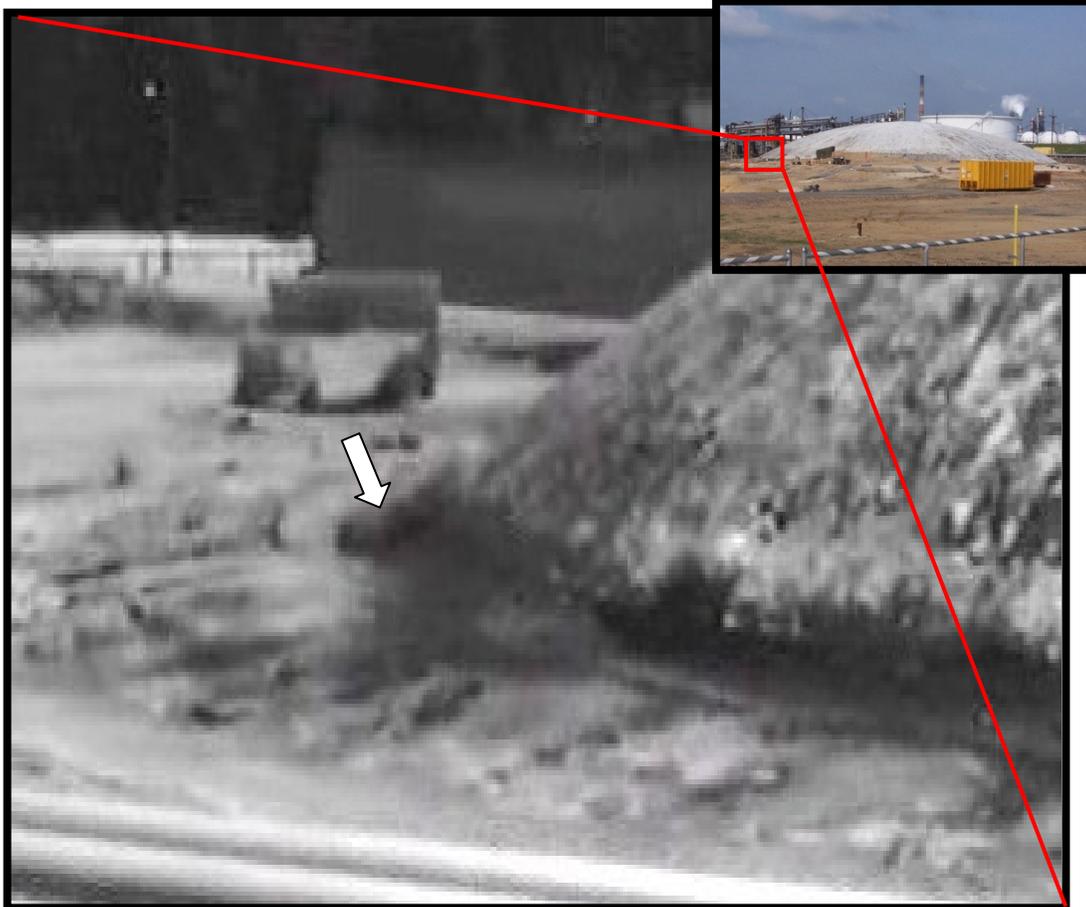


# DELAWARE TOXICS RELEASE INVENTORY DATA DETAIL



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

January 2009

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## **DNREC MISSION STATEMENT**

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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 to serve and educate the citizens of the First State about the wise use, conservation, and enhancement of Delaware's environment.

**Front Cover:** *This is a DNREC photograph of the frozen earth storage unit at the Premcor Delaware City refinery. Only the roof of the unit is visible above ground. This unit is being taken out of service because significant leakage into the environment was discovered by DNREC personnel using infrared technology. The dark cloud at the lower left of the tank cover is a cloud of propane and propylene escaping from the tank through the earth. The refinery has agreed to close the frozen earth storage system, provide alternative storage, and improve existing handling equipment for propane and butane. See additional discussion on page 19. The infrared video can be seen at: <http://www.serc.delaware.gov/reports.shtml>*

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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 2007. DNREC publishes this report as part of our efforts to inform citizens about environmental issues in their communities. This is the 21<sup>st</sup> year of TRI data collection. The program has proven to be successful as a non-regulatory way to encourage pollution prevention and reductions of toxic chemical releases. It is no surprise that when properly motivated and encouraged to innovate, Delaware companies have demonstrated continued progress in increasing efficiency and reducing their releases of toxic chemicals.

The 2007 data summarized in this report are encouraging. The Delaware City (Premcor Oil) Refinery and the Georgetown Perdue facilities reported significant reductions in nitrate compounds released to water. These facilities reflect a trend towards greater accuracy and decreased releases. Compared to 2006 reported releases, Delaware's 2007 total on-site TRI releases declined by four percent. Reported releases to water and land were down 17% and 48%, respectively. Reported releases to air, however, were up 9%, which was caused primarily by the increased production at the power plants, and the resulting increase in releases of acid gases. The long term trend, since 1998, shows a decrease of more than ten percent. Also, the trend for on-site releases of carcinogenic compounds continues downward with the total amount of on-site releases for all carcinogens falling by 150,000 pounds, 39 percent less than reported for 2006, and by 625,000 pounds, or 73 percent less than for 1998. In the future, emissions from power plants will also be significantly reduced when compliance with our multi-pollutant regulations is achieved.

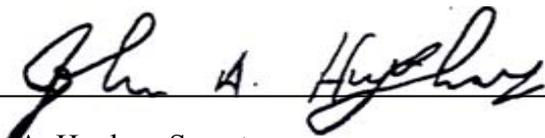
This TRI report shows progress in two important areas: increased accuracy and decreased emissions across a broad front. Instead of relying on estimates, Delaware's TRI facilities increasingly use results from directly monitored data. For 2006, the use of such direct data revealed higher than estimated nitrate compound releases from the Premcor refinery. For 2007, Premcor further increased their water sampling to get better data over time, and the facility-reported discharge of nitrate compounds to the Delaware River decreased by 424,000 pounds. At Evraz Claymont Steel, although other methods were used to estimate releases, reported releases of mercury to air decreased by 50 pounds, or 16 percent, for 2007.

Despite concerns by states and others, the TRI program was modified by a Federal rule allowing more facilities to report on the TRI short Form A, beginning in the 2006 reporting year. This "short form" provides only general information and does not report any quantitative amounts. Through their initiatives and outreach efforts of DNREC's TRI program, Delaware companies have trended away from use of this "short form" and continue to provide detailed TRI data to the public.

We publish two TRI documents annually: This more technical *TRI Data Detail Report* and the shorter *Data Summary Report*, a more compact, less technical report. These reports 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 1995-2007 are also available at the above web site, 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.

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

The 2007 TRI data represents the 21<sup>st</sup> year of data collection from facilities for distribution to the public, and the TRI program continues to fulfill its goal of providing chemical use, release, and management information to the public. The increased attention given to releases and management of chemicals through the TRI reporting requirements continues to drive an increase in knowledge about the releases, as well as efforts to achieve reductions in releases.

For 2007, total on-site releases reported in Delaware show a decrease of 4.4%. Although the decrease is driven by significant decreases in releases of nitrate compounds from two facilities, 8 facilities reported decreases in on-site releases of greater than 10,000 pounds. Overall, results from the 2007 TRI data show (most amounts rounded to the nearest 1,000 pounds):

- The total amount reported as released to water for 2007 decreased by 695,000 pounds (17%), compared to 2006. The largest change in this category was nitrate compounds released from the Premcor Delaware City refinery, which reported 424,000 pounds (15%) less than the 2006 amount, followed by the Perdue Georgetown facility, which reported a reduction of 183,000 pounds (27%). The Premcor change was not related to specific changes in their production of petrochemicals, but rather to more accurate reporting of this TRI compound. DNREC's Division of Water Resources is working with the refinery to implement a plan for further reductions of these releases. The Perdue reduction was the result of reduced nitrate concentrations and wastewater volume.
- The total amount released on-site to land decreased by 376,000 pounds (48%), largely the result of decreases in the reported amounts of by-products from coal combustion sent to on-site landfills in 2006, but now sent to off-site landfills, by the Indian River Power Plant.
- The total amount reported released on-site to air increased by 579,000 pounds (9%) for 2007, including hydrochloric acid reports from the Indian River Power Plant, increasing by 300,000 pounds (12%), and from the Edge Moor/Hay Road power plants, increasing by 180,000 pounds (13%) for 2007. These amounts are generally the result of increased power production at these facilities. Also, the reported on-site releases to air from the Premcor refinery increased by 113,000 pounds (26%). This was primarily because of the 136,000-pound increase in propylene reported released from the frozen earth storage unit, but partially offset by decreases in releases to air from other units in the refinery. The reported propylene release is the result of DNREC investigations that required the refinery to quantify releases from the storage unit. DNREC has issued an order to the refinery to replace the storage unit with alternative storage by May 1, 2010, and to close the frozen earth storage unit by December 15, 2010.
- The trend for on-site release of carcinogens continues its downward trend.
  - Reported releases of carcinogens (known, probable, and possible) fell by 150,000 pounds (39%) for 2007, a result of the above transfers off-site of carcinogens in ash from the Indian River Power Plant, and other smaller reductions.
  - Reported releases of vinyl acetate released to air fell by 15,000 pounds, 34% less than for 2006.
- The trend for on-site release of persistent bioaccumulative toxins (PBT's) is generally down, with some significant decreases:
  - Reports of all mercury released to air fell by 92 pounds (13%) for 2007.
    - Reports of elemental mercury released to air fell by 33 pounds (74%) to 11 pounds in 2007, following a decrease of 217 pounds (83%) for 2005-2006.

