLYOLS		10	1	0	11	96,313	0
CHEMICAL TOTAL		7,089	3,165	45,026	55,280	418,365	0
NITRATE COMPOUNDS							
CIBA SPECIALTY CHEMICALS		0	0	0	0	35,012	0
DAIMLER CHRYSLER		0	0	0	0	37,057	0
EDGE MOOR/HAY ROAD POWER PLANTS		0	21	0	21	0	0
FUJIFILM IMAGING COLORANTS		0	0	0	0	151	0
GENERAL MOTORS		0	0	0	0	36,000	0
INVISTA SEAFORD		0	310,000	0	310,000	2,400	0
PERDUE GEORGETOWN		0	385,000	90	385,090	0	0
PREMCOR		0	234,230	0	234,230	0	538,990
SARA LEE APPAREL		0	0	0	0	90,944	0
SPI POLYOLS	1	0	0	0	0	0	0
CHEMICAL TOTAL		0	929,251	90	929,341	201,564	538,990
NITRIC ACID							
CIBA SPECIALTY CHEMICALS		0	0	0	0	0	35,577
DAIMLER CHRYSLER		37	0	0	37	0	3,700
GENERAL MOTORS		0	0	0	0	0	16,000
SPI PHARMA	1	0	0	0	0	0	0
SPI POLYOLS	1	0	0	0	0	0	0
CHEMICAL TOTAL		37	0	0	37	0	55,277
NITROBENZENE							
ORIENT		242	0	0	242	3	0
CHEMICAL TOTAL		242	0	0	242	3	0
N-METHYL-2-PYRROLIDONE							
DAIMLER CHRYSLER		20,500	0	0	20,500	1,497	14,000
MEDAL		600	0	0	600	73,854	0
ROHM & HAAS BUILDING 7		1,337	0	0	1,337	12,111	0
ROHM & HAAS TECH CENTER		1,762	0	0	1,762	140,132	0
CHEMICAL TOTAL		24,199	0	0	24,199	227,594	14,000

APPENDIX F

Source: DNREC 2005 Database, December 1, 2006
 Form A reports do not indicate amounts
 All amounts are in pounds

APPENDIX F

2005 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-METHYLOLACRYLAMIDE							
DOW REICHHOLD		219	0	0	219	0	0
CHEMICAL TOTAL		219	0	0	219	0	0
OCTACHLOROSTYRENE							
DUPONT EDGE MOOR		0	0	0	0	143	0
CHEMICAL TOTAL		0	0	0	0	143	0
P-CHLOROANILINE							
CIBA SPECIALTY CHEMICALS		5	0	0	5	20,165	2,735
CHEMICAL TOTAL		5	0	0	5	20,165	2,735
PENTACHLOROBENZENE							
DUPONT EDGE MOOR		0	0	0	0	13	0
EDGE MOOR/HAY ROAD POWER PLANTS		14	0	0	14	0	0
CHEMICAL TOTAL		14	0	0	14	13	0
PHENANTHRENE							
PREMCOR		14	0	0	14	0	20
CHEMICAL TOTAL		14	0	0	14	0	20
PHENOL							
PREMCOR		110	44,595	0	44,705	0	234,677
UNIQEMA		50	0	0	50	425	182
CHEMICAL TOTAL		160	44,595	0	44,755	425	234,859
PHOSGENE							
DUPONT EDGE MOOR		407	0	0	407	0	169,042
CHEMICAL TOTAL		407	0	0	407	0	169,042
PHTHALIC ANHYDRIDE							
ROHM & HAAS		1	0	0	0	0	0
CHEMICAL TOTAL		0	0	0	0	0	0
POLYCHLORINATED BIPHENYLS							
DUPONT EDGE MOOR		0	0	0	0	15	0
CHEMICAL TOTAL		0	0	0	0	15	0

APPENDIX F

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 Form A reports do not indicate amounts
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APPENDIX F

2005 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			
POLYCYCLIC AROMATIC COMPOUNDS							
DUPONT EDGE MOOR		0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		89	0	0	89	0	0
GENERAL MOTORS		0	0	0	0	0	0
IKO WILMINGTON		0	0	0	0	96	3
INDIAN RIVER POWER PLANT		2	0	0	2	0	0
INVISTA SEAFORD		0	0	0	0	1	0
MCKEE RUN		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
PREMCOR		319	3	0	322	0	338
SARA LEE APPAREL		1	0	0	1	0	0
SPI POLYOLS		0	0	0	0	0	0
CHEMICAL TOTAL		413	4	0	417	97	341
PROPYLENE							
PREMCOR		10,739	0	0	10,739	0	544,950
CHEMICAL TOTAL		10,739	0	0	10,739	0	544,950
PROPYLENE OXIDE							
UNIQEMA		1,550	0	0	1,550	0	0
CHEMICAL TOTAL		1,550	0	0	1,550	0	0
SILVER							
DENTSPLY CAULK LAKEVIEW		0	0	0	0	983	0
CHEMICAL TOTAL		0	0	0	0	983	0
SODIUM NITRITE							
DAIMLER CHRYSLER		1,200	0	0	1,200	0	3,300
GENERAL MOTORS		0	0	0	0	0	11,000
INVISTA SEAFORD		0	250	0	250	2,300	420,000
PREMCOR		4	896	0	900	0	1,459,268
CHEMICAL TOTAL		1,204	1,146	0	2,350	2,300	1,893,568

APPENDIX F

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 All amounts are in pounds

APPENDIX F

2005 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.
STYRENE							
DOW REICHHOLD		1,781	0	0	1,781	308	65,248
JOHNSON POLYMER		412	0	0	412	32	1,317
JUSTIN TANKS		30,062	0	0	30,062	360	0
MARBLE WORKS		2,879	0	0	2,879	0	0
PREMCOR		49	0	0	49	0	23
SPATZ FIBERGLASS		4,652	0	0	4,652	0	0
CHEMICAL TOTAL		39,835	0	0	39,835	700	66,588
SULFURIC ACID							
DUPONT RED LION PLANT		2,148	0	0	2,148	0	0
EDGE MOOR/HAY ROAD POWER PLANTS		118,276	0	0	118,276	0	125,171
INDIAN RIVER POWER PLANT		110,000	0	0	110,000	0	350,000
INVISTA SEAFORD		120,000	0	0	120,000	0	0
NRG DOVER		6,800	0	0	6,800	0	20,000
PREMCOR		257,680	0	0	257,680	0	0
CHEMICAL TOTAL		614,904	0	0	614,904	0	495,171
TETRACHLOROETHYLENE							
PREMCOR		19	0	0	19	0	0
CHEMICAL TOTAL		19	0	0	19	0	0
TITANIUM TETRACHLORIDE							
DUPONT EDGE MOOR		375	0	0	375	0	1,587,195
CHEMICAL TOTAL		375	0	0	375	0	1,587,195
TOLUENE							
AGILENT TECHNOLOGIES NEWPORT		2,746	0	0	2,746	121,791	0
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
DAIMLER CHRYSLER		2,500	0	0	2,500	77	0
DENTSPLY CAULK WEST		1,922	0	0	1,922	24,972	0
DUPONT EDGE MOOR		1,375	0	0	1,375	0	0
HONEYWELL	1	0	0	0	0	0	0
NORAMCO		1,025	0	0	1,025	845,446	965,791
PREMCOR		10,326	4,555	0	14,881	54	122,338
SERVICE ENERGY DOVER	1	0	0	0	0	0	0
VP RACING FUELS		45	0	0	45	1,115	0
CHEMICAL TOTAL		19,939	4,555	0	24,494	993,455	1,088,129

APPENDIX F

Source: DNREC 2005 Database, December 1, 2006

Form A reports do not indicate amounts

All amounts are in pounds

APPENDIX F

2005 ON SITE CHEMICAL RELEASE BY CHEMICAL

CHEMICAL NAME (Alphabetical) FACILITY NAME	FORM A	ON-SITE RELEASE				OFF SITE TRANSFER	ON SITE WASTE MGMT.
		AIR	WATER	LAND	TOTAL		
TOLUENE DIISOCYANATE (MIXED ISOMERS)							
E-A-R SPECIALTY COMPOSITES		5	0	0	5	1,900	0
MACDERMID		14	0	0	14	0	519
CHEMICAL TOTAL		19	0	0	19	1,900	519
TRICHLOROETHYLENE							
CAMDEL METALS		15,333	0	0	15,333	2,228	0
CHEMICAL TOTAL		15,333	0	0	15,333	2,228	0
VANADIUM COMPOUNDS							
DUPONT EDGE MOOR		15	253	0	268	79,856	0
EDGE MOOR/HAY ROAD POWER PLANTS		2,285	0	0	2,285	49,587	0
INDIAN RIVER POWER PLANT		1,205	5	100,000	101,210	0	0
PREMCOR		2,975	7,053	0	10,028	1,018,658	0
CHEMICAL TOTAL		6,480	7,311	100,000	113,791	1,148,101	0
VINYL ACETATE							
DOW REICHOLD		983	0	0	983	28	25,000
FORMOSA PLASTICS		45,397	0	0	45,397	0	0
CHEMICAL TOTAL		46,380	0	0	46,380	28	25,000
VINYL CHLORIDE							
FORMOSA PLASTICS		71,589	12	0	71,601	0	201,858
CHEMICAL TOTAL		71,589	12	0	71,601	0	201,858
XYLENE (MIXED ISOMERS)							
ARLON		11,932	0	0	11,932	4,814	161,580
BLADES BULK PLANT	1	0	0	0	0	0	0
CARL KING	1	0	0	0	0	0	0
CIBA SPECIALTY CHEMICALS		1,436	0	0	1,436	1,253	6,683
DAIMLER CHRYSLER		22,900	0	0	22,900	20,061	0
GENERAL MOTORS		57,580	0	0	57,580	123,119	1,600
PREMCOR		5,453	0	0	5,453	121	78,705
SUNOCO		112	0	0	112	0	0
VP RACING FUELS	1	0	0	0	0	0	0
CHEMICAL TOTAL		99,413	0	0	99,413	149,368	248,568

APPENDIX F

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APPENDIX F

2005 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.
ZINC COMPOUNDS							
ALLEN'S HATCHERY	1	0	0	0	0	0	0
CLAYMONT STEEL		2,606	17	144	2,767	1,755,659	0
DAIMLER CHRYSLER		1	0	0	1	11,920	0
DUPONT EDGE MOOR		20	126	0	146	41,863	0
INDIAN RIVER POWER PLANT		1,605	750	61,000	63,355	0	0
INVISTA SEAFORD		250	250	4,200	4,700	250	0
MOUNTAIRE FARMS FRANKFORD MILL	1	0	0	0	0	0	0
MOUNTAIRE FARMS OF DELAWARE	1	0	0	0	0	0	0
PERDUE BRIDGEVILLE	1	0	0	0	0	0	0
PPG DOVER		255	0	0	255	1,791	0
PREMCOR		2,391	2,394	0	4,785	140	0
SARA LEE APPAREL		0	0	0	0	2,580	0
CHEMICAL TOTAL		7,128	3,537	65,344	76,009	1,814,203	0
STATE TOTALS		6,472,074	1,211,798	752,894	8,436,766	20,083,537	68,042,123

APPENDIX F

Source: DNREC 2005 Database, December 1, 2006
 Form A reports do not indicate amounts
 All amounts are in pounds

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds Alphabetical by Chemical	OFF SITE TRANSFERS					ON SITE WASTE MGMT.				
	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
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	39	3,800	0	0	3,839	0	0	16,000	16,000
GAC SEAFORD	0	0	0	0	0	0	0	0	0	0
GENERAL MOTORS	0	15,000	440	0	80	15,520	0	0	1,700	1,700
PREMCOR	0	0	0	0	0	0	0	0	332,761	332,761
SERVICE ENERGY DOVER	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	15,039	4,240	0	80	19,359	0	0	350,461	350,461
1,3-BUTADIENE										
DOW REICHHOLD	0	0	0	0	0	0	0	0	1,200,000	1,200,000
PREMCOR	0	0	0	0	0	0	0	0	48	48
Chemical Total	0	0	0	0	0	0	0	0	1,200,048	1,200,048
1,3-DICHLOROPROPYLENE										
HONEYWELL	0	0	8,256	103	10	8,369	0	0	0	0
Chemical Total	0	0	8,256	103	10	8,369	0	0	0	0
2,4-DIMETHYLPHENOL										
PREMCOR	0	0	0	0	0	0	0	0	51,305	51,305
Chemical Total	0	0	0	0	0	0	0	0	51,305	51,305
4,4'-ISOPROPYLIDENEDIPHENOL										
UNIQEMA	5,306	0	0	0	0	5,306	0	0	0	0
Chemical Total	5,306	0	0	0	0	5,306	0	0	0	0
4,4'-METHYLENEBIS(2-CHLOROANILINE)										
ROHM & HAAS TECH CENTER	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0
ACETONITRILE										
AGILENT TECHNOLOGIES NEWPORT	0	0	10,573	0	0	10,573	0	0	0	0
Chemical Total	0	0	10,573	0	0	10,573	0	0	0	0

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds											
Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MGMT.				
	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
ACROLONITRILE											
DOW REICHHOLD	4	0	0	0	1	5	0	0	384,000	384,000	
Chemical Total	4	0	0	0	1	5	0	0	384,000	384,000	
ACRYLIC ACID											
DOW REICHHOLD	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
AMMONIA											
ALLEN FAMILY FOODS	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	215	0	0	0	5	220	0	0	0	0	
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	0	0	
HANOVER FOODS	0	0	0	0	0	0	0	0	0	0	
HONEYWELL	752	0	0	0	0	752	0	0	0	0	
INDIAN RIVER POWER PLANT	9,700	0	0	0	0	9,700	0	0	830,000	830,000	
JOHNSON POLYMER	466	0	0	0	160	626	0	0	0	0	
PICTSWEET	0	0	0	0	0	0	0	0	0	0	
PREMCOR	0	0	0	0	0	0	0	14,540,03	18,637	14,558,667	
Chemical Total	11,133	0	0	0	165	11,298	0	14,540,030	848,637	15,388,667	
ANILINE											
CIBA SPECIALTY CHEMICALS	27,107	124	88,828	1,211	0	117,270	0	0	1,219	1,219	
ORIENT	5	0	0	0	0	5	0	0	11,486	11,486	
Chemical Total	27,112	124	88,828	1,211	0	117,275	0	0	12,705	12,705	
ANTHRACENE											
PREMCOR	0	0	0	0	0	0	0	0	10	10	
Chemical Total	0	0	0	0	0	0	0	0	10	10	
ANTIMONY COMPOUNDS											
INVISTA SEAFORD	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
ARSENIC											
ALLEN'S HATCHERY	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds	OFF SITE TRANSFERS						ON SITE WASTE MGMT.			
Alphabetical by Chemical	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
ARSENIC COMPOUNDS										
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
MOUNTAIRE FARMS FRANKFORD MILL	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0
BARIUM										
PRINCE 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	30,511	30,511	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	109,082	109,082	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	139,593	139,593	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
PREMCOR	0	4	0	162	0	166	48	150,945	28,737	179,730
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	4	0	162	0	166	48	150,945	28,737	179,730
BENZO(G,H,I)PERYLENE										
DUPONT EDGE MOOR	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
GENERAL MOTORS	0	0	0	0	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
INVISTA SEAFORD	0	0	0	0	0	0	0	0	0	0
MCKEE RUN	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
PREMCOR	0	0	0	0	0	0	0	0	411	411
Chemical Total	0	0	0	0	0	0	0	0	411	411

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds	OFF SITE TRANSFERS						ON SITE WASTE MGMT.			
Alphabetical by Chemical	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
BIPHENYL										
CIBA SPECIALTY CHEMICALS	34,870	94	27,435	630	0	63,029	0	0	2,321	2,321
Chemical Total	34,870	94	27,435	630	0	63,029	0	0	2,321	2,321
BIS(2-CHLOROETHYL) ETHER										
UNIQEMA	1,793	0	0	0	0	1,793	0	0	0	0
Chemical Total	1,793	0	0	0	0	1,793	0	0	0	0
BORON TRIFLUORIDE										
HONEYWELL	0	0	1,171	2,880	0	4,051	0	0	0	0
Chemical Total	0	0	1,171	2,880	0	4,051	0	0	0	0
BUTYL ACRYLATE										
DOW REICHHOLD	0	0	14	0	0	14	0	0	230	230
JOHNSON POLYMER	5	0	0	10	0	15	0	0	58	58
Chemical Total	5	0	14	10	0	29	0	0	288	288
CARBON DISULFIDE										
PREMCOR	0	0	0	0	0	0	0	2,841	2,165,876	2,168,717
Chemical Total	0	0	0	0	0	0	0	2,841	2,165,876	2,168,717
CARBONYL SULFIDE										
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	0	0
PREMCOR	0	0	0	0	0	0	0	4,273,038	4,938,199	9,211,237
Chemical Total	0	0	0	0	0	0	0	4,273,038	4,938,199	9,211,237
CERTAIN GLYCOL ETHERS										
DAIMLER CHRYSLER	130,000	230	910	95	0	131,235	0	0	990	990
FUJIFILM IMAGING COLORANTS	805	0	268	0	0	1,073	0	0	0	0
GENERAL MOTORS	21,000	0	3,400	0	230	24,630	0	0	7,000	7,000
HIRSH INDUSTRIES	0	0	0	0	0	0	0	0	0	0
JOHNSON POLYMER	1,070	0	0	0	598	1,668	0	0	0	0
PPG DOVER	250	0	0	255	750	1,255	0	0	0	0
UNIQEMA	2,165	0	0	0	0	2,165	0	0	926	926
Chemical Total	155,290	230	4,578	350	1,578	162,026	0	0	8,916	8,916

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds											
Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MGMT.				
	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
CHLORINE											
ALLEN FAMILY FOODS	0	0	0	0	0	0	0	0	0	0	0
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	2,685,608	2,685,608	0
KUEHNE COMPANY	0	0	0	0	0	0	0	0	0	0	0
OCCIDENTAL CHEMICAL	0	0	0	369	0	369	0	0	1,397,980	1,397,980	0
SPI PHARMA	0	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	369	0	369	0	0	4,083,588	4,083,588	0
CHROMIUM											
CAMDEL METALS	0	0	0	0	29	29	0	0	0	0	0
METAL MASTERS	0	229,601	0	0	750	230,351	0	0	0	0	0
SUNROC	0	1,600	0	0	0	1,600	0	0	0	0	0
Chemical Total	0	231,201	0	0	779	231,980	0	0	0	0	0
CHROMIUM COMPOUNDS											
CHROME DEPOSIT	0	0	0	0	755	755	1,300	0	0	0	1,300
CLARIANT	0	0	0	0	277	277	0	0	0	0	0
CLAYMONT STEEL	0	34,297	0	0	933	35,230	0	0	0	0	0
DUPONT EDGE MOOR	0	0	0	0	221,535	221,535	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	6	0	0	0	27,300	27,306	0	0	0	0	0
HONEYWELL	0	0	0	0	0	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	0
INVISTA SEAFORD	0	0	0	0	2,205	2,205	0	0	0	0	0
ORIENT	0	0	0	0	0	0	0	0	0	0	0
PREMCOR	0	79,758	0	0	104	79,862	0	0	0	0	0
Chemical Total	6	114,055	0	0	253,109	367,170	1,300	0	0	0	1,300
COBALT COMPOUNDS											
DUPONT EDGE MOOR	0	0	0	0	14,795	14,795	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	22,579	22,579	0	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	37,374	37,374	0	0	0	0	0
COPPER											
ARLON	0	33,000	0	0	285	33,285	0	0	0	0	0
SUNROC	0	4,500	0	0	0	4,500	0	0	0	0	0
Chemical Total	0	37,500	0	0	285	37,785	0	0	0	0	0

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds										
Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MGMT.			
	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
COPPER COMPOUNDS										
ALLEN'S HATCHERY	0	0	0	0	0	0	0	0	0	0
CLAYMONT STEEL	0	34,646	0	0	1,987	36,633	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	72	6,983	0	0	21,653	28,708	0	0	0	0
FUJIFILM IMAGING COLORANTS	296	0	0	0	352	648	0	0	0	0
HONEYWELL	0	0	0	0	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
MOUNTAIRE FARMS FRANKFORD MILL	0	0	0	0	0	0	0	0	0	0
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0
PREMCOR	0	0	0	0	0	0	0	0	0	0
Chemical Total	368	41,629	0	0	23,992	65,989	0	0	0	0
CRESOL (MIXED ISOMERS)										
PREMCOR	0	59	0	2,919	5	2,983	3,380	60,107	257,465	320,952
Chemical Total	0	59	0	2,919	5	2,983	3,380	60,107	257,465	320,952
CUMENE										
PREMCOR	0	0	0	0	0	0	0	0	27	27
Chemical Total	0	0	0	0	0	0	0	0	27	27
CYANIDE COMPOUNDS										
PREMCOR	0	0	0	0	0	0	0	285,037	100,568	385,605
Chemical Total	0	0	0	0	0	0	0	285,037	100,568	385,605
CYCLOHEXANE										
CARL KING	0	0	0	0	0	0	0	0	0	0
CIBA SPECIALTY CHEMICALS	0	20,197	0	0	0	20,197	0	0	5,089	5,089
PREMCOR	0	0	0	0	0	0	0	0	1,711	1,711
Chemical Total	0	20,197	0	0	0	20,197	0	0	6,800	6,800
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	750	250	1,000	0	0	0	0
Chemical Total	0	0	0	750	250	1,000	0	0	0	0

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds	OFF SITE TRANSFERS						ON SITE WASTE MGMT.			
Alphabetical by Chemical	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
DICHLOROMETHANE										
NORAMCO	0	0	56,687	0	0	56,687	733,349	0	0	733,349
Chemical Total	0	0	56,687	0	0	56,687	733,349	0	0	733,349
DIETHANOLAMINE										
UNIQEMA	481	0	0	0	0	481	0	0	206	206
Chemical Total	481	0	0	0	0	481	0	0	206	206
DIETHYL SULFATE										
UNIQEMA	79	0	0	0	0	79	0	0	34	34
Chemical Total	79	0	0	0	0	79	0	0	34	34
DIISOCYANATES										
CUSTOM DECORATIVE MOULDINGS	0	0	0	0	0	0	0	0	0	0
E-A-R SPECIALTY COMPOSITES	0	0	0	1,400	0	1,400	0	0	0	0
GENERAL MOTORS	0	0	0	0	0	0	0	0	0	0
ROHM & HAAS	0	0	0	0	0	0	0	0	0	0
ROHM & HAAS TECH CENTER	0	0	0	17,752	0	17,752	0	0	0	0
Chemical Total	0	0	0	19,152	0	19,152	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS										
DUPONT EDGE MOOR	0	0	0	0	39	39	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
INVISTA SEAFORD	0	0	0	0	0	0	0	0	0	0
OCCIDENTAL CHEMICAL	0	0	0	0	0	0	0	0	0	0
PREMCOR	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	39	39	0	0	0	0
ETHYL ACRYLATE										
DOW REICHHOLD	0	0	0	0	0	0	0	0	550	550
JOHNSON POLYMER	5	0	0	0	0	5	0	0	932	932
Chemical Total	5	0	0	0	0	5	0	0	1,482	1,482
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	0	3,600	0	0	3,600	0	0	0	0
PREMCOR	0	0	0	0	38	38	0	0	8,998	8,998
Chemical Total	0	0	3,600	0	38	3,638	0	0	8,998	8,998

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds											
Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MGMT.				
	POTW	RE-CYCLE	ENERGY RECOVERY	TREAT-MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT-MENT	TOTAL	
ETHYLENE											
PREMCOR	0	0	0	0	0	0	0	0	3,462	3,462	
SUNOCO	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	3,462	3,462	
ETHYLENE GLYCOL											
CYTEC INDUSTRIES INC.	9,146	0	0	0	0	9,146	0	0	0	0	
DAIMLER CHRYSLER	210	0	0	0	0	210	0	0	0	0	
GENERAL MOTORS	150	0	0	0	0	150	0	0	0	0	
PPG DOVER	1,118	0	0	12,899	250	14,267	0	0	0	0	
PREMCOR	0	0	0	0	0	0	0	0	43,640	43,640	
Chemical Total	10,624	0	0	12,899	250	23,773	0	0	43,640	43,640	
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											
NORAMCO	0	0	0	6,785	0	6,785	0	0	0	0	
PREMCOR	0	0	0	0	0	0	0	0	310,391	310,391	
Chemical Total	0	0	0	6,785	0	6,785	0	0	310,391	310,391	
HEXACHLOROBENZENE											
DUPONT EDGE MOOR	0	0	0	9	877	886	0	0	0	0	
Chemical Total	0	0	0	9	877	886	0	0	0	0	
HYDROCHLORIC ACID											
DUPONT EDGE MOOR	0	0	0	1	192	193	0	0	16,363,940	16,363,941	
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	13,000	13,000	
INVISTA SEAFORD	0	0	0	0	0	0	0	0	10,000	10,000	
NRG DOVER	0	0	0	0	0	0	0	0	0	0	
PREMCOR	0	0	0	0	0	0	0	0	394,763	394,763	
Chemical Total	0	0	0	1	192	193	0	0	16,781,704	16,781,704	

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds											
Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MGMT.				
	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
HYDROGEN CYANIDE											
PREMCOR	0	0	0	0	0	0	0	285,037	100,568	385,605	
Chemical Total	0	0	0	0	0	0	0	285,037	100,568	385,605	
HYDROGEN FLUORIDE											
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	8,456	8,456	
HONEYWELL	0	0	0	0	221	221	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	26,000	26,000	
Chemical Total	0	0	0	0	221	221	0	0	34,456	34,456	
LEAD											
DENTSPLY CAULK LAKEVIEW	0	61	0	0	0	61	0	0	0	0	
HALKO MFG.	0	0	0	0	0	0	46,616	0	0	46,616	
PPG INDUSTRIES WORKS 32	0	0	0	0	0	0	0	0	0	0	
PRINCE MINERALS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	61	0	0	0	61	46,616	0	0	46,616	
LEAD COMPOUNDS											
CHROME DEPOSIT	0	5,000	0	0	1,800	6,800	0	0	0	0	
CLAYMONT STEEL	0	295,303	0	0	51	295,354	0	0	0	0	
DUPONT EDGE MOOR	0	120	0	0	66,282	66,402	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	4	0	0	0	9,626	9,630	0	0	0	0	
GE ENERGY	3	1,221	0	0	6	1,230	0	0	0	0	
HONEYWELL	0	0	0	0	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	4	0	0	0	0	4	0	0	0	0	
INSTEEL WIRE	0	752	0	0	0	752	0	0	0	0	
INVISTA SEAFORD	0	0	0	0	7	7	0	0	0	0	
JOHNSON CONTROLS	0	4,793,043	0	0	0	4,793,043	0	0	0	0	
NRG DOVER	0	0	0	0	388	388	0	0	0	0	
PPG DOVER	0	0	0	0	0	0	0	0	0	0	
PREMCOR	0	1	0	0	294	295	0	0	0	0	
VP RACING FUELS	0	9	0	0	1	10	0	0	0	0	
Chemical Total	11	5,095,449	0	0	78,455	5,173,915	0	0	0	0	
MALEIC ANHYDRIDE											
UNIQEMA	0	0	0	0	80	80	0	0	0	0	
Chemical Total	0	0	0	0	80	80	0	0	0	0	

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds											
Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MGMT.				
	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
MANGANESE											
CAMDEL METALS	0	0	0	0	4	4	0	0	0	0	
Chemical Total	0	0	0	0	4	4	0	0	0	0	
MANGANESE COMPOUNDS											
ALLEN'S HATCHERY	0	0	0	0	0	0	0	0	0	0	
CLAYMONT STEEL	0	162,766	0	0	4,846	167,612	0	0	0	0	
DAIMLER CHRYSLER	48	900	0	0	2,900	3,848	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	3,569,626	3,569,626	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	24,889	24,889	0	0	0	0	
HONEYWELL	0	0	0	0	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
MOUNTAIRE FARMS FRANKFORD MILL	0	0	0	0	0	0	0	0	0	0	
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0	
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0	
PREMCOR	0	97,836	0	0	0	97,836	0	0	0	0	
PRINCE MINERALS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	48	261,502	0	0	3,602,261	3,863,811	0	0	0	0	
MERCURY											
DENTSPLY CAULK LAKEVIEW	0	9,626	0	0	0	9,626	0	0	0	0	
OCCIDENTAL CHEMICAL	0	383,030	0	0	905	383,935	4,000	0	0	4,000	
Chemical Total	0	392,656	0	0	905	393,561	4,000	0	0	4,000	
MERCURY COMPOUNDS											
CLAYMONT STEEL	0	0	0	0	28	28	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	55	55	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
INTERVET	0	0	0	0	2	2	0	0	0	0	
INVISTA SEAFORD	0	0	0	0	0	0	0	0	0	0	
NRG DOVER	0	0	0	0	7	7	0	0	0	0	
PREMCOR	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	91	92	0	0	0	0	