- Reports of mercury compounds released to air fell by 59 pounds (9%) compared to 2006.
- Reports of lead compounds released to land decreased to 14,605 pounds, down 15,546 pounds (52%) from the 30,151 pounds reported for 2006.

In summary, total on-site releases are down. On-site releases are down for water and land, but up for air. Additional detail regarding the changes noted above, as well as discussion related to specific facilities can be found in the facility profiles starting on page 18 of this report.

## 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 2007 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). See Appendix A for more information.

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 21 years of reported data. Most releases reported under TRI are also regulated through Federal and/or State permits.

This report contains detail from every 2007 TRI report and report revision from Delaware facilities filed with and received by DNREC as of November 1, 2008. Facilities must submit these reports to DNREC and EPA by July 1 of each year. Several types of analyses are presented in this report 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 on the next page for a list of reporting 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 37).

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 5 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 provides a list of covered industries reporting to the Delaware TRI program for 2007 along with corresponding three primary digits of the North American Industrial Classification System (NAICS) Codes. The 6-digit NAICS codes are used to identify the type of activities performed at a facility. Each industry sector represented by facilities reporting in Delaware for 2007 is described in Table 5 on page 16. The NAICS codes were used in TRI for the first time in 2006 to provide more discrimination between the various industry sectors reporting to TRI. They do not correspond directly to the Standard Industrial Classification (SIC) codes that were in use since the beginning of the program. Because of the diversity of industries reporting to TRI and the differences in code definitions, all the facilities that were in a particular SIC code may not remain together in a NAICS code.

**TABLE 1  
COVERED INDUSTRIES**

NAICS CODES	INDUSTRY
212	Mining
221	Utilities
311	Food Manufacturing
313	Textile Products Mfg.
324	Petroleum and Coal Products Mfg.
325	Chemical Manufacturing
326	Plastics and Rubber Manufacturing
331	Primary Metal Manufacturing
332	Fabricated Metal product Mfg.
333	Equipment Mfg.
334	Computer and Electronic Product Mfg.
335	Electrical Equipment Mfg.
336	Transportation Equipment Mfg.
337	Furniture Manufacturing
339	Misc. Manufacturing
424	Wholesalers, Non-Durable Goods
454	Non-Store Retailers
928	National Security

The standard Form R report (see Appendix M for Form) 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, Appendix N) 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 if:

**For Persistent Bioaccumulative Toxic (PBT) Chemicals except dioxins:**

1. The total annual release amount is zero, and
2. The annual sum of the energy recovery, recycle, and treatment amounts managed on- and off-site (PBT Reportable Amount) does not exceed 500 pounds, and
3. The total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds.
4. Dioxins and dioxin-like compounds in any amount may not be reported on Form A.

### **For non-PBT chemicals:**

1. The total annual reportable amount (including the sum of on- and off-site releases, disposal, treatment, recovery for recycle or energy) is less than 5,000 pounds, and
2. The total amount of on-site releases is less than 2,000 pounds, and
3. The total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds.

### **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 2-4. TRI facilities are primarily industrial/manufacturing facilities and facilities report releases and other waste management activity to TRI. TRI does not account for amounts of hazardous material stored at facilities. The DNREC program addressing inventories of material stored on site, the Hazardous Chemical Reporting program known as “Tier II” (also administered under EPCRA), includes a much greater number of facilities. Facilities report amounts and the location of chemicals stored on-site to Tier II, but not releases. For further information, see *Hazardous Chemical Reporting* in Appendix A.
- **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 2007, 7% of the reports representing 14% 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 DATA 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.

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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 year 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 37 for details on these reports.

- **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 3). The greatest impact to Delaware is the Electric Utilities (NAICS 221). 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.

- **SIC/NAICS**

Starting in the 2006 reporting year, four-digit facility SIC (Standard Industrial Classification) codes were phased out and replaced with six-digit NAICS (North American Industry Classification System) codes. Facilities should not be added or removed from TRI reporting because of this change. See page 3 for a table listing of the primary NAICS codes reported to the Delaware TRI program for 2007, and additional discussion about NAICS.

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

EPA has enacted a change to the TRI Form A reporting requirements. See pages 3 and 4 for a description of Form A and Form R and their reporting thresholds, and Appendices M and N for copies of the reporting forms. Because of the potential loss of data associated with the conversion of current Form R reports to Form A reports, DNREC continues to oppose this new rule, and we have been working with the reporting facilities to emphasize the importance of continuing to report on Form R. We have received the second year of reports under this new rule and see that Delaware had a decrease of eight Form A reports for 2006 and one Form A report for 2007.

• **Dioxin and Dioxin-Like Compounds for the 2008 Reporting Year**

There are seventeen distinct members of this chemical category listed under TRI. On May 10, 2007, the EPA Toxics Release Inventory Program issued a final rule expanding reporting requirements for the dioxin and dioxin-like compounds category. The final rule requires that, in addition to the total grams released for the entire category, facilities must report the quantity for each individual member on a new Form. EPA will then use the individual mass quantity data to calculate Toxic Equivalent Quantity (TEQ) values that will be made available to the public along with the mass data. The reporting requirements of the final rule apply to the 2008 reporting year beginning January 1, 2008, (for which reports are due July 1, 2009), and to subsequent reporting years.

## 2007 Data Summary

**TABLE 2  
2007 TRI DATA SUMMARY  
(IN POUNDS)**

	2007
No. of Facilities	69
No of Form As	44
No of Form Rs	294
No. of Chemicals	102
On-site Releases	
Air	6,920,246
Water	3,327,675
Land	406,188
Total On-Site Releases	10,654,109
Off-site Transfers	
POTW's	1,243,120
Recycle	8,179,183
Energy Recovery	4,910,600
Treatment	171,044
Disposal	7,144,231
Total Off-Site Transfers	21,648,179
On-site Waste Mgmt.	
Recycle	10,945,896
Energy Recovery	20,387,061
Treatment	39,879,302
Total On-Site Mgmt.	71,212,259
Total Waste	103,514,547

Statewide totals of reported 2007 TRI on-site releases, off-site transfers, and wastes managed on-site are shown in Table 2. On-site releases were lower by 4.4% (491,000 pounds) compared to 2006. Increased accuracy in reporting the data (water discharge monitoring) accounts for most of the decrease, while changes in raw materials, pollution controls, and production levels at other facilities account for both decreases and increases. A total of 69 facilities submitted 338 reports on 102 different chemicals. Of the 338 reports, 44 were submitted using Form A. Ammonia, benzo (g,h,i) perylene, polycyclic aromatic compounds, methanol, and zinc, lead, and manganese compounds all had greater than 10 reports. Releases to air, led by acid gases, constitute the largest portion of the total on-site releases. Nitrate compound releases to water made up the largest decrease.

### 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 **release to air** category includes stack releases collected by mechanical means such as vents, ducts, or pipes, and fugitive releases escaping collection, including equipment leaks and evaporation, and is released into the general atmosphere. **Releases to water** 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. Releases to water which contain TRI-reportable chemicals in runoff and storm water runoff are also reportable.

**Releases to land** are to (1) RCRA (Resource Conservation and Recovery Act) 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 27 sub-categories is provided for the purpose of classifying the types of final off-site waste management undertaken for each chemical.

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

## 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 on-site releases to air, water, and land reported to TRI in 2007 made up 10% of all TRI-reported waste amounts.

**FIGURE 1  
2007 ON SITE RELEASES**

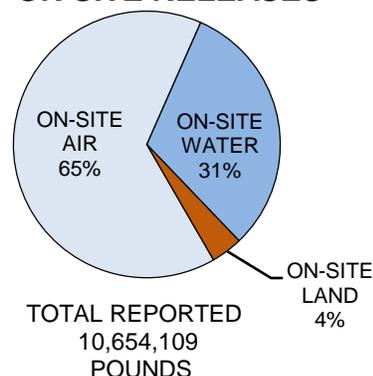
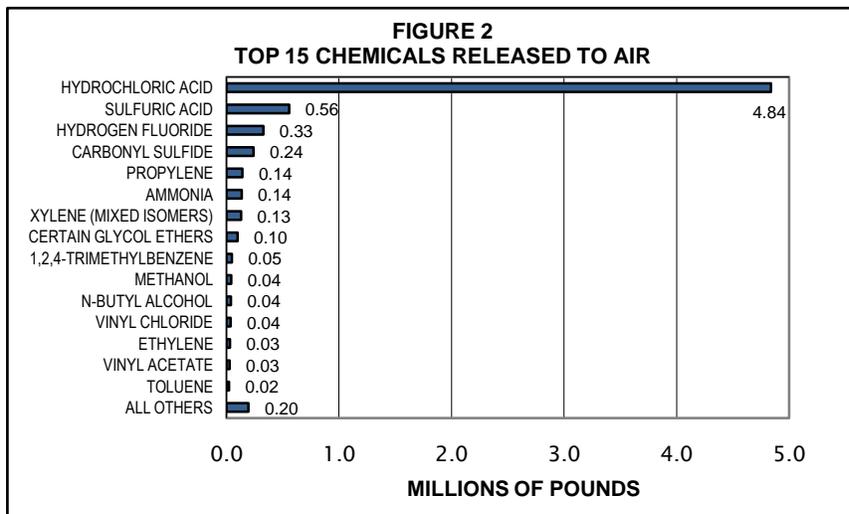


Figure 1 shows the on-site releases reported in the State. A large portion, 65% of the total on-site release, is to air. Additional analysis of on-site releases is presented in Figures 2, 3, and 4, which show the top 15 chemicals released to air, water, and land. Additional detail about on-site releases 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 all other 72 chemicals



reported as released in 2007 to the air. The remaining 15 chemicals had no releases to air. As in all the years following the inclusion of the 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 83% of all Delaware-reported TRI on-site releases to air. Two facilities reported carbonyl sulfide, which accounted for 3.5% of all releases to air. DuPont Edge Moor was the primary reporter of this chemical. The Premcor refinery, the only reporter of propylene, reported a significant increase in this release to air, as the refinery began to use new data to estimate the release amount from its Frozen Earth Storage system. Propylene accounted for 2.1% of all on-site releases to air for 2007. Ten facilities reported ammonia, which accounted for 2.0% of all on-site air releases. Ammonia is released from petrochemical, food processing, and chemical facilities. It is used in refrigeration systems and is a by-product of air pollution control activities, primarily at electric generating facilities. Xylene and certain glycol ethers are primarily used as solvents in paints for the automobile manufacturing industry. The Chrysler and General Motors automobile assembly facilities accounted for most of these releases. Eight facilities reported xylene, (1.9% of total on-site releases to air), and six facilities reported on certain glycol ethers (1.4% of on-site releases to air). Three facilities reported 1,2,4-trimethylbenzene releases to air, (0.7% of total release to air), with General Motors reporting 70% of the total release of this chemical.