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds	OFF SITE TRANSFERS						ON SITE WASTE MGMT.			
Alphabetical by Chemical	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
METHANOL										
AGILENT TECHNOLOGIES NEWPORT	0	0	21,525	0	0	21,525	0	0	0	0
CIBA SPECIALTY CHEMICALS	579,169	1,517,728	96	9,500	0	2,106,493	334,688	0	305,520	640,208
CYTEC INDUSTRIES INC.	278,026	0	16,547	0	0	294,573	0	0	0	0
DAIMLER CHRYSLER	0	0	54	0	0	54	0	0	0	0
DENTSPLY CAULK WEST	0	0	12,743	0	0	12,743	0	0	0	0
GENERAL MOTORS	0	6,100	310	0	8	6,418	0	0	680	680
HONEYWELL	27	0	644	1,960	2	2,633	0	0	0	0
MEDAL	0	0	0	30,737	0	30,737	1,712,330	0	0	1,712,330
NORAMCO	16,241	0	762,630	0	0	778,871	479,889	0	0	479,889
PREMCOR	0	0	0	0	0	0	0	0	14,972	14,972
VP RACING FUELS	0	1,512	0	0	18	1,530	0	0	0	0
Chemical Total	873,463	1,525,340	814,549	42,197	28	3,255,577	2,526,907	0	321,172	2,848,079
METHYL ISOBUTYL KETONE										
DAIMLER CHRYSLER	0	0	20,000	0	0	20,000	0	0	0	0
Chemical Total	0	0	20,000	0	0	20,000	0	0	0	0
METHYL METHACRYLATE										
DENTSPLY CAULK WEST	0	605	0	0	0	605	0	0	0	0
DOW REICHHOLD	0	0	0	0	0	0	0	0	10,300	10,300
JOHNSON POLYMER	5	0	0	0	0	5	0	0	1,746	1,746
Chemical Total	5	605	0	0	0	610	0	0	12,046	12,046
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
PREMCOR	0	0	0	0	0	0	0	0	74,597	74,597
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	74,597	74,597
MOLYBDENUM TRIOXIDE										
PREMCOR	0	2,626	0	0	0	2,626	0	0	0	0
Chemical Total	0	2,626	0	0	0	2,626	0	0	0	0
N,N-DIMETHYLANILINE										
NORAMCO	21,244	0	0	0	0	21,244	0	0	0	0
Chemical Total	21,244	0	0	0	0	21,244	0	0	0	0

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds	OFF SITE TRANSFERS					ON SITE WASTE MGMT.				
Alphabetical by Chemical	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
N,N-DIMETHYLFORMAMIDE										
ROHM & HAAS	103,084	0	428,683	57,360	5,985	595,112	4,318,804	0	1,309	4,320,113
Chemical Total	103,084	0	428,683	57,360	5,985	595,112	4,318,804	0	1,309	4,320,113
NAPHTHALENE										
CARL KING	0	0	0	0	0	0	0	0	0	0
DOVER AFB	0	0	0	0	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
INVISTA SEAFORD	0	0	0	5	0	5	0	0	0	0
PREMCOR	0	0	0	0	0	0	0	0	694	694
UNIQEMA	1,643	0	0	0	0	1,643	0	0	704	704
Chemical Total	1,643	0	0	5	0	1,648	0	0	1,398	1,398
N-BUTYL ALCOHOL										
DAIMLER CHRYSLER	0	59	4,600	0	0	4,659	0	0	24,000	24,000
NORAMCO	735	0	63,759	0	0	64,494	0	0	0	0
PREMCOR	0	0	0	0	0	0	0	0	752	752
UNIQEMA	1,102	0	6,000	0	0	7,102	0	0	472	472
Chemical Total	1,837	59	74,359	0	0	76,255	0	0	25,224	25,224
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	188	0	14,188	29,678	1,210	45,264	0	0	0	0
MEDAL	0	0	0	0	0	0	1,478,830	0	0	1,478,830
PREMCOR	0	0	0	0	0	0	0	0	3,995	3,995
Chemical Total	188	0	14,188	29,678	1,210	45,264	1,478,830	0	3,995	1,482,825
NICKEL										
CAMDEL METALS	0	0	0	0	18	18	0	0	0	0
METAL MASTERS	0	232,100	0	0	250	232,350	0	0	0	0
PRINCE MINERALS	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	232,100	0	0	268	232,368	0	0	0	0

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds										
Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MGMT.			
	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
NICKEL COMPOUNDS										
CLAYMONT STEEL	0	3,488	0	0	823	4,311	0	0	0	0
DUPONT EDGE MOOR	0	0	0	0	37,918	37,918	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	33	0	0	0	22,087	22,120	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
PREMCOR	0	257,702	0	0	1	257,703	0	0	0	0
SPI POLYOLS	0	90,567	0	0	5,746	96,313	0	0	0	0
Chemical Total	33	351,757	0	0	66,575	418,365	0	0	0	0
NITRATE COMPOUNDS										
CIBA SPECIALTY CHEMICALS	35,012	0	0	0	0	35,012	0	0	0	0
DAIMLER CHRYSLER	37,000	56	0	0	1	37,057	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0
FUJIFILM IMAGING COLORANTS	121	0	30	0	0	151	0	0	0	0
GENERAL MOTORS	36,000	0	0	0	0	36,000	0	0	0	0
INVISTA SEAFORD	0	0	0	2,400	0	2,400	0	0	0	0
PERDUE GEORGETOWN	0	0	0	0	0	0	0	0	0	0
PREMCOR	0	0	0	0	0	0	0	0	538,990	538,990
SARA LEE APPAREL	90,944	0	0	0	0	90,944	0	0	0	0
SPI POLYOLS	0	0	0	0	0	0	0	0	0	0
Chemical Total	199,077	56	30	2,400	1	201,564	0	0	538,990	538,990
NITRIC ACID										
CIBA SPECIALTY CHEMICALS	0	0	0	0	0	0	0	0	35,577	35,577
DAIMLER CHRYSLER	0	0	0	0	0	0	0	0	3,700	3,700
GENERAL MOTORS	0	0	0	0	0	0	0	0	16,000	16,000
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	0	0	0	0	0	55,277	55,277
NITROBENZENE										
ORIENT	3	0	0	0	0	3	0	0	0	0
Chemical Total	3	0	0	0	0	3	0	0	0	0
N-METHYL-2-PYRROLIDONE										
DAIMLER CHRYSLER	0	36	1,400	61	0	1,497	0	0	14,000	14,000
MEDAL	62,854	11,000	0	0	0	73,854	0	0	0	0
ROHM & HAAS BUILDING 7	0	0	12,111	0	0	12,111	0	0	0	0
ROHM & HAAS TECH CENTER	0	0	130,702	7,340	2,090	140,132	0	0	0	0
Chemical Total	62,854	11,036	144,213	7,401	2,090	227,594	0	0	14,000	14,000

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds	OFF SITE TRANSFERS						ON SITE WASTE MGMT.			
Alphabetical by Chemical	POTW	RE- CYCLE	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
Chemical Total	0	0	0	0	0	0	0	0	0	0
OCTACHLOROSTYRENE										
DUPONT EDGE MOOR	0	0	0	2	142	143	0	0	0	0
Chemical Total	0	0	0	2	142	143	0	0	0	0
P-CHLOROANILINE										
CIBA SPECIALTY CHEMICALS	2,085	124	17,955	0	1	20,165	0	0	2,735	2,735
Chemical Total	2,085	124	17,955	0	1	20,165	0	0	2,735	2,735
PENTACHLOROBENZENE										
DUPONT EDGE MOOR	0	0	0	0	13	13	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	13	13	0	0	0	0
PHENANTHRENE										
PREMCOR	0	0	0	0	0	0	0	0	20	20
Chemical Total	0	0	0	0	0	0	0	0	20	20
PHENOL										
PREMCOR	0	0	0	0	0	0	0	27,489	207,188	234,677
UNIQEMA	425	0	0	0	0	425	0	0	182	182
Chemical Total	425	0	0	0	0	425	0	27,489	207,370	234,859
PHOSGENE										
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	169,042	169,042
Chemical Total	0	0	0	0	0	0	0	0	169,042	169,042
PHTHALIC ANHYDRIDE										
ROHM & HAAS	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	0	0	0	0	0	0	0	0
POLYCHLORINATED BIPHENYLS										
DUPONT EDGE MOOR	0	0	0	0	15	15	0	0	0	0
Chemical Total	0	0	0	0	15	15	0	0	0	0

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds	OFF SITE TRANSFERS						ON SITE WASTE MGMT.				
Alphabetical by Chemical	POTW	RE- CYCLE	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	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0	
GENERAL MOTORS	0	0	0	0	0	0	0	0	0	0	
IKO WILMINGTON	0	0	0	0	96	96	3	0	0	3	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
INVISTA SEAFORD	0	0	0	1	0	1	0	0	0	0	
MCKEE RUN	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	
PREMCOR	0	0	0	0	0	0	0	0	338	338	
SARA LEE APPAREL	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	1	96	97	3	0	338	341	
PROPYLENE											
PREMCOR	0	0	0	0	0	0	0	0	544,950	544,950	
Chemical Total	0	0	0	0	0	0	0	0	544,950	544,950	
PROPYLENE OXIDE											
UNIQEMA	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	0	0	
SILVER											
DENTSPLY CAULK LAKEVIEW	0	983	0	0	0	983	0	0	0	0	
Chemical Total	0	983	0	0	0	983	0	0	0	0	
SODIUM NITRITE											
DAIMLER CHRYSLER	0	0	0	0	0	0	0	0	3,300	3,300	
GENERAL MOTORS	0	0	0	0	0	0	0	0	11,000	11,000	
INVISTA SEAFORD	0	0	0	2,300	0	2,300	0	0	420,000	420,000	
PREMCOR	0	0	0	0	0	0	0	0	1,459,268	1,459,268	
Chemical Total	0	0	0	2,300	0	2,300	0	0	1,893,568	1,893,568	

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds											
Alphabetical by Chemical	OFF SITE TRANSFERS						ON SITE WASTE MGMT.				
	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL	
STYRENE											
DOW REICHHOLD	308	0	0	0	0	308	0	0	65,248	65,248	
JOHNSON POLYMER	12	0	0	0	20	32	0	0	1,317	1,317	
JUSTIN TANKS	0	0	0	0	360	360	0	0	0	0	
MARBLE WORKS	0	0	0	0	0	0	0	0	0	0	
PREMCOR	0	0	0	0	0	0	0	0	23	23	
SPATZ FIBERGLASS	0	0	0	0	0	0	0	0	0	0	
Chemical Total	320	0	0	0	380	700	0	0	66,588	66,588	
SULFURIC ACID											
DUPONT RED LION PLANT	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	125,171	125,171	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	350,000	350,000	
INVISTA SEAFORD	0	0	0	0	0	0	0	0	0	0	
NRG DOVER	0	0	0	0	0	0	0	0	20,000	20,000	
PREMCOR	0	0	0	0	0	0	0	0	0	0	
Chemical Total	0	0	0	0	0	0	0	0	495,171	495,171	
TETRACHLOROETHYLENE											
PREMCOR	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	1,587,195	1,587,195	
Chemical Total	0	0	0	0	0	0	0	0	1,587,195	1,587,195	
TOLUENE											
AGILENT TECHNOLOGIES NEWPORT	0	0	121,791	0	0	121,791	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	77	0	0	77	0	0	0	0	
DENTSPLY CAULK WEST	0	24,972	0	0	0	24,972	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	0	0	
HONEYWELL	0	0	0	0	0	0	0	0	0	0	
NORAMCO	0	0	845,446	0	0	845,446	965,791	0	0	965,791	
PREMCOR	0	6	0	0	48	54	0	0	122,338	122,338	
SERVICE ENERGY DOVER	0	0	0	0	0	0	0	0	0	0	
VP RACING FUELS	0	1,108	0	0	7	1,115	0	0	0	0	
Chemical Total	0	26,086	967,314	0	55	993,455	965,791	0	122,338	1,088,129	

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds		OFF SITE TRANSFERS					ON SITE WASTE MGMT.			
Alphabetical by Chemical	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
TOLUENE DIISOCYANATE (MIXED)										
E-A-R SPECIALTY COMPOSITES	0	0	0	1,900	0	1,900	0	0	0	0
MACDERMID	0	0	0	0	0	0	0	0	519	519
Chemical Total	0	0	0	1,900	0	1,900	0	0	519	519
TRICHLOROETHYLENE										
CAMDEL METALS	0	0	0	2,228	0	2,228	0	0	0	0
Chemical Total	0	0	0	2,228	0	2,228	0	0	0	0
VANADIUM COMPOUNDS										
DUPONT EDGE MOOR	0	0	0	0	79,856	79,856	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	49,587	49,587	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
PREMCOR	0	1,018,654	0	0	4	1,018,658	0	0	0	0
Chemical Total	0	1,018,654	0	0	129,447	1,148,101	0	0	0	0
VINYL ACETATE										
DOW REICHHOLD	0	0	28	0	0	28	0	0	25,000	25,000
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	0	0
Chemical Total	0	0	28	0	0	28	0	0	25,000	25,000
VINYL CHLORIDE										
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	201,858	201,858
Chemical Total	0	0	0	0	0	0	0	0	201,858	201,858
XYLENE (MIXED ISOMERS)										
ARLON	0	0	0	4,814	0	4,814	0	161,580	0	161,580
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	289	0	48	916	0	1,253	0	0	6,683	6,683
DAIMLER CHRYSLER	0	0	20,000	61	0	20,061	0	0	0	0
GENERAL MOTORS	0	120,000	3,100	0	19	123,119	0	0	1,600	1,600
PREMCOR	0	3	0	0	118	121	0	0	78,705	78,705
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	289	120,003	23,148	5,791	137	149,368	0	161,580	86,988	248,568

APPENDIX G

APPENDIX G

2005 OFF SITE TRANSFERS AND WASTE MANAGED ON SITE

All Amounts are in Pounds	OFF SITE TRANSFERS						ON SITE WASTE MGMT.			
Alphabetical by Chemical	POTW	RE- CYCLE	ENERGY RECOVERY	TREAT- MENT	DISPOSAL	TOTAL	RECYCLE	ENERGY RECOVERY	TREAT- MENT	TOTAL
ZINC COMPOUNDS										
ALLEN'S HATCHERY	0	0	0	0	0	0	0	0	0	0
CLAYMONT STEEL	0	1,755,543	0	0	116	1,755,659	0	0	0	0
DAIMLER CHRYSLER	320	4,500	0	0	7,100	11,920	0	0	0	0
DUPONT EDGE MOOR	0	0	0	0	41,863	41,863	0	0	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0
INVISTA SEAFORD	0	0	0	0	250	250	0	0	0	0
MOUNTAIRE FARMS FRANKFORD MILL	0	0	0	0	0	0	0	0	0	0
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0
PPG DOVER	41	0	0	0	1,750	1,791	0	0	0	0
PREMCOR	0	135	0	0	5	140	0	0	0	0
SARA LEE APPAREL	200	0	0	0	2,380	2,580	0	0	0	0
Chemical Total	561	1,760,178	0	0	53,464	1,814,203	0	0	0	0
STATE TOTALS	1,514,246	11,259,408	2,709,850	199,493	4,400,539	20,083,537	10,079,028	19,786,104	38,176,991	68,042,123

APPENDIX G

APPENDIX H

2005 ON SITE RELEASE SUMMARY BY CHEMICAL

(Ranked by On-Site Release) CHEMICAL	ON SITE RELEASE			TOTAL	OFF SITE	ON-SITE
	AIR	WATER	LAND		TRANSFERS	WASTE MGMT.
HYDROCHLORIC ACID	4,306,716	0	0	4,306,716	193	16,781,704
NITRATE COMPOUNDS	0	929,251	90	929,341	201,564	538,990
SULFURIC ACID	614,904	0	0	614,904	0	495,171
BARIUM COMPOUNDS	8,990	12,774	280,000	301,764	139,593	0
HYDROGEN FLUORIDE	279,159	0	0	279,159	221	34,456
CARBONYL SULFIDE	267,553	0	0	267,553	0	9,211,237
MANGANESE COMPOUNDS	6,786	132,597	70,435	209,818	3,863,811	0
AMMONIA	145,384	3,147	0	148,531	11,298	15,388,667
VANADIUM COMPOUNDS	6,480	7,311	100,000	113,791	1,148,101	0
CERTAIN GLYCOL ETHERS	109,769	0	0	109,769	162,026	8,916
XYLENE (MIXED ISOMERS)	99,413	0	0	99,413	149,368	248,568
N-HEXANE	78,575	0	0	78,575	45,264	1,482,825
ZINC COMPOUNDS	7,128	3,537	65,344	76,009	1,814,203	0
VINYL CHLORIDE	71,589	12	0	71,601	0	201,858
COPPER COMPOUNDS	3,849	4,825	58,022	66,696	65,989	0
CHROMIUM COMPOUNDS	2,540	868	60,168	63,576	367,170	1,300
ETHYLENE	63,037	0	0	63,037	0	3,462
CRESOL (MIXED ISOMERS)	3	55,312	0	55,315	2,983	320,952
NICKEL COMPOUNDS	7,089	3,165	45,026	55,280	418,365	0
METHANOL	51,223	259	0	51,482	3,255,577	2,848,079
VINYL ACETATE	46,380	0	0	46,380	28	25,000
PHENOL	160	44,595	0	44,755	425	234,859
STYRENE	39,835	0	0	39,835	700	66,588
1,2,4-TRIMETHYLBENZENE	33,628	0	0	33,628	19,359	350,461
LEAD COMPOUNDS	2,609	1,827	26,500	30,936	5,173,915	0
ARSENIC COMPOUNDS	755	5	29,000	29,760	0	0
N-BUTYL ALCOHOL	25,539	8	0	25,547	76,255	25,224
TOLUENE	19,939	4,555	0	24,494	993,455	1,088,129
N-METHYL-2-PYRROLIDONE	24,199	0	0	24,199	227,594	14,000
METHYL TERT-BUTYL ETHER	19,755	654	0	20,409	0	74,597
COBALT COMPOUNDS	1,179	133	18,000	19,312	37,374	0
METHYL ISOBUTYL KETONE	18,400	0	0	18,400	20,000	0
TRICHLOROETHYLENE	15,333	0	0	15,333	2,228	0
CYCLOHEXANE	12,455	0	0	12,455	20,197	6,800
PROPYLENE	10,739	0	0	10,739	0	544,950
BENZENE	7,975	593	0	8,568	166	179,730
ETHYLENE OXIDE	8,159	0	0	8,159	0	0
CYANIDE COMPOUNDS	6,480	1,020	0	7,500	0	385,605
HYDROGEN CYANIDE	6,480	1,020	0	7,500	0	385,605
ETHYLBENZENE	5,326	1,200	0	6,526	3,638	8,998
1,3-BUTADIENE	5,789	0	0	5,789	0	1,200,048

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

APPENDIX H

2005 ON SITE RELEASE SUMMARY BY CHEMICAL

(Ranked by On-Site Release) CHEMICAL	ON SITE RELEASE			TOTAL	OFF SITE	ON-SITE
	AIR	WATER	LAND		TRANSFERS	WASTE MGMT.
N,N-DIMETHYLFORMAMIDE	3,218	0	0	3,218	595,112	4,320,113
ANILINE	2,982	0	0	2,982	117,275	12,705
SODIUM NITRITE	1,204	1,146	0	2,350	2,300	1,893,568
ACETONITRILE	2,140	0	0	2,140	10,573	0
ACROLONITRILE	2,096	0	0	2,096	5	384,000
FORMALDEHYDE	1,965	0	0	1,965	0	0
BORON TRIFLUORIDE	1,673	0	0	1,673	4,051	0
DICHLOROMETHANE	1,671	0	0	1,671	56,687	733,349
CARBON DISULFIDE	1,583	0	0	1,583	0	2,168,717
PROPYLENE OXIDE	1,550	0	0	1,550	0	0
METHYL METHACRYLATE	1,391	0	0	1,391	610	12,046
CHLORINE	1,362	0	0	1,362	369	4,083,588
4,4'-ISOPROPYLIDENEDIPHENOL	1,229	80	0	1,309	5,306	0
ACRYLIC ACID	1,120	0	0	1,120	0	0
NAPHTHALENE	885	1	0	886	1,648	1,398
MERCURY COMPOUNDS	735	0	59	794	92	0
ETHYLENE GLYCOL	265	441	0	706	23,773	43,640
MOLYBDENUM TRIOXIDE	121	415	0	536	2,626	0
2,4-DIMETHYLPHENOL	0	518	0	518	0	51,305
ANTIMONY COMPOUNDS	250	0	250	500	0	0
BARIUM	250	250	0	500	0	0
POLYCYCLIC AROMATIC COMPOUNDS	413	4	0	417	97	341
PHOSGENE	407	0	0	407	0	169,042
TITANIUM TETRACHLORIDE	375	0	0	375	0	1,587,195
BUTYL ACRYLATE	317	0	0	317	29	288
MERCURY	261	17	0	278	393,561	4,000
ETHYL ACRYLATE	269	0	0	269	5	1,482
NICKEL	10	250	0	260	232,368	0
NITROBENZENE	242	0	0	242	3	0
N-METHYLOLACRYLAMIDE	219	0	0	219	0	0
CUMENE	148	0	0	148	0	27
BIPHENYL	100	0	0	100	63,029	2,321
DIETHYL SULFATE	100	0	0	100	79	34
BENZO(G,H,I)PERYLENE	57	4	0	62	0	411
NITRIC ACID	37	0	0	37	0	55,277
TETRACHLOROETHYLENE	19	0	0	19	0	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)	19	0	0	19	1,900	519
PENTACHLOROBENZENE	14	0	0	14	13	0
PHENANTHRENE	14	0	0	14	0	20

APPENDIX H

2005 ON SITE RELEASE SUMMARY BY CHEMICAL

(Ranked by On-Site Release) CHEMICAL	ON SITE RELEASE			TOTAL	OFF SITE	ON-SITE
	AIR	WATER	LAND		TRANSFERS	WASTE MGMT.
DIETHANOLAMINE	13	0	0	13	481	206
BIS(2-CHLOROETHYL) ETHER	12	0	0	12	1,793	0
1,3-DICHLOROPROPYLENE	10	0	0	10	8,369	0
LEAD	5	5	0	10	61	46,616
FORMIC ACID	7	0	0	7	6,785	310,391
CHROMIUM	5	0	0	5	231,980	0
P-CHLOROANILINE	5	0	0	5	20,165	2,735
DIISOCYANATES	3	0	0	3	19,152	0
MALEIC ANHYDRIDE	2	0	0	2	80	0
ANTHRACENE	0.11	0	0	0.11	0	10
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0.0103	0.0003	0.0008	0.0114	39	0
OCTACHLOROSTYRENE	0.002	0	0	0.002	143	0
POLYCHLORINATED BIPHENYLS	0.0002	0	0	0.0002	15	0
ARSENIC	0	0	0	0	0	0
COPPER	0	0	0	0	37,785	0
DIBUTYL PHTHALATE	0	0	0	0	1,000	0
DI(2-ETHYLHEXYL) PHTHALATE	0	0	0	0	0	0
N,N-DIMETHYLANILINE	0	0	0	0	21,244	0
HEXACHLOROBENZENE	0	0	0	0	886	0
4,4'-METHYLENEBIS(2- CHLOROANILINE)	0	0	0	0	0	0
MANGANESE	0	0	0	0	4	0
PHTHALIC ANHYDRIDE	0	0	0	0	0	0
SILVER	0	0	0	0	983	0
CHEMICAL TOTALS	6,472,074	1,211,798	752,894	8,436,766	20,083,537	68,042,123

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

APPENDIX I

2005 PBT RELEASE AND TRANSFER DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES			TOTAL	OFF SITE TRANSFERS	ON SITE WASTE
	AIR	WATER	LAND			
BENZO(G,H,I)PERYLENE						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	0.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	0.20	0.00	0.00	0.20	0.00	0.00
GENERAL MOTORS	0.20	0.00	0.00	0.20	0.10	0.00
INDIAN RIVER POWER PLANT	0.07	0.00	0.00	0.07	0.00	0.00
INVISTA SEAFORD	0.00	0.00	0.00	0.00	0.00	0.00
MCKEE RUN	0.02	0.00	0.00	0.02	0.00	0.00
PERDUE BRIDGEVILLE	0.00	0.00	0.00	0.00	0.00	0.00
PERDUE GEORGETOWN	0.00	0.00	0.00	0.00	0.00	0.00
PINNACLE FOODS	0.00	0.00	0.00	0.00	0.00	0.00
PREMCOR	57.00	4.20	0.00	61.20	0.00	411.00
CHEMICAL TOTAL	57.49	4.20	0.00	61.69	0.10	411.00
DIOXIN AND DIOXIN-LIKE COMPOUNDS						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	39.26	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	0.01	0.00	0.00	0.01	0.00	0.00
INDIAN RIVER POWER PLANT	0.00	0.00	0.00	0.00	0.00	0.00
INVISTA SEAFORD	0.00	0.00	0.00	0.00	0.00	0.00
OCCIDENTAL CHEMICAL	0.00	0.00	0.00	0.00	0.01	0.00
PREMCOR	0.00	0.00	0.00	0.00	0.00	0.00
CHEMICAL TOTAL	0.01	0.00	0.00	0.01	39.27	0.00
HEXACHLOROBENZENE						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	886.10	0.00
CHEMICAL TOTAL	0.00	0.00	0.00	0.00	886.10	0.00
LEAD						
DENTSPLY CAULK LAKEVIEW	0.00	0.00	0.00	0.00	61.00	0.00
HALKO MFG.	0.00	0.00	0.00	0.00	0.00	46,616.00
PPG INDUSTRIES WORKS 32	0.00	0.00	0.00	0.00	0.00	0.00
PRINCE MINERALS	5.00	5.00	0.00	10.00	0.00	0.00
CHEMICAL TOTAL	5.00	5.00	0.00	10.00	61.00	46,616.00

Additional detail on PBT's can be found in this report on pages 33-35

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

APPENDIX I

2005 PBT RELEASE AND TRANSFER DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE
	AIR	WATER	LAND	TOTAL		
LEAD COMPOUNDS						
CHROME DEPOSIT	0.00	0.00	0.00	0.00	6,800.00	0.00
CLAYMONT STEEL	372.00	3.16	38.00	413.16	295,354.00	0.00
DUPONT EDGE MOOR	0.69	129.40	0.00	130.09	66,402.20	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	1,232.00	1,680.00	0.00	2,912.00	9,629.90	0.00
GE ENERGY	0.00	0.00	0.00	0.00	1,229.90	0.00
HONEYWELL	0.00	0.00	0.00	0.00	0.00	0.00
INDIAN RIVER POWER PLANT	638.37	0.00	23,062.00	23,700.37	4.00	0.00
INSTEEL WIRE	0.00	0.00	0.00	0.00	752.00	0.00
INVISTA SEAFORD	53.10	0.00	3,400.00	3,453.10	7.20	0.00
JOHNSON CONTROLS	104.00	4.00	0.00	108.00	4,793,043.00	0.00
NRG DOVER	2.50	0.00	0.00	2.50	388.00	0.00
PPG DOVER	0.00	0.00	0.00	0.00	0.00	0.00
PREMCOR	206.00	10.00	0.00	216.00	294.50	0.00
VP RACING FUELS	0.30	0.00	0.00	0.30	10.00	0.00
CHEMICAL TOTAL	2,608.96	1,826.56	26,500.00	30,935.52	5,173,914.70	0.00
MERCURY						
DENTSPLY CAULK LAKEVIEW	0.19	0.00	0.00	0.19	9,626.00	0.00
OCCIDENTAL CHEMICAL	260.90	17.26	0.00	278.16	383,935.22	4,000.00
CHEMICAL TOTAL	261.09	17.26	0.00	278.35	393,561.22	4,000.00
MERCURY COMPOUNDS						
CLAYMONT STEEL	361.10	0.01	0.00	361.11	27.90	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	142.50	0.00	0.00	142.50	54.80	0.00
INDIAN RIVER POWER PLANT	172.00	0.00	33.00	205.00	0.00	0.00
INTERVET	0.00	0.00	0.00	0.00	1.90	0.00
INVISTA SEAFORD	30.00	0.00	26.00	56.00	0.00	0.00
NRG DOVER	8.00	0.00	0.00	8.00	6.90	0.00
PREMCOR	21.00	0.00	0.00	21.00	0.04	0.00
CHEMICAL TOTAL	734.60	0.01	59.00	793.61	91.54	0.00
OCTACHLOROSTYRENE						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	143.30	0.00
CHEMICAL TOTAL	0.00	0.00	0.00	0.00	143.30	0.00
PENTACHLOROBENZENE						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	12.80	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	14.30	0.00	0.00	14.30	0.00	0.00
CHEMICAL TOTAL	14.30	0.00	0.00	14.30	12.80	0.00

Additional detail on PBT's can be found in this report on pages 33-35

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

APPENDIX I

2005 PBT RELEASE AND TRANSFER DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				OFF SITE	ON SITE
	AIR	WATER	LAND	TOTAL	TRANSFERS	WASTE
POLYCHLORINATED BIPHENYLS						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	15.20	0.00
CHEMICAL TOTAL	0.00	0.00	0.00	0.00	15.20	0.00
POLYCYCLIC AROMATIC COMPOUNDS						
DUPONT EDGE MOOR	0.01	0.00	0.00	0.01	0.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	89.20	0.10	0.00	89.30	0.00	0.00
GENERAL MOTORS	0.20	0.00	0.00	0.20	0.10	0.00
IKO WILMINGTON	0.00	0.00	0.00	0.00	95.56	3.36
INDIAN RIVER POWER PLANT	1.58	0.00	0.00	1.58	0.00	0.00
INVISTA SEAFORD	0.20	0.00	0.00	0.20	0.87	0.00
MCKEE RUN	0.15	0.00	0.00	0.15	0.00	0.00
PERDUE BRIDGEVILLE	0.00	0.00	0.00	0.00	0.00	0.00
PERDUE GEORGETOWN	0.00	0.00	0.00	0.00	0.00	0.00
PINNACLE FOODS	2.00	0.00	0.00	2.00	0.30	0.00
PREMCOR	319.00	3.40	0.00	322.40	0.00	338.00
SARA LEE APPAREL	0.99	0.00	0.00	0.99	0.00	0.00
SPI POLYOLS	0.11	0.00	0.00	0.11	0.00	0.00
CHEMICAL TOTAL	413.44	3.50	0.00	416.94	96.83	341.36
PBT TOTALS	4,095	1,857	26,559	32,510	5,568,822	51,368