## Releases to Water

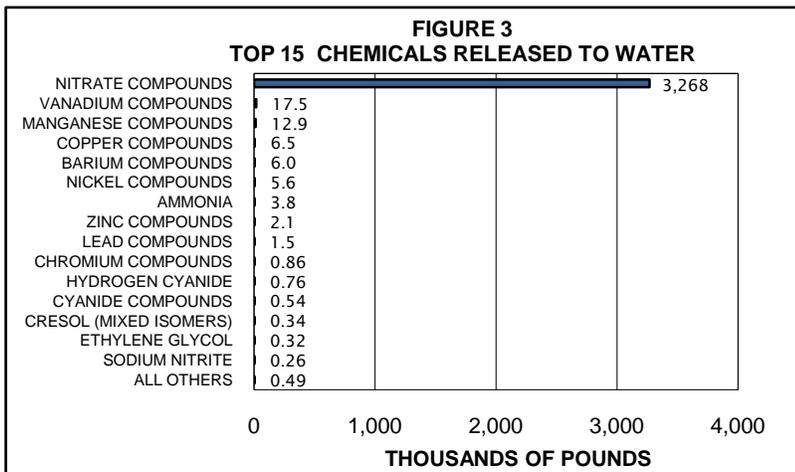
As can be seen in Figure 1 on page 7, releases to water were lower than releases to air. On-site releases to water make up 31% of the total on-site releases compared to 65% for air.

**TABLE 3**  
**TRI CHEMICALS RELEASED TO WATER BY WATER BODY**

WATER BODY	NO. OF FACILITIES	NO. OF REPORTS	RELEASE (IN POUNDS)
DELAWARE RIVER	8	72	2,374,922
DRAWYER CREEK TRIBUTARY	1	2	24
ISLAND CREEK	1	10	4,715
MCKEE RUN	1	3	0
MUDDY RUN	1	1	0
NAAMANS CREEK	1	6	341
NANTICOKE RIVER	1	12	460,267
RED LION CREEK	1	1	2
SANDY BRANCH	1	1	4
SAVANNAH DITCH	1	2	487,400
STATE TOTAL	17	110	3,327,675

Table 3 shows the amount of TRI chemicals released to each water body that received a TRI chemical. Figure 3 below shows the relative relationship of the top 15 TRI chemicals to the 15 other chemicals reported as released to water. This clearly shows the influence that nitrate compounds have on the total. The three reporters of nitrate compounds, Premcor, Perdue Georgetown, and INVISTA, reported a total decrease of 527,000 pounds. These were part of the releases to the Delaware River and the Nanticoke River. More details of these releases can be found in their facility profiles on pages 19, 21 and 22. Figure 3 shows that nitrate compounds were the top chemical released, (98% of the total release to water), followed by vanadium compounds (0.53%), and manganese compounds

**FIGURE 3**  
**TOP 15 CHEMICALS RELEASED TO WATER**



(0.39%). The remaining chemicals released to water were each less than 0.20% of total releases to water. The biological treatment of nitrogen-containing materials such as ammonia and animal waste is responsible for the formation of nitrate compounds. Premcor reported 2,321,000 pounds of nitrate compounds released to water. Premcor changed its sampling method for 2006 by taking more frequent samples during normal periods of operation. This change led to the discovery that the previous method was not as accurate, so the new, more accurate amounts were reported. In 2007, the frequency was increased further, to provide additional accuracy. Perdue Georgetown was the second largest reporter of nitrate compounds at 487,000 pounds, and INVISTA reported 460,000 pounds. Vanadium and manganese compounds are products of petroleum refining, coal and oil combustion, and ore processing. Vanadium compounds were released to water largely (95%) by the Premcor refinery. Manganese compounds were released to water primarily by DuPont Edge Moor and the Premcor refinery. DuPont reported 80% of the manganese compounds released to water, with Premcor contributing 15%. Metallic (antimony, barium, cobalt, chromium, copper, lead, manganese, mercury, nickel, vanadium, zinc) compounds are generally products of fuel combustion and ore refining. The DuPont Edge Moor, Edge Moor/Hay Road Power Plants, Indian River Power Plant, and the Premcor Refinery are the primary facilities releasing these compounds to water. Ammonia is the by-product of pollution control activities and waste treatment. Premcor reported 97% of the ammonia releases to water.

Not every report to a water body in Table 3 shows a release quantity. For example, of the 72 reports listing the Delaware River as their destination or possible destination watershed, only 54 reports show an actual release quantity to the Delaware River. The other 18 met the TRI reporting requirements and had the potential to release to the river and may have released chemicals to other media (air or land), but did not report any amounts actually released to the river. In Delaware, 37 of the 110 reports listing a water body as a possible destination for a release to water did not report any quantities actually released to that water body.

Table 4 shows the total amount of TRI chemicals for 2007 released to each basin in the State of Delaware. The Piedmont Basin contains lands that drain into the portion of the Delaware River above the City of New Castle, and the Inland Bays include lands that drain into the Indian River Bay/ Rehoboth Bay area, then to the Atlantic Ocean. All the receiving streams except the Nanticoke River eventually feed into the Delaware Bay. The total amount released to

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

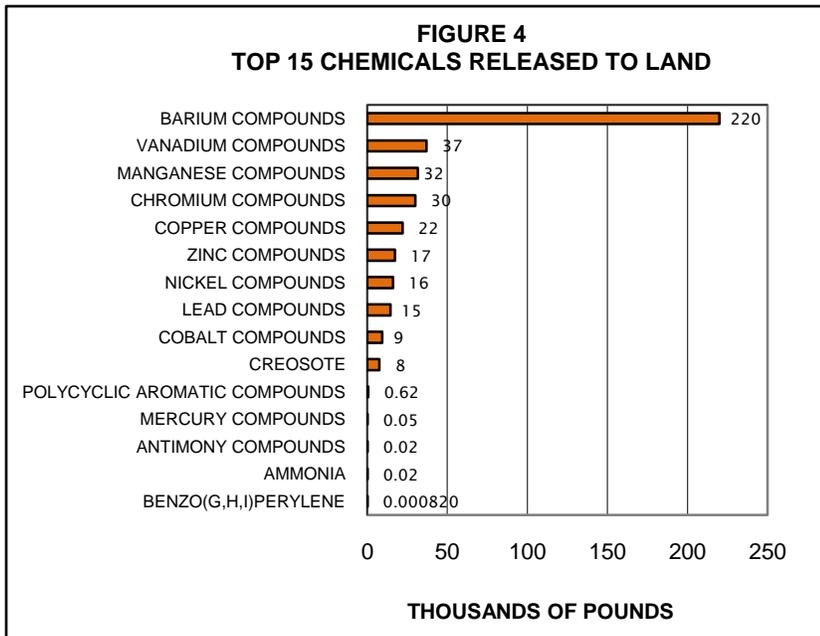
BASIN	RELEASE	
	(IN POUNDS)	PERCENT
CHESAPEAKE	460,267	13.8%
DELAWARE BAY	2,837,946	85.3%
INLAND BAYS	4,719	0.1%
PIEDMONT	24,743	0.7%
STATE TOTAL	3,327,675	100.0%

water decreased by 695,000 pounds in 2007, largely the result of decreases reported by Premcor and Perdue Georgetown. Additional discussion about these releases can be found in the Trend Analysis Section starting on page 44 and in the facility profiles starting on page 18.

### Releases to Land

Releases to land as shown in Figure 1 on page 7, are relatively small, amounting to 4% of total on-site releases. Figure 4 on page 10 shows the relative contribution for all 15 chemicals reported as being released to land. Nearly all the releases to land are metals and metal compounds except for the small quantities of ammonia, creosote, PACs, and benzo (g,h,i) perylene (0.00082 pounds). Most of the metals and metal compounds reported are formed during the combustion process from metal impurities that exist in coal or oil.

**FIGURE 4  
TOP 15 CHEMICALS RELEASED TO LAND**



Barium compounds now comprise 54% of the total releases to land, and all metal compounds compose 98.0% of all releases to land. Releases to land by the Indian River Power Plant and INVISTA facilities, generally the metallic compounds (antimony, barium, cobalt, chromium, copper, lead, manganese, mercury, nickel, vanadium, zinc) shown above account for 97.7% of the total releases to land. Additional discussion about these releases to land and their trends can be found in the Trend Analysis Section starting on page 44.

Descriptions about some of the hazards these chemicals may present 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. The amounts of chemical wastes transferred off-site are more than twice the amounts released on-site.