Additional detail on PBT's can be found in this report on pages 33-35

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

APPENDIX J

2005 CARCINOGEN RELEASE AND TRANSFER DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE
	AIR	WATER	LAND	TOTAL		
1,3-BUTADIENE						
DOW REICHHOLD	4,995	0	0	4,995	0	1,200,000
PREMCOR	794	0	0	794	0	48
CHEMICAL TOTAL	5,789	0	0	5,789	0	1,200,048
1,3-DICHLOROPROPYLENE						
HONEYWELL	10	0	0	10	8,369	0
CHEMICAL TOTAL	10	0	0	10	8,369	0
4,4'-METHYLENEBIS(2-CHLOROANILINE)						
ROHM & HAAS TECH CENTER	0	0	0	0	0	0
CHEMICAL TOTAL	0	0	0	0	0	0
ACROLONITRILE						
DOW REICHHOLD	2,096	0	0	2,096	5	384,000
CHEMICAL TOTAL	2,096	0	0	2,096	5	384,000
ARSENIC						
ALLEN'S HATCHERY	0	0	0	0	0	0
CHEMICAL TOTAL	0	0	0	0	0	0
ARSENIC COMPOUNDS						
INDIAN RIVER POWER PLANT	755	5	29,000	29,760	0	0
MOUNTAIRE FARMS FRANKFORD MILL	0	0	0	0	0	0
CHEMICAL TOTAL	755	5	29,000	29,760	0	0
BENZENE						
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
PREMCOR	3,025	593	0	3,618	166	179,730
SUNOCO	4,950	0	0	4,950	0	0
VP RACING FUELS	0	0	0	0	0	0
CHEMICAL TOTAL	7,975	593	0	8,568	166	179,730
BUTYL ACRYLATE						
DOW REICHHOLD	141	0	0	141	14	230
JOHNSON POLYMER	176	0	0	176	15	58
CHEMICAL TOTAL	317	0	0	317	29	288
CHROMIUM COMPOUNDS						
CHROME DEPOSIT	0	0	0	0	755	1,300
CLARIANT	5	0	0	5	277	0
CLAYMONT STEEL	130	3	68	201	35,230	0
DUPONT EDGE MOOR	1	45	0	46	221,535	0
EDGE MOOR/HAY ROAD POWER PLANTS	1,044	563	0	1,607	27,306	0
HONEYWELL	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	755	250	57,000	58,005	0	0
INVISTA SEAFORD	250	0	3,100	3,350	2,205	0
ORIENT	0	0	0	0	0	0
PREMCOR	355	7	0	362	79,862	0
CHEMICAL TOTAL	2,540	868	60,168	63,576	367,170	1,300

Additional detail on carcinogens can be found in this report on pages 35-38

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

APPENDIX J

2005 CARCINOGEN RELEASE AND TRANSFER DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				OFF SITE	ON SITE
	AIR	WATER	LAND	TOTAL	TRANSFERS	WASTE
COBALT COMPOUNDS						
DUPONT EDGE MOOR	3	128	0	131	14,795	0
EDGE MOOR/HAY ROAD POWER PLANTS	921	0	0	921	22,579	0
INDIAN RIVER POWER PLANT	255	5	18,000	18,260	0	0
CHEMICAL TOTAL	1,179	133	18,000	19,312	37,374	0
DICHLOROMETHANE						
NORAMCO	1,671	0	0	1,671	56,687	733,349
CHEMICAL TOTAL	1,671	0	0	1,671	56,687	733,349
DIETHYL SULFATE						
UNIQEMA	100	0	0	100	79	34
CHEMICAL TOTAL	100	0	0	100	79	34
ETHYL ACRYLATE						
DOW REICHHOLD	91	0	0	91	0	550
JOHNSON POLYMER	178	0	0	178	5	932
CHEMICAL TOTAL	269	0	0	269	5	1,482
ETHYLBENZENE						
BLADES BULK PLANT	0	0	0	0	0	0
CARL KING	0	0	0	0	0	0
DAIMLER CHRYSLER	3,500	0	0	3,500	3,600	0
PREMCOR	1,826	1,200	0	3,026	38	8,998
CHEMICAL TOTAL	5,326	1,200	0	6,526	3,638	8,998
ETHYLENE OXIDE						
SUNOCO	5,583	0	0	5,583	0	0
UNIQEMA	2,576	0	0	2,576	0	0
CHEMICAL TOTAL	8,159	0	0	8,159	0	0
FORMALDEHYDE						
DOW REICHHOLD	1,965	0	0	1,965	0	0
CHEMICAL TOTAL	1,965	0	0	1,965	0	0
HEXACHLOROBENZENE						
DUPONT EDGE MOOR	0	0	0	0	886	0
CHEMICAL TOTAL	0	0	0	0	886	0
LEAD						
DENTSPLY CAULK LAKEVIEW	0	0	0	0	61	0
HALKO MFG.	0	0	0	0	0	46,616
PPG INDUSTRIES WORKS 32	0	0	0	0	0	0
PRINCE MINERALS	5	5	0	10	0	0
CHEMICAL TOTAL	5	5	0	10	61	46,616

Additional detail on carcinogens can be found in this report on pages 35-38

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

APPENDIX J

2005 CARCINOGEN RELEASE AND TRANSFER DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE
	AIR	WATER	LAND	TOTAL		
LEAD COMPOUNDS						
CHROME DEPOSIT	0	0	0	0	6,800	0
CLAYMONT STEEL	372	3	38	413	295,354	0
DUPONT EDGE MOOR	1	129	0	130	66,402	0
EDGE MOOR/HAY ROAD POWER PLANTS	1,232	1,680	0	2,912	9,630	0
GE ENERGY	0	0	0	0	1,230	0
HONEYWELL	0	0	0	0	0	0
INDIAN RIVER POWER PLANT	638	0	23,062	23,700	4	0
INSTEEL WIRE	0	0	0	0	752	0
INVISTA SEAFORD	53	0	3,400	3,453	7	0
JOHNSON CONTROLS	104	4	0	108	4,793,043	0
NRG DOVER	3	0	0	3	388	0
PPG DOVER	0	0	0	0	0	0
PREMCOR	206	10	0	216	295	0
VP RACING FUELS	0	0	0	0	10	0
CHEMICAL TOTAL	2,609	1,827	26,500	30,936	5,173,915	0
NAPHTHALENE						
CARL KING	0	0	0	0	0	0
DOVER AFB	8	0	0	8	0	0
INDIAN RIVER POWER PLANT	0	0	0	0	0	0
INVISTA SEAFORD	10	0	0	10	5	0
PREMCOR	861	1	0	862	0	694
UNIQEMA	6	0	0	6	1,643	704
CHEMICAL TOTAL	885	1	0	886	1,648	1,398
NICKEL						
CAMDEL METALS	0	0	0	0	18	0
METAL MASTERS	5	0	0	5	232,350	0
PRINCE MINERALS	5	250	0	255	0	0
CHEMICAL TOTAL	10	250	0	260	232,368	0
NICKEL COMPOUNDS						
CLAYMONT STEEL	88	8	26	122	4,311	0
DUPONT EDGE MOOR	39	188	0	227	37,918	0
EDGE MOOR/HAY ROAD POWER PLANTS	5,573	1,127	0	6,700	22,120	0
INDIAN RIVER POWER PLANT	755	250	45,000	46,005	0	0
PREMCOR	624	1,591	0	2,215	257,703	0
SPI POLYOLS	10	1	0	11	96,313	0
CHEMICAL TOTAL	7,089	3,165	45,026	55,280	418,365	0
NITROBENZENE						
ORIENT	242	0	0	242	3	0
CHEMICAL TOTAL	242	0	0	242	3	0
P-CHLOROANILINE						
CIBA SPECIALTY CHEMICALS	5	0	0	5	20,165	2,735
CHEMICAL TOTAL	5	0	0	5	20,165	2,735
POLYCHLORINATED BIPHENYLS						
DUPONT EDGE MOOR	0	0	0	0	15	0
CHEMICAL TOTAL	0	0	0	0	15	0

Additional detail on carcinogens can be found in this report on pages 35-38

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

APPENDIX J

2005 CARCINOGEN RELEASE AND TRANSFER DETAIL

CHEMICAL FACILITY	TOTAL ON SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE
	AIR	WATER	LAND	TOTAL		
POLYCYCLIC AROMATIC COMPOUNDS						
DUPONT EDGE MOOR	0	0	0	0	0	0
EDGE MOOR/HAY ROAD POWER PLANTS	89	0	0	89	0	0
GENERAL MOTORS	0	0	0	0	0	0
IKO WILMINGTON	0	0	0	0	96	3
INDIAN RIVER POWER PLANT	2	0	0	2	0	0
INVISTA SEAFORD	0	0	0	0	1	0
MCKEE RUN	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
PREMCOR	319	3	0	322	0	338
SARA LEE APPAREL	1	0	0	1	0	0
SPI POLYOLS	0	0	0	0	0	0
CHEMICAL TOTAL	413	4	0	417	97	341
PROPYLENE OXIDE						
UNIQEMA	1,550	0	0	1,550	0	0
CHEMICAL TOTAL	1,550	0	0	1,550	0	0
STYRENE						
DOW REICHHOLD	1,781	0	0	1,781	308	65,248
JOHNSON POLYMER	412	0	0	412	32	1,317
JUSTIN TANKS	30,062	0	0	30,062	360	0
MARBLE WORKS	2,879	0	0	2,879	0	0
PREMCOR	49	0	0	49	0	23
SPATZ FIBERGLASS	4,652	0	0	4,652	0	0
CHEMICAL TOTAL	39,835	0	0	39,835	700	66,588
TETRACHLOROETHYLENE						
PREMCOR	19	0	0	19	0	0
CHEMICAL TOTAL	19	0	0	19	0	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)						
E-A-R SPECIALTY COMPOSITES	5	0	0	5	1,900	0
MACDERMID	14	0	0	14	0	519
CHEMICAL TOTAL	19	0	0	19	1,900	519
TRICHLOROETHYLENE						
CAMDEL METALS	15,333	0	0	15,333	2,228	0
CHEMICAL TOTAL	15,333	0	0	15,333	2,228	0
VINYL ACETATE						
DOW REICHHOLD	983	0	0	983	28	25,000
FORMOSA PLASTICS	45,397	0	0	45,397	0	0
CHEMICAL TOTAL	46,380	0	0	46,380	28	25,000
VINYL CHLORIDE						
FORMOSA PLASTICS	71,589	12	0	71,601	0	201,858
CHEMICAL TOTAL	71,589	12	0	71,601	0	201,858
CARCINOGEN TOTALS	224,135	8,062	178,694	410,890	6,325,900	2,854,284

Additional detail on carcinogens can be found in this report on pages 35-38

Source: DNREC 2005 Database, December 1, 2006

All amounts are in pounds

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 2-4 on pages 6-8) 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 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 50-51 of this report. The reader may also consult other chemical or toxicology reference materials to learn more about chemicals of interest. One such source is the Agency For Toxic Substances And Disease Registry. This source has a web site that has extensive information about many of the toxic chemicals in this report at: <http://www.atsdr.cdc.gov/toxpro2.html> as well as a shorter summary that answers many common questions about the chemical at: <http://www.atsdr.cdc.gov/toxfaq.html>. 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 2 on page 6

Hydrochloric Acid (Hydrogen Chloride)

(Aerosol portion only is reportable)

Used in: Metal processing and cleaning, analytical chemistry, and making other chemicals. Also produced during coal and oil combustion at power generating facilities.

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. Also produced during coal and oil combustion at power generating facilities.

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

Hydrogen Fluoride

Used in: Etching glass, manufacturing chemicals and gasoline. Also produced during coal and oil combustion at power generating facilities.

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

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, and vomiting, increased or irregular heartbeat.

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.



APPENDIX K

COMMON TOXIC CHEMICALS AND THEIR HAZARDS

Certain Glycol Ethers

Used in: Solvents.

Hazard: Can irritate the eyes, nose, 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.

N-Hexane

Used in: Chief constituent of petroleum ether, gasoline, and rubber solvents. Also used in solvents for adhesives, in organic analysis, to extract vegetable oils from crops such as soybeans, and in denaturing alcohols.

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

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.

Ethylene

Used in: Polymer, plastic, solvent, resin, and antifreeze production in the petroleum and chemical industries.

Hazard: Exposure is primarily by inhalation. Can cause dizziness and unconsciousness. Skin contact may cause frostbite. Is flammable, explosive, and reactive.

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.

Vinyl Acetate

Used for: Plastics and chemical manufacturing.

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

Styrene

Used in: Making polystyrene plastics, protective coatings, polyesters, resins, and as a chemical intermediate.

Hazard: Carcinogen, mutagen. Toxic by inhalation or skin absorption. Can cause eye, nose, and throat irritation. Repeated exposure may cause concentration and memory problems. Higher levels may cause dizziness. Very high levels may be fatal or cause brain and liver damage.

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-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 may damage the liver, heart, kidneys, hearing and the sense of balance.

WATER – From Figure 3 on page 7 - 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.

Manganese and Manganese Compounds *

Used in: Dry-cell batteries, steelmaking, matches, fireworks, in animal feed, fertilizer, livestock nutritional supplements, in glazes and varnishes, and in ceramics, for water purification purposes in water and waste-treatment plants.

Hazard: Toxic when Inhaled. Repeated exposure can cause brain damage, may damage kidneys and liver.

Cresol (Mixed Isomers)

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 the hazardous substances list.

Phenol

Used 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.

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



APPENDIX K

COMMON TOXIC CHEMICALS AND THEIR HAZARDS

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.

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.

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 may affect the liver.

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.

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.

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.

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.

* 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 difficulty in breathing.

Hydrogen Cyanide and Cyanide Compounds

Used in: As insecticide for closed spaces, metal electroplating, and metal treatment.

Hazard: Extremely toxic by inhalation. Will depress the central nervous system. Will cause weakness and loss of coordination, headache, nausea, eye and skin irritation, and in higher concentrations will cause death in humans.

LAND – From Figure 4 on page 8 - 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.

Arsenic Compounds *

Used in: Pesticides, animal feed production, wood and tanning preservative, ammunition and semiconductor industries.

Hazard: Arsenic trioxide is a carcinogen, and may damage the liver and kidneys. Exposure can be through inhalation, ingestion or absorbed through the skin. Ingestion can result in stomach ache, nausea, vomiting and diarrhea. It can also result in decreased production of red and white blood cells which may cause fatigue, abnormal heart rhythm, blood-vessel damage resulting in bruising, and impaired nerve function. One of the early warning signs of arsenic poisoning is a "pins and needles" sensation in hands and feet.

Cobalt Compounds *

Used In: Production of alloys used in the manufacture of aircraft engines, magnets, grinding and cutting tools, artificial hip and knee joints. Cobalt compounds are also used to color glass, ceramics and paints, and used as a drier for porcelain enamel and paints. Cobalt compounds enter the environment from natural sources and the burning of coal or oil.

Hazard: Primarily by ingestion. Cobalt can benefit or harm human health. Cobalt is beneficial for humans because it is part of vitamin B12. Exposure to high levels of cobalt compounds can result in lung and heart effects and skin problems. Liver and kidney effects have also been observed in animals exposed to high levels of cobalt.

Antimony Compounds

Used in: Lead storage batteries, solder, sheet and pipe metal, bearings, castings, and pewter. Antimony oxide is added to textiles and plastics to prevent them from catching fire. It is also used in paints, ceramics, and fireworks, and as enamels for plastics, metal, and glass. It is a by-product of smelting lead and other metals.

Hazard: By contact and ingestion. Can irritate eyes, nose, throat and skin. At high levels, can cause nausea, headaches, abdominal pain, and breathing difficulty.

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



APPENDIX K

COMMON TOXIC CHEMICALS AND THEIR HAZARDS

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 may 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.

Dioxin and Dioxin-like Compounds

Chlorinated Dibenzo-p-dioxins (CDDs) are a family of 75 different compounds commonly referred to as polychlorinated dioxins. These compounds have varying harmful effects, and are considered to be very toxic.

Used in: CDDs are not intentionally manufactured by industry, except in small amounts for research purposes. They are naturally produced from the incomplete combustion of organic material by forest fires or volcanic activity. They are unintentionally produced by industrial, municipal, and domestic incineration and combustion processes. CDDs formed during combustion processes are associated with small particles in the air, such as ash. The larger particles will be deposited close to the emission source, while very small particles may be transported longer distances. Some CDDs may vaporize and be transported long distances in the atmosphere, even around the globe. CDDs are found everywhere in the environment, and most people are exposed to very small background levels of CDDs when they breathe air or consume food. The most common way CDDs can enter your body is by eating food contaminated with CDDs. CDDs deposited on land from combustion sources or from herbicide or pesticide applications bind strongly to the soil, and therefore are not likely to contaminate groundwater by moving deeper into the soil.

Hazard: The most noted effect in people exposed to large amounts of one CCD, 2,3,7,8-TCCD, is chloracne, a severe skin disease. Other skin effects, including rashes and skin discoloration have also been noted. Changes in urine and blood that indicate liver damage may have occurred were also noted.

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

APPENDIX L

Glossary and Acronyms



GLOSSARY AND ACRONYMS

Aerosol - A gaseous form of a chemical which includes mists, vapors, gases, and fogs would be considered an aerosol. Hydrochloric and sulfuric acid aerosols are the reportable form of these two chemicals. These acids in aqueous solutions are no longer reportable under TRI, but an aerosol that is generated from a solution is reportable.

Air Releases - Point and non-point air emissions. Point releases are those through **stacks**, vents, or other confined spaces and are usually regulated by permit. Non-point, or **fugitive**, releases include equipment leaks from valves, pump seals, etc., evaporative losses from surface impoundments or spills, or releases from building ventilation systems.

ARP – DNREC’s Accidental Release Program - Formerly known as the Industrial Disaster Prevention program, ARP provides protection for the lives and health of the citizens of Delaware by ensuring that companies with extremely hazardous substances have proper control plans and operations in place to prevent disasters.

Article - The term in 40 CFR Section 372.3, is defined as a manufactured item: (1) which is formed to a specific shape or design during manufacture; (2) which has end use functions dependent in whole or in part upon shape or design; and (3) which does not release an EPCRA section 313 chemical under normal conditions of processing or use of that item at the facility or establishments.

Bioaccumulate - Bioaccumulate means to increase the concentration of a chemical in a biological organism such as humans over time, compared to the chemical's concentration in the environment. Compounds accumulate in living things any time they are taken up and stored faster than they are broken down or excreted.

Bottom Ash - Ash that falls to the bottom of the combustion chamber in a process burning fuels like coal and oil. Bottom ash is removed for disposal on a regular basis. Also see **Fly Ash**.

Carcinogen - A carcinogen is a substance that can cause cancer of some form.

Chemical Abstracts Service (CAS) Registry Number - A numerical identification given to each unique chemical, which aids in the identification of a chemical with multiple synonyms (e.g., CAS 78-93-3 - methyl ethyl ketone, is also known as 2-butanone). Chemical categories under TRI do not possess a CAS numbers and are assigned category codes by the EPA.

Covered Facility - A facility, as defined in 40 CFR Section 372.3, that has 10 or more full-time employees, is in a covered **SIC code** (see below), and meets the activity threshold for manufacturing, processing, or otherwise using an **EPCRA Section 313 chemical** (see below).

Covered SIC Code – For TRI prior to January 1, 1998, this means SIC codes 20 through 39 (manufacturing facilities). Beginning January 1, 1998, a covered SIC code means SIC codes in major group codes 10 (except 1011, 1081, and 1094), 12 (except 1241), or 20-39; industry codes 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce); or 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C, or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis).



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Disposal - Any underground injection, placement in landfills/surface impoundments, land treatment, or other intentional land disposal.

DNREC - Delaware Department of Natural Resources and Environmental Control – The State agency in Delaware that is responsible for environmental concerns. It has five divisions, and the Cabinet Secretary reports to the Governor. The Division of Air and Waste Management is responsible for this report, and the Divisions of Fish and Wildlife, Parks and Recreation, Soil and Water Conservation, and Water Resources complete the Department.

Emission Factors - Emission factors are published industry emission rates of chemicals in particular processes, which are based on averaging a large sampling of representative processes.

Energy Recovery - The use of a waste product to create and utilize energy to generate steam, electricity, etc. A TRI chemical in waste must contain enough heating value to sustain the combustion process; otherwise it is considered only treatment of the waste.

Environmental Fate - The disposition, over time, of a chemical in the environment. The bioaccumulation of a chemical in fish and the decomposition of a chemical when exposed to sunlight are examples of environmental fate.

EPA – United States Environmental Protection Agency.

EPCRA - Emergency Planning and Community Right-to-Know Act. Congress enacted the Emergency Planning and Community Right to Know Act as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986. This act includes the TRI program, and more information can be found in Appendix A of this report.

EPCRA Section 313 Chemical - A chemical or chemical category listed in 40 CFR Section 372.65 (40 CFR Section 372.3) - see **Toxic Chemical and Modified Chemicals below.**

Facility- All buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person). A facility may contain more than one establishment, or distinct business unit.

Fluid Bed - A fluid bed process uses a gas introduced under a bed of fine solid material to separate and fluidize the material, creating a condition of rapid mixing. The bed has the appearance of a vigorously boiling liquid, and the bed of material takes on many of the properties of a fluid. It exerts pressure and the material will flow through a hole in the vessel or over and under a weir within the bed. The fluid bed process is used to improve reaction time, processing uniformity, and process yield or conversions.

Fluid Catalytic Cracker - In petroleum chemistry, cracking is the process whereby complex organic molecules are converted to simpler molecules (light hydrocarbons) by the breaking of carbon-carbon bonds. Fluid Catalytic Cracking (FCC) produces a high yield of gasoline and LPG from heavier crude oil distillation fractions and residues. FCC uses a very active hot catalyst where it contacts the heavy feed material in a reactor, vaporizes it, and the cracking reactions break down the high molecular weight oil into lighter components including LPG, gasoline, and diesel fuel.

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Fluid Coker - Used in refineries, fluid coking is a continuous fluid bed technology that thermally converts heavy hydrocarbons to lighter products.

Fly Ash - Ash that becomes airborne and escapes in the exhaust air from a combustion process that burns fuels like coal or oil. Fly ash can be controlled with air pollution control devices like precipitators and filters. Also see **Bottom Ash**.

Form A - A two-page report that a facility may use when certain criteria are met for a given chemical that must otherwise be reported. Refer to page 2 for details on eligibility. The Form A provides basic facility information and the chemical identity, but does not provide other data that is given on the Form R. See pages 2-3 in this report for a description of Form A data elements.

Form R- A five-page report that a facility must use (except when Form A eligibility applies) for each TRI chemical that the facility exceeds an applicable threshold.

Fugitive Emissions - See **Air Releases**.

Hazardous Air Pollutants (HAPs) - Air pollutants which are not covered by ambient air quality standards but which, as defined in the Clean Air Act, may present a threat of adverse human health effects or adverse environmental effects. Such pollutants include asbestos, beryllium, mercury, benzene, coke oven emissions, radionuclides, and vinyl chloride.

IARC - International Agency for Research on Cancer (IARC) – IARC is part of the World Health Organization. IARC coordinates and conducts research on the causes of human cancer, the mechanisms of carcinogenesis, and develops scientific strategies for cancer control.

Import - To cause a chemical to be imported into the customs territory of the United States. For purposes of the definition, to cause means to intend that the chemical be imported and to control the identity of the imported chemical and the amount of the imported chemical. For TRI reporting purposes, “import” is the same as “manufacture”.

LEPC - Local Emergency Planning Committee (LEPC). Each LEPC has specific duties to fulfill, and the State Emergency Response Commission (SERC) supervises and coordinates those activities. The LEPC's are required to have broad representation from many groups including state and local officials, media, law enforcement, fire service, EMS and health care, environmental, community groups and citizens and industrial facilities that use hazardous materials. The SERC also receives various reports from businesses that use or store hazardous chemicals, or that experience an emergency release of a hazardous substance, and must establish procedures for receiving and processing requests for information from the public. See **SERC** for more information.

Manufacture - To produce, prepare, compound or import a TRI chemical, including the coincidental production of the chemical as an intermediate, a by-product, or an impurity.

Mass Balance Calculation - A method of calculating amounts and concentrations at a point in a process based on known amounts and concentrations at other points in the process. The basic Mass Balance equation is: Input + Generation = Output + Consumption.



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MSDS - Material Safety Data Sheet - A Material Safety Data Sheet (MSDS) is prepared by the manufacturer of a product. The purpose of the form is to provide information on the safe use, handling and potential hazards of a product. The form is required to be developed under 29 CFR Section 1910.1200(g). This form lists important attributes, including toxicity and safety information that a user or handler of the chemical is required to know about.

Modified Chemicals - The U.S. EPA has qualified several TRI chemicals to be reportable only in a specific form, such as hydrochloric acid and sulfuric acid aerosols, or has changed the method by which threshold and release calculations are made.

NAICS - North American Industrial Classification System - This is a systematic classification system which assigns a six-digit number to each commercial and industrial facility. It expands the classification categories used by the **SIC** codes. It is used by government, industry, and sales organizations to reach targeted industries for data collection, enforcement, and sales. The TRI program will be converting to NAICS starting with the 2006 reporting year. Also see **SIC - Standard Industrial Classification**

Off-site Transfers - Waste that is transferred off-site to another facility for the purpose of treatment, recycling, energy recovery, or disposal.

On-site Releases - Emissions from a facility to the environment as a result of normal operations or accidents. This includes emissions to the air, discharges to surface waters, disposal onto or in the ground, and underground injection. Underground injection is not an approved method of hazardous waste disposal in Delaware.

On-site Waste Management - Wastes that are treated, recycled, or recovered for energy at the facility. The disposal of a waste into an on-site landfill is considered a release by EPA, and thus is not included in this category.

OSHA - Occupational Safety and Health Administration - The Federal agency that has the responsibility to ensure a safe and healthful work environment.

Otherwise Use - Encompasses any activity involving a TRI chemical that does not fall under the definition of manufacture or process. A chemical that is not intentionally incorporated into a product, like a solvent used for cleaning, falls under the otherwise use category.

P2 - Pollution Prevention - Pollution Prevention (P2) means "source reduction," as defined under the Pollution Prevention Act and other practices that reduce or eliminate the creation of pollutants. This EPA program was created to encourage, assist and lead others to prevent pollution at the source. Improved operation and maintenance, material substitution, process and equipment modification, conservation practices, product modification, and in-process recycling are examples of pollution prevention. EPA provides incentives to businesses, including public recognition, tools, and technical assistance. Since reduction of waste at its source is emphasized, recycling, energy recovery, treatment, and disposal are not included within the definition of pollution prevention. Also see **Waste Management** below.

PAH - Polynuclear Aromatic Hydrocarbon - Polynuclear aromatic hydrocarbons (PAHs) are hydrocarbon compounds with multiple benzene rings. PAHs are typical components of asphalts, fuels, oils, and greases. They are also called Polycyclic Aromatic Hydrocarbons. Some PAHs are toxic.

PCB – Polychlorinated Biphenyls - A group of toxic, persistent chemicals used in electrical transformers and capacitors for insulating purposes, and in gas pipeline systems as lubricant. The sale and new use of these chemicals were banned by law in 1979.

PBT - Persistent Bioaccumulative Toxin - PBT pollutants are chemicals that are toxic, persist in the environment and bioaccumulate (are not broken down or excreted), and thus pose risks to human health and ecosystems. The biggest concerns about PBT's are that they transfer rather easily among air, water, and land, and span boundaries of geography and generations.

PEL – Permissible Exposure Limit - OSHA sets permissible exposure limits (PELs) to protect workers against the health effects of exposure to hazardous substances. PELs are regulatory limits on the amount or concentration of a substance in the air. PELs are enforceable. OSHA PELs are based on an 8-hour time weighted average (TWA) exposure.

pH - pH is a measure of the acidity in a liquid. High acid content will be indicated by a pH of less than 7.0, and low acidity, called alkalinity, is indicated by a pH higher than 7.0. Although the pH scale is 0-14, it is a logarithmic scale and the range is based on powers of 10. In the case of pH, the range is 1×10^{-7} to 1×10^7 (0.0000001 to 10,000,000).

POTW - Publicly Owned Treatment Works - Usually a municipal wastewater treatment facility.

Process - To prepare a TRI chemical, after its manufacture, for distribution into commerce. Processing includes intentionally incorporating the chemical into a product or the reaction of the chemical to form another chemical or product.

Recycle - The process of capturing a useful product from a waste stream. Solvent recovery, metals recovery, and acid regeneration are examples of recycling.

Release - Any spilling, leaking, pumping, pouring, emitting, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles of any EPCRA Section 313 chemicals.

SARA - Superfund Amendments and Reauthorization Act of 1986 (SARA Title III), also known as The Emergency Planning and Community Right-to-Know Act (EPCRA), was enacted in 1986. This law provides an infrastructure at the state and local levels to plan for chemical emergencies. Facilities that store, use, or release certain chemicals, may be subject to various reporting requirements. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community.

Selective Catalytic Reduction (SCR) - Nitrogen oxides (NOx) emissions in boiler exhaust gas are converted into elemental nitrogen and water by injecting a nitrogen-based chemical reagent, most commonly ammonia, into the gas and then passing the gas through a catalyst bed where the NOx and ammonia react to form nitrogen and water vapor. Also see **SNCR** below.



APPENDIX L

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Selective Non-Catalytic Reduction (SNCR) – Nitrogen oxides (NO_x) emissions in boiler exhaust gas are converted into elemental nitrogen and water by injecting a nitrogen-based chemical reagent, most commonly urea or ammonia into the gas in the furnace. The SNCR method does not require a catalyst, but has lower conversion efficiency than the SCR method. Also see **SCR** above.

SERC - State Emergency Response Commission – The SERC's were created in response to the federal Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986, and are comprised of representatives from various state and local government organizations and industry. The primary focus of a SERC is to enhance state and local emergency response and preparedness capabilities through better coordination and planning. See **LEPC (Local Emergency Planning committee)** for more information.