**FIGURE 5  
2007 OFF-SITE TRANSFERS**

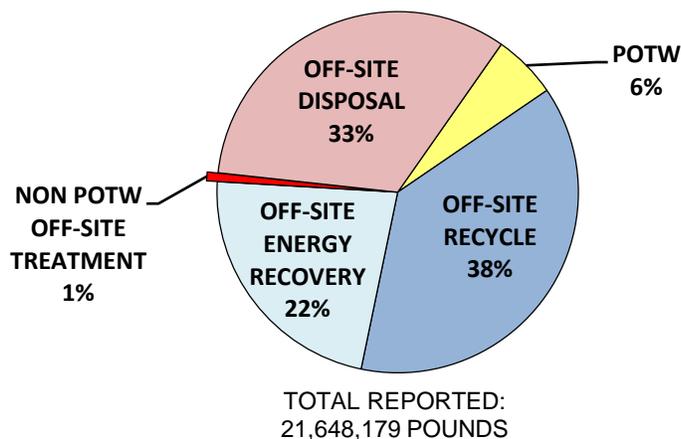


Figure 5 shows the relative portions transferred to the five off-site transfer categories. Table 2 on page 6 shows these amounts in tabular form, and Appendices D and G provide additional detail for transfers from each facility.

TRI chemicals in wastes are transported by various means from Delaware to their final destinations, many of which are out-of-state. TRI chemicals were sent to 23 states, some as far away as Wisconsin and Texas, and also to China and

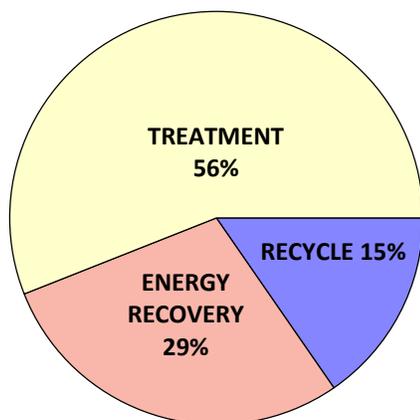
Canada, in addition to locations in Delaware. Over 92% of TRI chemicals in all wastes and over 98% of non-POTW wastes transferred off-site were sent to out-of-state locations for further processing and/or disposal.

While on-site releases account for 10% of total TRI waste, reported off-site transfers account for 21% of the total TRI wastes. See Figure 5 on page 10 for detail. Off-site transfer to recycle operations accounted for 38% of the amounts within the five categories in off-site transfers, and disposals accounted for 33% of the transfers. Eighty-one percent of the transfers to POTWs were to the City of Wilmington POTW, and all but 13,945 pounds of the 1,243,120 pounds treated at all POTWs were treated at Delaware POTW facilities. Ciba, Rohm & Haas, Air Liquide Medal, and Chrysler combined for 82% of the total TRI transfers to the Wilmington POTW.

See page 49 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

**FIGURE 6  
2007 ON-SITE WASTE MANAGEMENT**



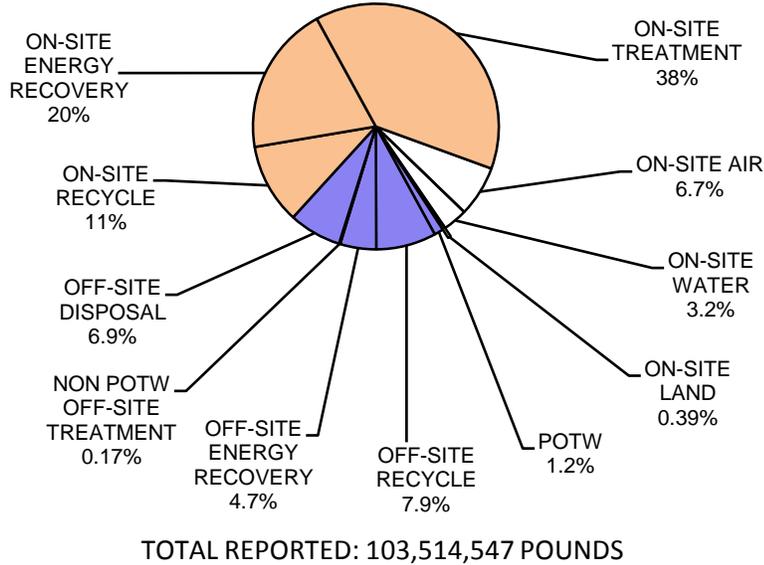
TOTAL REPORTED:  
71,212,259 POUNDS

On-Site Waste Management is the amount of waste that never leaves the facility site and is 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. The total amount of TRI chemicals managed on-site is 69% of the total TRI chemical waste. This amount is almost seven 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. Premcor, DuPont Edge Moor, Rohm & Haas, Medal, Dow Reichhold, and the Indian River Power Plant have the highest total amounts of on-site waste management.

## Total Waste

**FIGURE 7  
TOTAL 2007 TRI CHEMICAL MANAGEMENT**



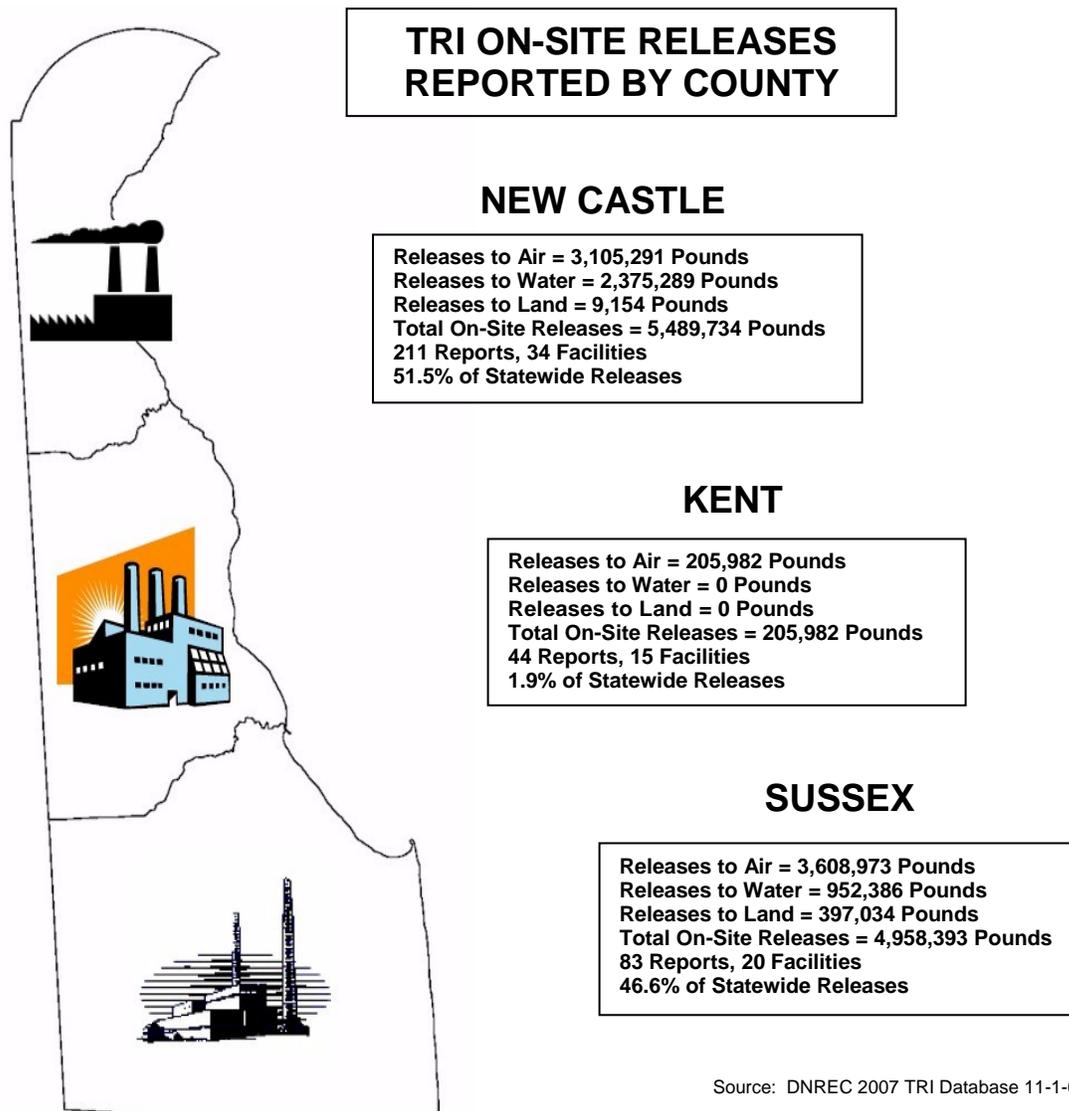
Total waste is the combined total of the on-site release, off-site transfer, and on-site waste management portions of the TRI chemical report. Figure 7 provides a perspective of the total TRI chemical waste picture in Delaware. About 10% of the total reported TRI waste is released on-site, 21% is transferred off-site, and 69% 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.

# 2007 Data Detail

## On-Site Releases by County

Figure 8 below provides basic on-site release information for each county in the State.

**FIGURE 8**

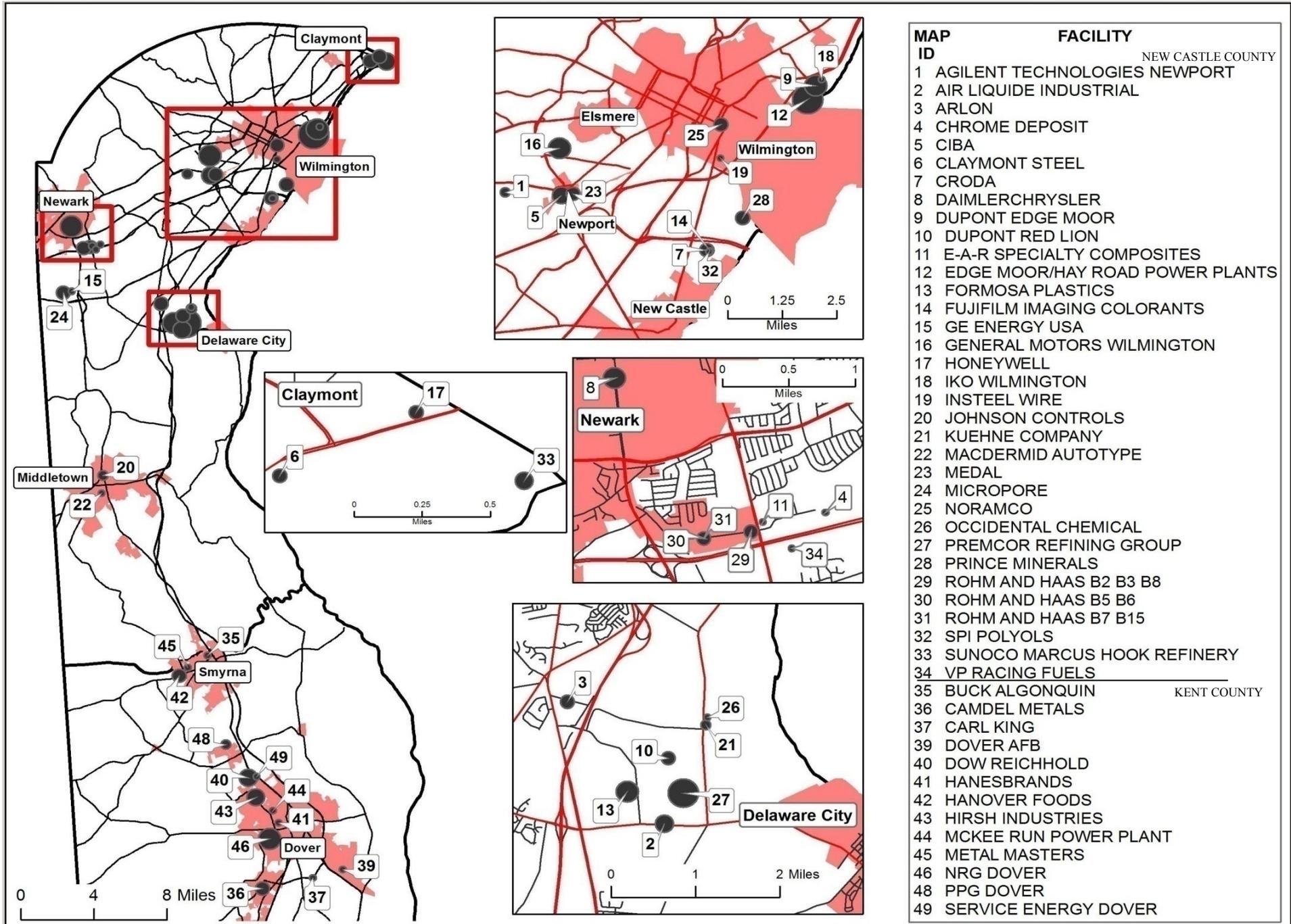


Source: DNREC 2007 TRI Database 11-1-08

## Facility Locations

Figure 9 on the following two 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. Facility contact information is in Appendix B.

FIGURE 9 TRI FACILITY LOCATOR MAP



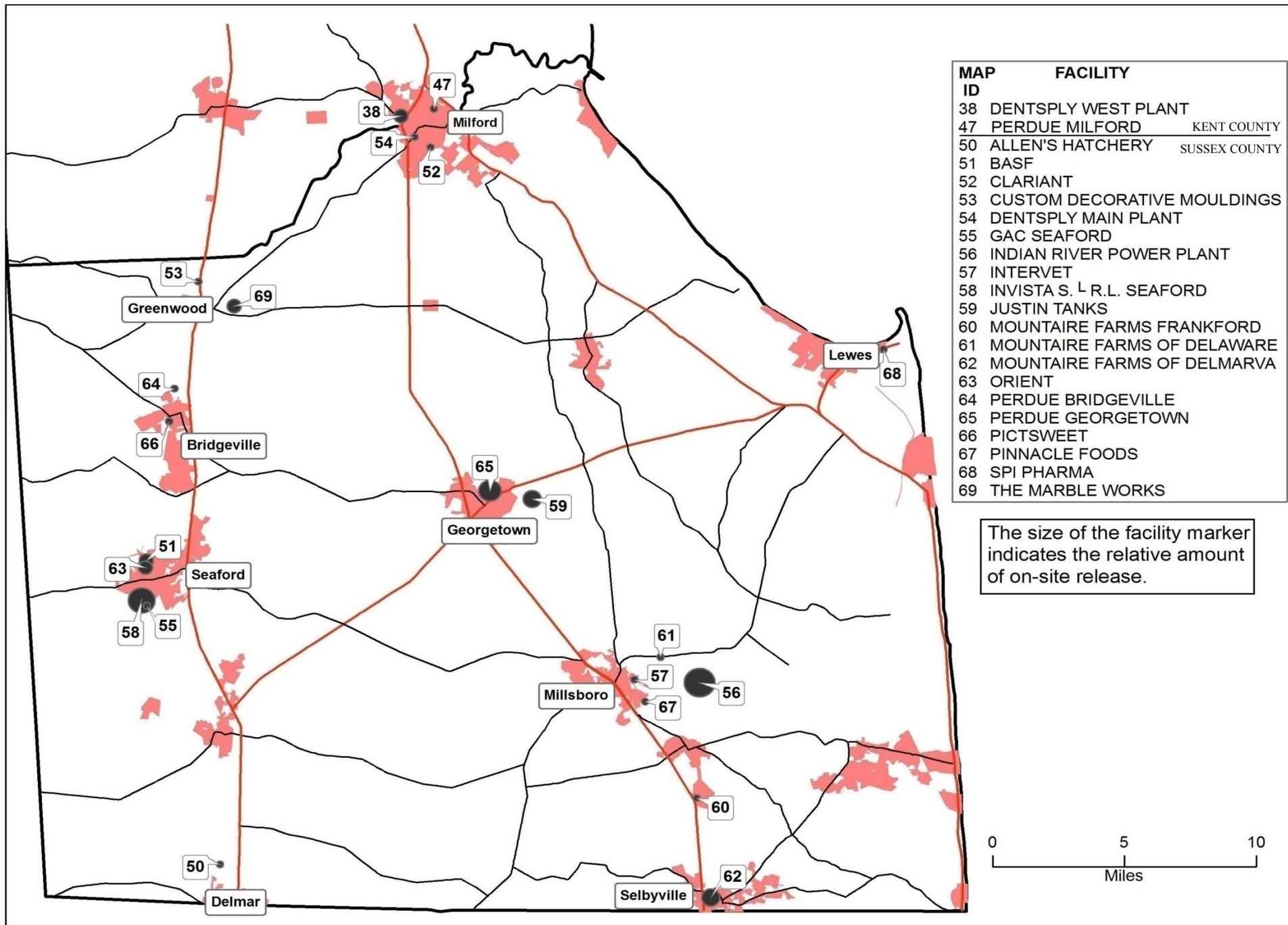


FIGURE 9 TRI FACILITY LOCATOR MAP

## NAICS Industry Groups

Table 5 provides a description of each North American Industrial Classification System (NAICS) industry group and the number of facilities in each group that reported in Delaware, along with the total reported amounts for each NAICS code. Starting with the 2006 reporting year, NAICS codes replaced the SIC (Standard Industrial Classification) codes. This table also provides on-site releases, off-site transfers, and wastes managed on-site for each group.

**TABLE 5**  
**2007 TRI DATA BY PRIMARY NAICS GROUP**

(in pounds)

NAICS CODE	INDUSTRY GROUP	NUMBER OF REPORTS	NUMBER OF FACILITIES	FORM A	FORM R	ON-SITE RELEASE	OFF SITE TRANSFERS	ON-SITE WASTE MGMT.
212	Mining	4	1	0	4	1,448	0	0
221	Utilities	43	4	1	42	5,617,410	779,625	1,330,374
311	Food Manufacturing	33	10	20	13	511,712	5,017	64,000
313	Textile Products Mfg.	5	2	1	4	4,187	876,369	5,118,558
324	Petroleum & Coal Products Mfg.	55	5	6	49	2,928,655	427,227	36,743,618
325	Chemical Manufacturing	119	23	10	109	1,181,839	12,531,890	23,544,375
326	Plastics & Rubber Mfg.	11	6	1	10	26,556	210,685	4,237,024
331	Primary Metal Manufacturing	13	3	0	13	15,878	2,754,618	0
332	Fabricated Metal product Mfg.	5	3	0	5	6	369,644	1,200
333	Equipment Mfg.	1	1	0	1	7,800	0	110
334	Computer and Electronic Product Mfg.	1	1	0	1	1	398	0
335	Electrical Equipment Mfg.	2	1	0	2	480	2,928,068	0
336	Transportation Equipment Mfg.	31	2	0	31	338,159	613,933	173,000
337	Furniture Manufacturing	1	1	0	1	12,481	0	0
339	Misc. Manufacturing	7	3	0	7	7,458	150,705	0
424	Wholesalers, Non-Durable Goods	2	1	2	0	0	0	0
454	Non-Store Retailers	3	1	3	0	0	0	0
928	National Security	2	1	0	2	41	0	0
	<b>TOTAL</b>	<b>338</b>	<b>69</b>	<b>44</b>	<b>294</b>	<b>10,654,109</b>	<b>21,648,179</b>	<b>71,212,259</b>