Standard Industrial Classification (SIC) Code - A four-digit code established by the Federal Office of Management and Budget used to describe the type of activity(s) at a facility. The first two digits of the code indicate the facility's major industry group. Using 2824 as an example, 28 indicates the group 'Chemicals and Allied Products' while 2824 indicates 'Manmade Organic Fibers' within that group. Facilities that engage in a variety of activities may possess multiple codes. Also see **North American Industrial Classification System – NAICS**. The TRI program will be converting to NAICS starting with the 2006 reporting year.

Stack Test - A process of sampling an exhaust stack to determine the contents, usually in percent concentration and cubic feet per hour. Sampling is usually done through a port or series of ports at an elevated point on the stack.

Toxic Chemical - A chemical or chemical category listed in 40 CFR Section 372.65 (40 CFR Section 372.3).

Treatment - The removal, destruction, alteration, or stabilization of the waste. Biological treatment, incineration, and neutralization are examples of waste treatment. Wastewater treatment plants and hazardous waste incinerators are examples of treatment facilities.

TRI - The Toxics Release Inventory (TRI) is a publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

Volatile Organic Compounds (VOCs) - Chemical compounds containing carbon and hydrogen which readily evaporate at room temperature.

Waste Management - EPA interprets waste management to include the following activities: recycling, combustion for energy recovery, treatment for destruction, waste stabilization, and release, including disposal. Waste management does not include the storage, container transfer, or tank transfer if no recycling, combustion for energy, treatment for destruction, waste stabilization, or release of the chemical occurs at the facility.

More terms and acronyms can be found at: <http://www.epa.gov/OCEPAterms/intro.htm> .



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December 9, 2005

Office of Environmental Information (OEI) Docket
U. S. Environmental Protection Agency
Mail Code: 28221T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Attention: Docket ID No. TRI-2005-0073

**Re: Comments on Proposed changes to Toxics Release Inventory Reporting Requirements
(70 Fed. Reg. 57822, (October 4, 2005))**

Following are comments of the Delaware Department of Natural Resources and Environmental Control (DNREC) regarding the proposal to increase eligibility for use of the Form A under the Toxics Release Inventory (TRI) reporting requirements. (*70 Federal Register 57822-57847, (October 4, 2005)*).

The Toxics Release Inventory provides information that is not only crucial for making decisions concerning health and the environment, but has also proven a valuable tool for more efficient environmental management. In Delaware, officials have found the TRI program extremely helpful in setting environmental and public health policy. In addition, TRI reporting has helped promote the implementation of Environmental Management Systems (EMS), and serves as a component. Reductions in TRI numbers are often incorporated directly into EMS goals. Pollution has been reduced as a direct result of facility participation in the TRI program, and now is not the time to turn back the clock on a successful program.

We do not favor any of the proposed changes for Form A reporting.

- **The burden reduction estimates being used as justification for this proposed rule change are incomplete, misleading, and potentially inaccurate. We do not agree the proposed changes provide sufficient burden reduction to justify their implementation.**
 - The claim of 165,000 hours is inflated. This amount consists of 47,000 claimed hours resulting from not completing 2,703 PBT Form R's and 117,000 hours from not completing 12,200 non-PBT Form R's. When discussing the implementation of the Form A option for PBT chemicals, the proposed rule states "EPA believes that many such facilities may choose to continue using Form R, since the burden of completing Form R for such facilities is small, and Form R allows them to show the public that they are neither releasing nor generating and managing as waste any of the PBT chemicals" (*70 Fed. Reg. 57839*). For non-PBT's, the Federal Register notes "it is important to note that actual burden savings may be considerably less if historical rates of Form A use continue in the future" (*70 Fed. Reg. 57842*). As noted by EPA within the proposed rule, when the 1994 rulemaking established the Form A option,

“only about half of the eligible respondents actually switched to Form A” (70 Fed. Reg. 57841-42). This fact alone demonstrates that the additional effort necessary to complete a Form R versus a Form A is not significant. We agree with these EPA statements, and thus do not see any need or benefit that will result from this proposal.

- The disparity between burden estimates presented in the proposed rule indicates an inadequate understanding of the true burden associated with TRI reporting. Without an adequate understanding of the true burden, attempts to quantify burden reductions are very questionable. Results from EPA’s alternate methodology proposed in the rule for calculating the form completion burden vary significantly from previous estimates. As EPA states in the proposed rule, “The resulting burden estimates derived from that engineering analyses for PBT and non-PBT chemicals are substantially lower than the current burden estimates in the OMB-approved Information Collection Request supporting statement for Form R” (70 Fed. Reg. 57827). Times to complete a Form A instead of a Form R are presented in the following tables below.

	OMB BASIS Form R (Hours)	OMB BASIS Form A (Hours)	OMB SAVINGS (Hours)
PBT’s	47.1	31.6	15.5
NON-PBT’s	25.2	17.6	7.6

	NEW ENGINEERING BASIS – FORM R	NEW ENGINEERING BASIS – FORM A	NEW ENGINEERING SAVINGS BASIS (Hours)
PBT’s	6.7	1.4	5.3
NON-PBT’S	7.6	1.4	6.2

The new engineering estimates are notably different from current calculation results, so we do not know what the true burden or burden reduction is, if any.

- The burden reduction estimates compiled by EPA fail to account for several additional issues. They do not appear to account for additional activities necessary to update/train facility representatives on the changing requirements. Even more importantly, for states and other organizations which actively compile, analyze and distribute the data, the burden reduction estimates do not account for additional efforts necessary to track and convey the changes in the reporting requirements to citizens and other public groups who make use of the data. Changes to the reporting requirements can cause significant complications when evaluating overall trends and conducting cross-year analyses. In many cases, re-programming databases to account for changes in the basis on which data is reported requires significant time and effort. When these additional aspects are considered, there may be no positive burden reduction at all.
- Facilities must complete some, if not most, of the calculations or estimates to determine eligibility to use Form A, so they have developed some, if not most, of the

numbers to report. As stated in the proposed rule concerning Form A Eligibility for PBT chemicals,

“This approach allows facilities that report zero or NA for items a, b, c, and d of Section 8.1 of Form R (Zero Total Disposal or Other Releases) for a PBT chemical (except dioxin and dioxin-like compounds) and do not have any releases included in Section 8.8, but may have other waste management information in Section 8.2 through 8.8 totaling 500 pounds or less, to now use the Form A Certification Statement. Section 8.8 of the Form R details the non-production related activities occurring at a facility. These could be releases or other waste management quantities. For this approach “releases” reported in Section 8.8 must be zero, but facilities may have other waste management quantities in Section 8.8, which will be totaled with the production related waste management quantities found in Sections 8.2-8.7” (70 Fed. Reg. 57838).

This passage clearly demonstrates that most of the Form R data elements must still be calculated to determine if a Form A can be used, so why should this data go unreported?

- The claim that burden reduction would accrue to facilities using Form A because the maximum amount on site is not reported on this form and thus would not need to be calculated (70 Fed. Reg. 57841) may not be correct in many situations. This amount is required for EPCRA Sections 311/312 reporting, and depending upon how the substances were reported under 311/312, it may have already been calculated for the report due on March 1. It is just entered again in Section 4 on Form R.
- **We believe that the proposed rule is inconsistent with the intent and direction of the recently expanded PBT information which disallowed Form A for PBT reporting and implemented reduced reporting thresholds for PBT chemicals.**
 - As noted in (64 Federal Register 58732, (Oct. 29, 1999)), EPA cited concerns at that time over releases and other waste management of these chemicals at low levels and said that, based on the information available to the Agency at that time, EPA believed that the level of information from Form A was insufficient to do meaningful analysis on PBT chemicals.
 - We believe that this approach was correct then and is correct more than ever now, so in order to retain the ability to do meaningful analysis on PBT data, the current reporting requirements should be retained or made stronger, not weaker.
 - For Delaware, fifty percent of the reports for benzo(g,h,i)perylene, and eighty-five percent of the reports for polycyclic aromatic compounds that contain data now would contain no numerical data under this proposal.
- **While EPA has stated in a press release that the proposed rule “provides new incentives to facilities to emit less”, the proposed rule actually provides a significant disincentive.**
 - Although this proposal does provide a new incentive to facilities to emit less in order to be able to take advantage of the shorter Form A if they can reduce their PBT waste management totals below 500 pounds, it is at the same time negative for non-PBT chemicals, in that the eligibility threshold is being raised from 500 pounds to 5,000 pounds and thus does not encourage facilities to reduce their emissions. This second part should be described as a “disincentive” to emit less, since facilities currently falling under the 500 pound level would be able to increase amounts up to the 5,000

pound level and still use the Form A. Considering the number of potential PBT Form A reports compared with the number of non-PBT Form A reports, it would appear that the disincentive aspect of the rule change could have a much larger impact than the suggested incentive aspect. We suggest as a more positive way to achieve burden reduction, that whenever possible, stronger, not weaker, encouragement be given to the facilities for reducing or discontinuing use of TRI chemicals.

- **An increase in the Form A threshold does a disservice to our citizens because it no longer allows them access to important data.**

- An analysis using 2004 data shows that about 35% of our Form R reports and 29% of our PBT reports would become eligible for Form A reporting under the proposed threshold increase. See Attachment A for further detail. All the numerical data associated with these reports would be lost under the new proposal. While these amounts may be relatively small when compared to the overall totals, these numbers represent important information to citizens in the communities where these facilities operate.
- For example, 21% of the Delaware TRI facilities would no longer be required to report any numerical data to the program, and thus the communities in which these facilities operate would not receive any data from these facilities regarding their use of toxic chemicals.
- Small facilities tend to have a larger percentage of their total production-related waste as on-site releases to the environment than do larger facilities. In Delaware, on-site releases constitute about 11% of all TRI production-related waste for all facilities combined. However, for the chemicals and facilities previously noted that would be eligible for Form A non-PBT reporting, on-site releases constitute 45% of production-related waste.
- In addition, 100% of the numerical data in Delaware would be lost for 25 chemicals, including naphthalene, toluene diisocyanate, tetrachloroethylene, and formaldehyde, a known carcinogen. Eighty percent of the reports for methyl tert-butyl ether and three-fourths of the reports for methyl methacrylate could be converted to Form A containing no numerical data.
- Concerning PBT chemicals, the proposed rule states "The Agency anticipates this will have a minimal impact on the national reports TRI generates annually because it is a low quantity of waste and will have a negligible impact on national totals" (*64 Fed. Reg. 578414*). Concerning non-PBT chemicals, it states the proposal "still allows the TRI program to report on a substantial majority of the releases" (*64 Fed. Reg. 57842*). We disagree with the implied focus of TRI represented by these statements. On a national level, capturing the largest percentage of reportable amounts is a worthy goal, but this must be balanced with providing information useful at the community level, which is a primary focus of the Emergency Planning and Community Right-to-know Act. While a TRI report from a facility with small annual reportable amounts may not be significant on a national basis, it can be extremely important to the citizens living next to the facility.

- **We disagree that in order to capture "a substantial majority of the releases" the direction would be to increase reporting thresholds.**

- Although reporting thresholds were increased once before, when Form A was created, it sets a dangerous precedent by again increasing reporting thresholds. If thresholds

for Form A eligibility are increased now, it will be easier to increase thresholds for other reporting segments in the future, with predictable further loss of data.

- We believe that these changes should not be made, nor should any changes be made, unless some clear benefit can be demonstrated for the TRI data users.
- **We disagree with the general approach of changing reporting requirements because it will lead to confusion among data users.**
 - As noted in the proposed rule, "Using a different basis for reportable amounts for PBT and non-PBT chemicals does pose some risk of confusion among reporters" (*64 Fed. Reg. 57839*). If this is true, and we agree that it will be, then there certainly will be confusion among data users who, as a group, are undoubtedly less experienced in analyzing data. Comparison on an equal basis will not be possible. The data users will probably not fully remember or be able to understand how to compare the differences between data prepared using prior years' basis and data prepared using the new basis, or the difference between PBT and non-PBT data presented in the same year.
 - Changing the basis for reporting will make comparisons difficult, if not meaningless. Delaware actively collects, manages/analyzes, and publicly distributes TRI data. We believe that it is our responsibility to collect complete and accurate data from the facilities releasing toxic chemicals into the environment and report that data to our citizens. We also believe that it is the right of the communities near these releases to have access to this data. We use actual amounts of releases, not just a count of reports, to report chemical releases and other activity at the facilities to our citizens, and actual amounts of releases must also be used in most analyses of how chemicals may affect their communities. In order to make meaningful comparisons between years and to evaluate progress, we need to have a consistent basis for reporting year-to-year.
- **A small release does not necessarily mean a small risk.**
 - The Environmental Protection Agency's Risk Screening Environmental Indicators (RSEI) program is built in large part on the premise that a small amount of releases of a more toxic or hazardous chemical can be more dangerous than a larger release of a less toxic substance. This allows for more efficient prioritizing of reduction programs or projects with the aim of reducing overall hazard or risk. The RSEI program relies exclusively on TRI data and would be considerably less effective with the proposed Form A changes that would remove numerical reporting for some small releases of some highly toxic chemicals.
 - For example, the highest reportable amount eliminated from reporting in Delaware under this proposal is a report for naphthalene, a newly listed carcinogen in 2004. The next highest amount is a report for chromium VI compounds, a carcinogen and toxic metallic compound more toxic than naphthalene. The third is a report for nickel compounds, also a carcinogen and even more toxic than chromium compounds. Fifty-seven percent of the reports in Delaware for non-PBT carcinogens could be affected by this proposal for the 2004 reporting year.
 - Another reason the Agency should be concerned about these small facilities is that some of their releases consist of Hazardous Air Pollutants (HAPs) regulated under the Clean Air Act. The national, regional, and local modeling done to predict ambient

concentrations of these chemicals uses TRI data and is likely to be affected by sources dropping out—even sources of 5,000 pounds per year or less could have a significant impact on the modeling. EPA's documentation for this proposal does not indicate that the Agency has even considered the impact of collecting less data on releases of HAPS, or on the Agency's ability to track and potentially regulate those chemicals. It is difficult to believe that the state or federal air program offices would want to sacrifice the collection of these data in TRI—particularly since it is the only chemical- and site-specific database the Agency has for these substances.

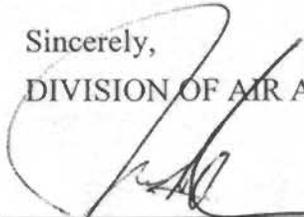
The Agency has also requested comment on defining the Annual Reportable Amount.

- **We believe that Section 8.8 data should be included in the Annual Reportable Amount for non-PBT's.**
 - Current thresholds for Form A reporting for non-PBT's ignore non-production-related waste. One-time or periodic activities such as dismantling refractory furnaces and other remediation/maintenance activities can lead to significant releases to the environment, even at small facilities, as can catastrophic accidental releases. However, these activities are not considered in calculating production-related waste. Depending on the circumstance, an accidental release might not even be included in the threshold for TRI reporting. Imagine the scenario in which the Bhopal Union Carbide facility was located in the U.S., but did not have to report a deadly catastrophic 40 ton release to TRI because the rest of its activities were small enough to meet the 5,000 pound Form A threshold. This condition should be corrected.
 - Although the Section 8.8 release amounts are not direct results of production activities, these releases are still releases as a result of the facility doing business manufacturing, processing or otherwise using the TRI-listed chemical. As such, the release of the chemical should be accounted for in the total amount reported by the facility for non-PBT chemicals.