**FIGURE 10**  
**TOP 5 NAICS INDUSTRIES FOR 2007**  
**PERCENT ON-SITE RELEASE**

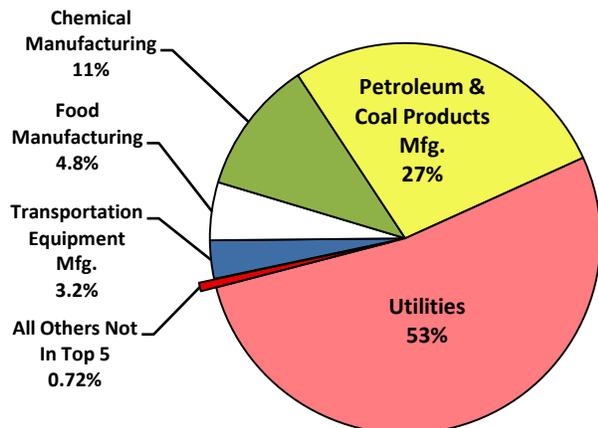


Figure 10 shows the percent contribution of each of the top five NAICS groups and all others not in the top five compared to the reported total on-site releases. Three of these top five - NAICS groups 221 (Utilities), 324 (Petroleum and Coal Products Mfg.), and 325 (Chemical Mfg.) combine for 91% of the total on-site releases within the State. Facilities not in the top five NAICS industry groups reported contributions of only 76,335 pounds on-site, or 0.72% of the on-site release total.

## 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 10,654,237 pounds that were reported released on-site by all 69 facilities Statewide, the top 15 facilities accounted for 10,536,702 pounds, or 98.9% of the total on-site releases.

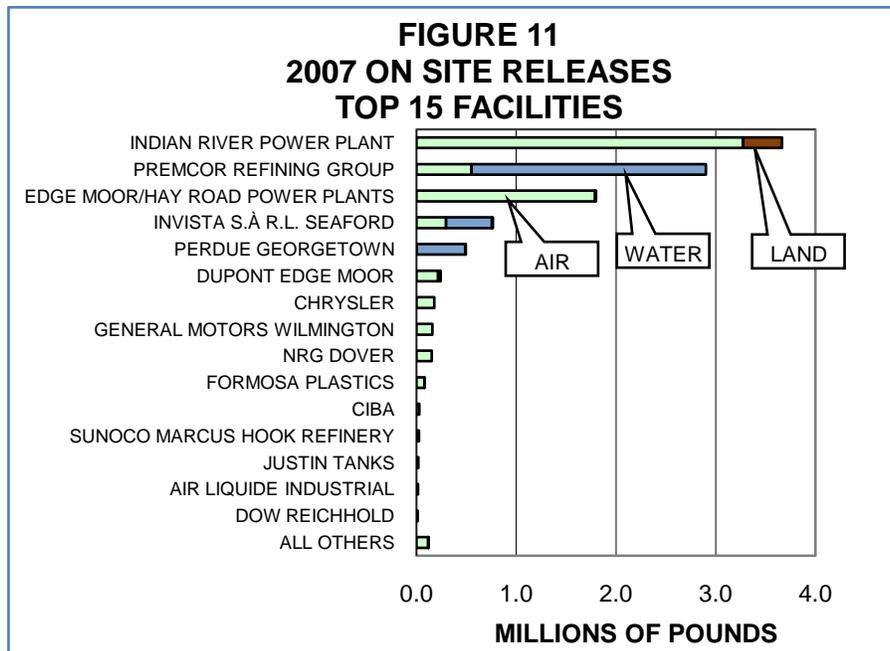


Table 6 shows the 2007 ranking of the top 15 facilities along with their 2006 ranking and the reported amounts of on-site releases for both years. Releases to the environment because of remedial actions, accidents, or one-time catastrophic events are included in these values. The percent change in total on-site releases for each of the top 15 facilities from 2006 to 2007 is

**TABLE 6  
TOP 15 FACILITIES 2006 AND 2007 RANKING BY ON-SITE RELEASE  
(in pounds)**

2006 RANK	2007 RANK	FACILITY	2007			2007 ON-SITE RELEASE	2006 ON-SITE RELEASE	2006 TO 2007 CHANGE IN RELEASES	
			TOTAL AIR	TOTAL WATER	TOTAL LAND				
1	1	INDIAN RIVER POWER PLANT	3,271,238	4,715	388,202	3,664,155	3,722,465	-58,310	-2%
2	2	PREMCO REFINING GROUP	551,985	2,350,514	0	2,902,499	3,315,541	-413,043	-12%
3	3	EDGE MOOR/HAY ROAD POWER PLANTS	1,792,016	8,226	0	1,800,241	1,591,913	208,328	13%
5	4	INVISTA S.À R.L. SEAFORD	295,011	460,267	8,816	764,094	685,691	78,402	11%
4	5	PERDUE GEORGETOWN	2,500	487,400	16	489,916	707,590	-217,674	-31%
6	6	DUPONT EDGE MOOR	217,854	16,039	8,213	242,106	304,561	-62,454	-20.5%
7	7	CHRYSLER	178,136	0	0	178,136	177,320	816	0%
8	8	GENERAL MOTORS WILMINGTON	160,023	0	0	160,023	133,218	26,805	20%
9	9	NRG DOVER	153,012	0	0	153,012	109,013	43,999	40%
10	10	FORMOSA PLASTICS	79,629	3	0	79,632	102,478	-22,846	-22%
13	11	CIBA	29,119	0	0	29,119	29,856	-737	-2.5%
11	12	SUNOCO MARCUS HOOK REFINERY	26,156	0	0	26,156	85,737	-59,581	-69%
16	13	JUSTIN TANKS	18,400	0	0	18,400	12,489	5,911	47%
15	14	AIR LIQUIDE INDUSTRIAL	15,731	0	0	15,731	12,572	3,159	25%
12	15	DOW REICHHOLD	13,355	0	0	13,355	33,368	-20,013	-60%
		<b>ALL OTHERS</b>	<b>116,083</b>	<b>511</b>	<b>941</b>	<b>117,535</b>	<b>114,880</b>	<b>2,655</b>	<b>2.3%</b>
<b>TOP 15</b>			<b>6,804,163</b>	<b>3,327,164</b>	<b>405,247</b>	<b>10,536,574</b>	<b>11,023,812</b>	<b>-487,238</b>	<b>-4.4%</b>
<b>STATE TOTALS, ALL FACILITIES</b>			<b>6,920,246</b>	<b>3,327,675</b>	<b>406,188</b>	<b>10,654,109</b>	<b>11,145,467</b>	<b>-491,358</b>	<b>-4.4%</b>

Source: 2006 and 2007 DNREC TRI Databases, November 2008

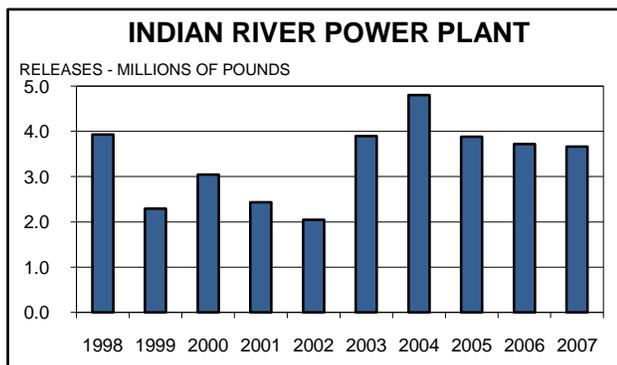
also shown, and some of these changes are significant. Changes at the facility, such as the way releases are estimated, how waste is managed, changes in raw materials or processing methods, or installation of new or improved production equipment possibly used to limit or eliminate releases of all or 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 2007 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 are different**. Appendix C provides a complete list of 2007 on-site release data grouped by facility and chemical.

The DNREC TRI program visits select 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. Eight visits were conducted during the 2007 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** - This 784 megawatt facility, located near Millsboro, produces electricity, primarily from the combustion of coal. Oil- and coal-fired power plants were required to report under TRI for the first time for 1998. For the fourth year in a row, Indian River has reduced its TRI emissions.



The Indian River Plant reported on 18 TRI chemicals for 2007. Ten of these were metal compounds, three were non-metallic PBT's, three were acid gases and the remaining two were ammonia and naphthalene. All the compounds except ammonia are formed during the combustion process as a result of impurities within the coal and oil. Ammonia is a product of the emissions reduction process.

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

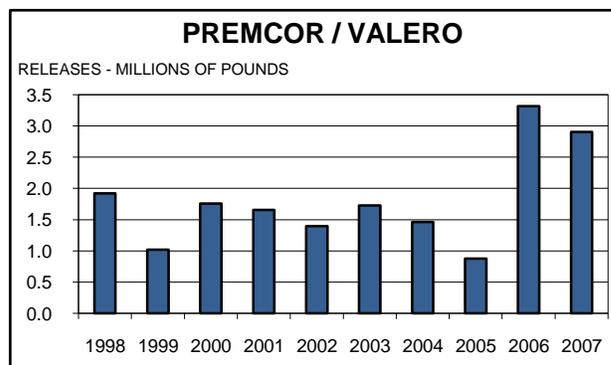
entire year, and this resulted in significantly higher release amounts for hydrochloric acid gas from 2003 up to 2005. In 2005, coal analysis and emission factors were used to calculate the hydrochloric acid gas. This gave a more representative total release for the year because it represents all the data for the year, not just the data collected during a single stack test run on regular coal. Acid gases, such as hydrochloric acid, sulfuric acid, and hydrofluoric acid, accounted for 88% of the facility's on-site releases in 2007.

Coal analysis data, emissions data, and emissions factors are used as a basis for calculating releases. Coal consumption decreased 16% in 2006 and increased 2.1% in 2007 based on coal burn records. In 2005, the on-site releases decreased 19% due to the Powder River Basin (PRB) coal and other lower sulfur coals the Station was test burning. PRB coal is lower in sulfur and chlorine, which produces less sulfuric and hydrochloric acid gases. Although the facility did increase coal consumption by more than 2% in 2007 and the net acid gases increased, Indian River burned lower sulfur bituminous coal in 2007, which, along with increased off-site transfers of ash, contributed to an overall lower TRI on-site release amount of 1.6%. Additional amounts of some metallic compounds, particularly barium compounds, are now transferred off-site for disposal, and this has reduced the amount of the facility on-site release to land by about 353,000 pounds.

With the increased off-site transfer of ash-containing metallic compounds in 2007, on-site mercury releases decreased by 34 pounds (17%) for 2007. Mercury total on-site releases were down from 197 pounds in 2006 to 163 pounds in 2007. Total mercury on-site releases and off-site disposal was up 19 pounds (10%) for 2007. Starting in 2004, coal analysis data and emissions data were used to calculate mercury and other metal compound releases. Metal compounds, formed as a result of impurities in the coal, are largely captured (96%) in the fly ash and bottom ash and sent to an on-site landfill or off-site beneficial use applications. The metallic compounds accounted for 11% of the facility on-site releases in 2007. Ammonia is released in the power production process solely from the use of urea, a pollution control agent used in Selective Non-Catalytic Reduction technology for reducing nitrogen oxides (NOx) by limiting the formation of oxides of nitrogen in the atmosphere. Ammonia release decreased 52% in 2007, the result of system optimization and the largest unit being in outage during the Ozone Season. Naphthalene is in the oil combusted at the facility.

**Rank #2 - Premcor/Valero** - The Valero Delaware City Refinery, owned and operated by The Premcor Refining Group Inc. (Premcor) refines crude oil into automobile gasoline, home heating oil, and a variety of other petroleum products. Premcor purchased the facility from Motiva Enterprises, L.L.C. on May 1, 2004, and subsequently became a subsidiary of Valero Energy Corporation.

Premcor reported on 43 TRI chemicals for 2007. The total facility-reported on-site releases decreased by 413,043 pounds in 2007, primarily the result of a 423,855-pound decrease in reported releases to water for nitrate compounds. The decrease in nitrate compounds reflects the use of new analytical data. Reported releases of propylene from the Frozen Earth Storage unit (see Cover Picture) increased by



approximately 131,000 pounds. This increase is based on new test methodology for quantifying fugitive emissions. DNREC issued a Conciliation Order on September 26, 2008 requiring Premcor to take corrective action at the Frozen Earth Storage unit to cease emissions related to the operation of this unit. Alternate storage must be provided by May 1, 2010 and the unit must be closed by December 15, 2010.

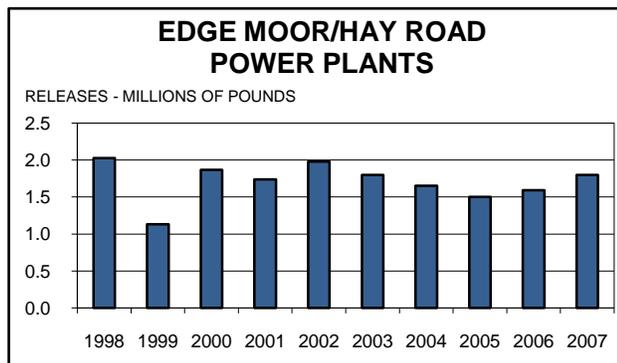
Releases of cresol and phenol to water decreased by 56,351 and 45,616 pounds, respectively, due to use of new analytical data. Releases of n-hexane to air decreased by 43,288 pounds due to an improved calculation methodology. Sulfuric acid releases to air increased by 47,465 pounds in 2007, primarily due to use of new stack test data for the power plant boilers and combustion turbines. On a historic basis, sulfuric acid releases have declined 22% since 2003, due primarily to the addition of wet gas scrubbers (WGS) at the Fluid Cat Cracker and Fluid Coker units. Release of hydrochloric acid has decreased by over 99% since 2003, the result of installing a hydrochloric acid wet gas scrubber (WGS) on the Continuous Catalytic Reformer Unit. Releases of MTBE continue to decline due to the phase-out of MTBE as an additive in gasoline. MTBE fell below the TRI reporting threshold in 2007 and was not reported.

The above changes, along with other smaller increases and decreases, resulted in a net decrease of 413,045 pounds (12%) in reported on-site releases for the facility in 2007 compared to 2006.

Total on-site waste management amounts increased by 7.8 million pounds in 2007. The majority of the increase is due to new feed streams to the Sulfur Recovery Unit (SRU) from the Fluid Catalytic Cracking Unit and Coker wet gas scrubbers and from the Sour Water Stripper. The increase in SRU processing rates resulted in increased treatment of carbon disulfide and carbonyl sulfide in the SRU and increased energy recovery of ammonia at the SRU.

Off-site transfers increased by over 200,000 pounds in 2007. The increase is primarily due to new analytical data for nickel and vanadium compounds in gasifier slag sent off-site for recycle or disposal.

**Rank #3 - Edge Moor/Hay Road Power Plants** - Oil- and coal-fired power plants were required to report under TRI for the first time for 1998. 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 18 TRI chemicals for 2007. These facilities reported three acid gases, nine metal compounds, four non-metallic PBT's, nitrate compounds, and ammonia.

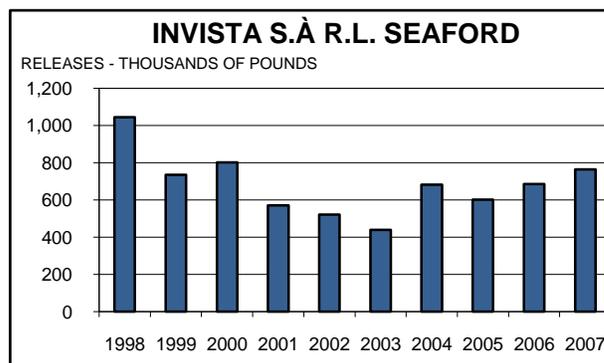
Electricity production at the facilities increased 28.6% in 2007. Also, because of a change in the types of fuel used (an increase in #6 oil and coal, and a decrease in #2 oil), overall on-site releases increased

13% compared to 2006 and are now at 89% of the facility's 1998 level. Acid gas emissions -- hydrochloric acid, hydrogen fluoride and sulfuric acid -- accounted for 97.5% of on-site

releases. The increase in on-site releases for hydrochloric, hydrogen fluoride, and sulfuric acid gases were the result of an increase in coal and oil use due to increased electricity generation. 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 94% of the metal compounds was largely captured in the fly ash and bottom ash which was disposed of in an off-site landfill. A portion of the ash is re-used in an encapsulated form by various vendors. The remaining 6% of metals not captured in ash was released to on-site air and water, and accounted for 1.3% of the facility total on-site releases.

**Rank #4 - INVISTA S.À R.L. Seaford** - This facility was the first plant worldwide to produce spun nylon fibers, beginning operations in 1939. INVISTA's Seaford site is located on approximately 648 acres adjacent to the Seaford Golf and Country Club and the Nanticoke River.

Principal products now produced at INVISTA's Seaford site include Bulk Continuous Filament (BCF) nylon yarn for carpets (marketed under globally-known brands such as STAINMASTER® carpet and ANTRON® carpet fiber), staple fiber for U.S. military combat uniforms and chemical-resistant clothing for the military, staple fiber for tennis balls, pool table coverings, and "gaming" felts, and staple fiber for conveyor belts used in paper manufacturing.

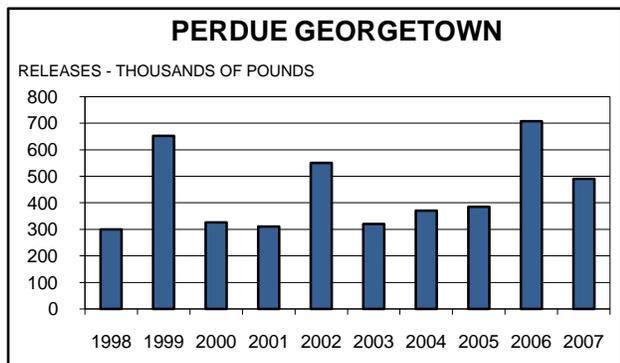


The INVISTA Seaford facility reported on 14 TRI chemicals for 2007. Total reported on-site releases increased 78,402 pounds (10%) from reporting year 2006. Because of new emission factors derived from emissions testing in 2007, the reported emissions of hydrochloric acid aerosols in 2007 are 10% higher (20,000 lbs) than reported emissions in 2006, which were based on prior emissions testing. Of the 14 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 facility produces hydrochloric and sulfuric acid aerosols, which are released to air from the power plant stack. The coal contains small amounts of chlorine and sulfur-containing compounds that convert to acid gases in the combustion process. The facility's overall fuel usage in 2007 remained unchanged from the 2006 reporting year. However, sulfuric acid aerosol releases decreased by 20% (19,000 lbs), based on acquisition of lower sulfur content coal as compared with the 2006 reporting year.

Nitrate compounds are produced during biological treatment of nylon process wastewater. Nitrate compounds releases increased by approximately 21% (80,000 lbs), due to an increase in the volume of water being treated by and discharged from the site's wastewater treatment facility. The increased discharge was the result of an increase in the volume of water diverted to the facility's treatment facility due to stormwater outfall diversions and process changes.