We respectfully request that you withdraw the proposal to expand the use of Form A.

We support and request implementation of a proposal to include Section 8.8 amounts in calculating the Annual Reportable Amount for non-PBT chemicals.

Sincerely,
DIVISION OF AIR AND WASTE MANAGEMENT



James D. Werner
Director

Attachment

Cc: John Parker, DNREC

**ATTACHMENT A
DELAWARE FORM A THRESHOLD IMPACT ANALYSIS**

CURRENT FORM R's	302	
CURRENT FORM A - NO PBT's	52	WILL PROBABLY REMAIN FORM A
CURRENT FORM R PBT's	59	POTENTIAL TO BECOME FORM A - IF ZERO RELEASE
CURRENT FORM R PBT's - NO RELEASE	17	COULD BECOME FORM A - NO RELEASE REPORTED
FORM R's UNDER 5,000	89	COULD BECOME FORM A
<hr/>		
TOTAL FORM R's CONVERTED TO FORM A	106	(17+89)
PERCENT FORM R's CHANGED TO FORM A	35%	(106/302)
PERCENT PBT's CONVERTED TO FORM A	29%	(17/59)
TOTAL POSSIBLE FORM A's	158	(52+17+89)
TOTAL 2004 REPORTS	354	(302 FORM R + 52 FORM A)
REMAINING FORM R's	196	(354 -158)

POTENTIAL DATA LOSS	
	POUNDS
ON-SITE RELEASES IN NEW FORM A's	54,667
TOTAL TRI WASTE IN NEW FORM A's	121,340

APPENDIX N

TRI REPORTING FORMS - FORM R



TOXICS RELEASE INVENTORY

Sample Form R
For reporting year 2005

Form Approved OMB Number: 2070-0093
Approval Expires: 01/31/2008

Page 1 of 5

(IMPORTANT: Type or print; read instructions)

 EPA United States Environmental Protection Agency		FORM R Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also Known as Title III of the Superfund Amendments and Reauthorization Act		TRI Facility ID Number	
				Toxic Chemical, Category or Generic Name	
<p>WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center 2. APPROPRIATE STATE OFFICE P. O. Box 1513 (See instructions in Appendix F) Lanham, MD 20703-1513 ATTN: TOXIC CHEMICAL RELEASE INVENTORY</p>					
Enter "X" here if this is a revision					
For EPA use only					
<p>IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.</p>					
PART 1. FACILITY IDENTIFICATION INFORMATION					
SECTION 1. REPORTING YEAR _____					
SECTION 2. TRADE SECRET INFORMATION					
2.1 Are you claiming the toxic chemical identified on page 2 trade secret?		2.2 Is this copy			
<input type="checkbox"/> Yes (Answer question 2.2; Attach substantiation forms)		<input type="checkbox"/> No (Do not answer 2.2; Go to Section 3)		<input type="checkbox"/> Sanitized <input type="checkbox"/> Unsanitized (Answer only if "YES" in 2.1)	
SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)					
I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.					
Name and official title of owner/operator or senior management official:			Signature:		Date Signed:
SECTION 4. FACILITY IDENTIFICATION					
4.1		TRI Facility ID Number			
Facility or Establishment Name		Facility or Establishment Name or Mailing Address (If different from street address)			
Street		Mailing Address			
City/Country/State/Zip Code		City/State/Zip Code		Country (Non-US)	
4.2 This report contains information for: (Important: Check a or b; check c or d if applicable) a. <input type="checkbox"/> An entire facility b. <input type="checkbox"/> Part of a facility c. <input type="checkbox"/> A Federal facility d. <input type="checkbox"/> GOCO					
4.3 Technical Contact Name		Telephone Number (include area code)			
Email Address					
4.4 Public Contact Name		Telephone Number (include area code)			
4.5 SIC Code (s) (4 digits)		Primary			
		a.	b.	c.	d.
4.7 Dun & Bradstreet Number (s) (9 digits)		a.			
		b.			
SECTION 5. PARENT COMPANY INFORMATION					
5.1 Name of Parent Company		NA <input type="checkbox"/>			
5.2 Parent Company's Dun & Bradstreet Number		NA <input type="checkbox"/>			



APPENDIX N

TRI REPORTING FORMS - FORM R

TOXICS RELEASE INVENTORY

Sample Form R
For reporting year 2005

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(IMPORTANT: Type or print, read instructions before reporting.)

FORM R

PART II. TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

TRI Facility ID Number
Toxic Chemical, Category or Generic Name

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)																																		
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)																																		
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "yes". Generic Name must be structurally descriptive.)																																		
1.4	Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category. (If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)																																		
NA	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	<input type="checkbox"/>																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces and punctuation.)

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

3.1	Manufacture the toxic chemical:	3.2	Process the toxic chemical:	3.3	Otherwise use the toxic chemical:
a. <input type="checkbox"/> Produce	b. <input type="checkbox"/> Import	a. <input type="checkbox"/> As a reactant	b. <input type="checkbox"/> As a formulation component	a. <input type="checkbox"/> As a chemical processing aid	b. <input type="checkbox"/> As a manufacturing aid
If produce or import		c. <input type="checkbox"/> As an article component	d. <input type="checkbox"/> Repackaging	c. <input type="checkbox"/> Ancillary or other use	
c. <input type="checkbox"/> For on-site use/processing	d. <input type="checkbox"/> For sale/distribution	e. <input type="checkbox"/> As an impurity			
e. <input type="checkbox"/> As a byproduct	f. <input type="checkbox"/> As an impurity				

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	<input type="text"/> (Enter two digit code from instruction package.)
-----	---

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

	A. Total Release (pounds/year*) (Enter a range code** or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	NA <input type="checkbox"/>		
5.2 Stack or point air emissions	NA <input type="checkbox"/>		
5.3 Discharges to receiving streams or water bodies (enter one name per box)			
Stream or Water Body Name			
5.3.1			
5.3.2			
5.3.3			

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box and indicate the Part II, Section 5.3 page number in this box. (example: 1,2,3, etc.)

EPA Form 9350 -1 (Rev. 08/2005) - Previous editions are obsolete. *For Dioxin or Dioxin-like compounds, report in grams/year. ** Range Codes: A= 1-10 pounds; B= 11-499 pounds; C= 500-999 pounds.

APPENDIX N

TRI REPORTING FORMS - FORM R



TOXICS RELEASE INVENTORY

Sample Form R
For reporting year 2005

Form Approved OMB Number: 2070-0093
Approval Expires: 01/31/2008

Page 3 of 5

(IMPORTANT: Type or print; read instructions before filling out this form)

<p>FORM R</p> <p>PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)</p>	TRI Facility ID Number Toxic Chemical, Category or Generic Name
--	--

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (continued)

		NA	A. Total Release (pounds/year*) (enter range code ** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	<input type="checkbox"/>		
5.4.2	Underground Injection onsite to Class II-V Wells	<input type="checkbox"/>		
5.5	Disposal to land onsite	<input type="checkbox"/>		
5.5.1A	RCRA Subtitle C landfills	<input type="checkbox"/>		
5.5.1B	Other landfills	<input type="checkbox"/>		
5.5.2	Land treatment/application farming	<input type="checkbox"/>		
5.5.3A	RCRA Subtitle C surface impoundments	<input type="checkbox"/>		
5.5.3B	Other surface impoundments	<input type="checkbox"/>		
5.5.4	Other disposal	<input type="checkbox"/>		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year*) (enter range code ** or estimate)	6.1.A.2 Basis of Estimate (enter code)
--	--

6.1.B POTW Name _____

POTW Address _____

City	State	County	Zip
------	-------	--------	-----

6.1.B POTW Name _____

POTW Address _____

City	State	County	Zip
------	-------	--------	-----

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box and indicate the Part II, Section 6.1 page number in this box (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. Off-Site EPA Identification Number (RCRA ID No.) _____

Off-Site Location Name _____

Off-Site Address _____

City	State	County	Zip	Country (Non-US)
------	-------	--------	-----	------------------

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

EPA Form 9350 -1 (Rev. 08/2005) - Previous editions are obsolete.

* For Dioxin or Dioxin-like compounds, report in grams/year
** Range Codes: A=1-10 pounds; B=1-499 pounds; C=500 - 999 pounds.



APPENDIX N

TRI REPORTING FORMS - FORM R

TOXICS RELEASE INVENTORY

(IMPORTANT: Type or print; read instructions before reporting.)

Sample Form R
For reporting year 2005

Form Approved OMB Number: 2070-0093
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Page 4 of 5

FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
Toxic Chemical, Category or Generic Name

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (CONTINUED)

A. Total Transfers (pounds/year*) (enter range code**or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

6.2 _____ Off-Site EPA Identification Number (RCRA ID No.)

Off-Site Location Name

Off-Site Address

City _____ State _____ County _____ Zip _____ Country (Non-US) _____

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

A. Total Transfers (pounds/year*) (enter range code**or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream [enter code]	b. Waste Treatment Method(s) Sequence [enter 3- or 4- character code(s)]								d. Waste Treatment Efficiency [enter 2 character code]	
7A.1a	7A.1b	1	2	3	4	5	6	7	8	7A.1d
	3	4	5	6	7	8				
	6	7	8							
7A.2a	7A.2b	1	2	3	4	5	6	7	8	7A.2d
	3	4	5	6	7	8				
	6	7	8							
7A.3a	7A.3b	1	2	3	4	5	6	7	8	7A.3d
	3	4	5	6	7	8				
	6	7	8							
7A.4a	7A.4b	1	2	3	4	5	6	7	8	7A.4d
	3	4	5	6	7	8				
	6	7	8							
7A.5a	7A.5b	1	2	3	4	5	6	7	8	7A.5d
	3	4	5	6	7	8				
	6	7	8							

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box and indicate the Part II, Section 6.2/7 page number in this box: (example: 1,2,3,etc.)

APPENDIX N

TRI REPORTING FORMS - FORM R



TOXICS RELEASE INVENTORY

(IMPORTANT: Type or print; read instructions before use)

Sample Form R
For reporting year 2005

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FORM R		TRI Facility ID Number			
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)		Toxic Chemical, Category or Generic Name			
SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES					
<input type="checkbox"/> Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.					
Energy Recovery Methods [enter 3-character code(s)]					
1	2	3			
SECTION 7C. ON-SITE RECYCLING PROCESSES					
<input type="checkbox"/> Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.					
Recycling Methods [enter 3-character code(s)]					
1	2	3			
SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES					
		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills				
8.1b	Total other on-site disposal or other releases				
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills				
8.1d	Total other off-site disposal or other releases				
8.2	Quantity used for energy recovery onsite				
8.3	Quantity used for energy recovery offsite				
8.4	Quantity recycled onsite				
8.5	Quantity recycled offsite				
8.6	Quantity treated onsite				
8.7	Quantity treated offsite				
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)*				
8.9	Production ratio or activity index				
8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.				
	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)			
8.10.1		a.	b.	c.	
8.10.2		a.	b.	c.	
8.10.3		a.	b.	c.	
8.10.4		a.	b.	c.	
8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities, check "Yes."				Yes <input type="checkbox"/>



APPENDIX N

TRI REPORTING FORMS - FORM A

TOXICS RELEASE INVENTORY

Sample Form A Page 1
For reporting year 2005

Form Approved OMB Number: 2070-0143
Approval Expires: 01/31/2008

Page 1 of ___

(IMPORTANT: Type or print; read instructions before filling out this form.)



United States
Environmental Protection Agency

TOXICS CHEMICAL RELEASE INVENTORY FORM A

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center
P. O. Box 1513
Lanham, MD 20703-1513
ATTN: TOXIC CHEMICAL RELEASE INVENTORY

Enter "X" here if
this is a revision
For EPA use only

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART 1. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR _____

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret?		2.2	Is this copy <input type="checkbox"/> Sanitized <input type="checkbox"/> Unsanitized	
	<input type="checkbox"/> Yes (Answer question 2.2; Attach substantiation forms)	<input type="checkbox"/> No (Do not answer 2.2; Go to Section 3)		(Answer only if "YES" in 2.1)	

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the statement, the annual reportable amount as defined in 40 CFR 372.27 (a), did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed, or otherwise used in an amount not exceeding 1 million pounds during this reporting year.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:

SECTION 4. FACILITY IDENTIFICATION

4.1	TRI Facility ID Number	
Facility or Establishment Name	Facility or Establishment Name or Mailing Address (If different from street address)	
Street	Mailing Address	
City/Country/State/Zip Code	City/State/Zip Code	Country (Non-US)

4.2 This report contains information for: (Important: Check c or d if applicable)
c. A Federal facility d. GOCO

4.3	Technical Contact Name	Telephone Number (include area code)
	Email Address	

4.4 Intentionally left blank

4.5	SIC Code (s) (4 digits)	Primary	b.	c.	d.	e.	f.
		a.					

4.7	Dun & Bradstreet Number (s) (9 digits)	a.
		b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA <input type="checkbox"/>
5.2	Parent Company's Dun & Bradstreet Number	NA <input type="checkbox"/>

APPENDIX N

TRI REPORTING FORMS - FORM A



TOXICS RELEASE INVENTORY

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

Sample Form A Page 2
For reporting year 2005

Page ___ of ___

EPA FORM A

PART II. CHEMICAL IDENTIFICATION

TRIFID: _____

Do not use this form for reporting PBT chemicals including Dioxin and Dioxin-like Compounds*

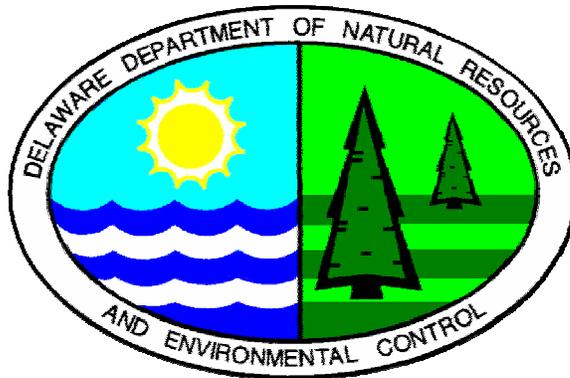
SECTION 1. TOXIC CHEMICAL IDENTITY		Report ___ of ___
1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)	
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)	
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "yes". Generic Name must be structurally descriptive.)	
SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above)		
2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)	
SECTION 1. TOXIC CHEMICAL IDENTITY		Report ___ of ___
1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)	
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)	
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "yes". Generic Name must be structurally descriptive.)	
SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above)		
2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)	
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SECTION 1. TOXIC CHEMICAL IDENTITY		Report ___ of ___
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SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above)		
2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)	

*See the TRI Reporting Forms and Instructions Manual for the list of PBT Chemicals (including Dioxin and Dioxin-like Compounds)

EPA Form 9350 -1 (Rev. 08/2005) - Previous editions are obsolete.

(Make additional copies of this page, if needed)

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EPCRA Reporting Program
Emergency Prevention and Response Branch, DNREC
156 South State Street
Dover, DE 19901
(302) 739-9405

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

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