**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 four TRI chemicals for 2007. Over 99% of the on-site releases were nitrate compounds.

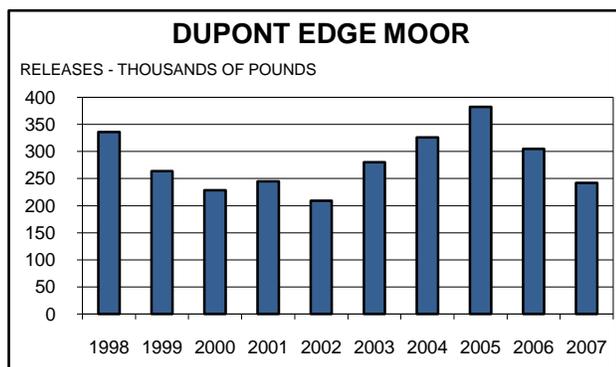
The Perdue wastewater treatment plant digests ammonia and production waste from the poultry processing plant's wastewater stream and converts some of these wastes to nitrate compounds.



These reported on-site release amounts have varied in recent years because of changes in plant operation and in the way the amount of nitrate compounds releases are estimated. In 2003, nitrate compound on-site releases decreased by 42%, the result of additional water recycle projects. In 2004 and 2005, production increases accounted for the increases. In 2006, the reported amount increased as a result of optimization testing for the new NPDES permit. In 2007, the nitrate compound

amount reported at the plant significantly decreased as a result of reduced nitrate concentrations, reduced wastewater amounts, and application of a more accurate factor for nitrate releases. The reported nitrate compound amount for 2007 declined by 27% compared to 2006. Total on-site releases of 489,916 pounds reported for 2007 decreased by 217,674 pounds compared to the total of 707,590 pounds for 2006.

**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 22 TRI chemicals for 2007. On-site releases declined by 21% compared to 2006. While production was slightly lower in 2007, on-site release of carbonyl sulfide decreased by 15%. This decrease can be attributed to an optimized start-up/shut-down schedule. Carbonyl sulfide is a gas by-product of the titanium dioxide production process, and is produced from the use of sulfur-bearing coke in the process of manufacturing the titanium dioxide from titanium-rich ores. Also, the

reported on-site release to water for manganese compounds decreased by 72% from 2006 levels, which was the result of ore blend changes, natural process variability, and on-site process changes aimed at redirecting these compounds to off-site transfers. As a result, the off-site transfer of manganese compounds increased by 23%.

Of the 22 reported TRI chemicals, carbonyl sulfide accounted for 86% of their total reported on-site release amounts, and manganese compounds accounted for 4.3%.

Dioxins and dioxin-like compounds are also created as a result of ore processing. Over 99.97% (48.6571 pounds out of 48.6684 pounds generated) of the dioxins generated are contained within the solid material sent to an out-of-state landfill facility.

In 2002, DuPont announced a goal to reduce the generation rate of dioxin and dioxin-like compounds by 90% by year-end 2007, compared with 2001 levels. DuPont Edge Moor

The term “dioxins” is used in this report to indicate a group of 17 dioxins and dioxin-like compounds (including furans) reportable to TRI, out of a family of several hundred dioxins and dioxin-like compounds. Among the “dioxins” included in TRI reports is the very toxic 2,3,7,8-TCDD dioxin, which is the cogener generally of most concern, and most commonly covered by the popular news media. Toxicity levels of these 17 compounds vary greatly, and some compounds in this group have toxicity levels **1,000 times less** than the 2,3,7,8-TCDD dioxin. The great majority (97%) of the “dioxins” reported by DuPont Edge Moor is a furan of this lower toxicity level. All TRI “dioxins” are reportable in grams without regard to toxicity level. However, starting in reports for 2008, dioxins will be reported on a separate form, and the results will be available both on a weight and Toxic Equivalent Quantity (TEQ) basis. See page 5 for more detail.

completed a major capital construction project in 2006 to provide these reductions, with the expectation that DuPont would meet its 90 percent reduction goal for “dioxins and dioxin-like compounds” in the coming years. Through 2007, DuPont reduced by more than 99 percent the on-site release of dioxin and dioxin-like compounds from 2001 levels, and reduced off-site transfer for disposal from the Edge Moor plant by 71% by implementing the capital project and by making process modifications.

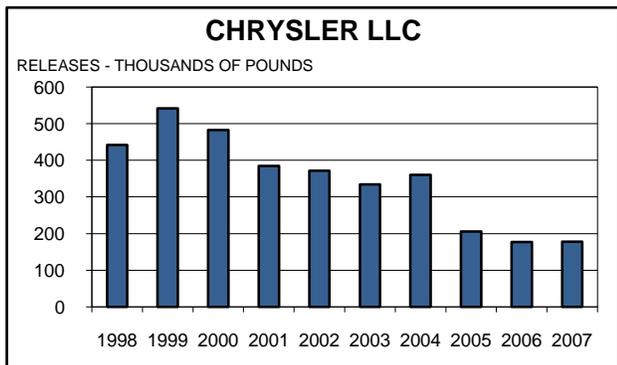
Although production of dioxins has been reduced since 2001, on-site release of dioxins did increase in 2007 compared to 2006. Reported on-site release of dioxins increased by 0.0097 pounds (4.39 grams). This increase was due to storm water sample analysis, which accounted for 95% of the total water discharges. The storm water sample analysis was required as a part of the site’s NPDES permit renewal. Storm water was not sampled in 2006 and hence this number was not accounted for in 2006. The majority of “dioxins in storm water” reported by DuPont Edge Moor is a furan of lower toxicity level.

DuPont Edge Moor also reported Creosote emissions in 2007. Creosote emissions were

reported because the site exceeded the otherwise use threshold when approximately 1000 railroad ties that were treated with creosote were replaced in 2007.

**Rank #7 - Chrysler LLC Newark Assembly Plant** - Chrysler assembles the Dodge Durango and Chrysler Aspen SUV for distribution to dealers. Chrysler reported on 17 TRI chemicals for 2007. 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



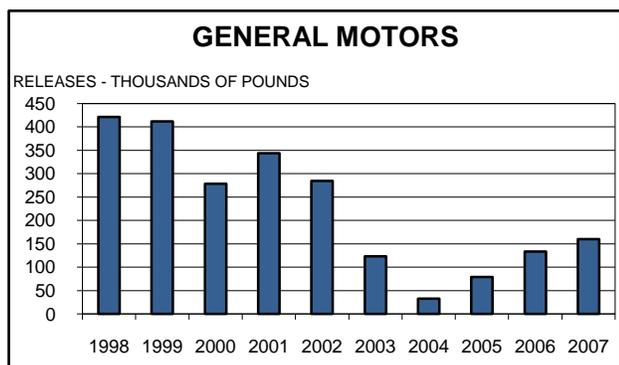
elsewhere in the facility. In total, these chemicals accounted for approximately 87% of the Chrysler on-site releases in 2007.

Chrysler accounted for about 83% of certain glycol ethers and 15% of all xylene releases in the state in 2007.

This facility had a production decrease of 12% in 2007, but the on-site releases remained relatively unchanged. Some

materials are incorporated into the vehicles themselves and increase and decrease with production; however, other material usages, even with continuing pollution prevention activities, increase because of the additional solvent usage required in the paint process for purging lines due to more system shutdowns and startups due to production interruptions.

**Rank #8 - General Motors Wilmington Assembly Plant** - General Motors assembles Pontiac Solstice and Saturn Sky automobiles for distribution to dealers; the Opel GT for export to Europe, and the Daewoo G2X for export to Korea.



GM reported on 14 TRI chemicals for 2007. Many of these are solvents (certain glycol ethers, n-butyl alcohol, xylene) used in paints or for parts cleaning, while others are materials that are incorporated into the cars themselves, such as ethylene glycol (antifreeze). Xylene, certain glycol ethers, and 1,2,4-trimethylbenzene are paint solvents used in both the base and top coats and accounted for 85% of GM on-site releases in 2007.

General Motors accounted for about 5% of certain glycol ethers, 70% of 1,2,4-trimethylbenzene, and 76% of all xylene releases in the state in 2007.

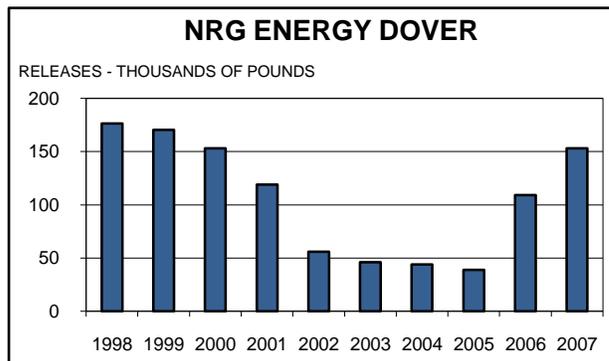
Production for 2007 was 125% of the 2006 level, and on-site releases were 120% of the 2006 amounts. During 2004-5, the plant underwent a significant model change-over and production was curtailed, but some TRI chemicals remained in use for non-production cleaning and other changeover activities. In 2006, production re-started and releases of TRI chemicals increased in proportion to production, while non-production releases continued at a lower level.

**Rank #9 - NRG Dover Plant** - Oil- and coal-fired power plants were required to report under TRI for the first time for 1998. This facility, located on the West side of Dover, produces electricity primarily from the combustion of coal.

The NRG Dover Plant reported on four TRI chemicals for 2007. Two of these were acid gases - hydrochloric acid and sulfuric acid - formed during the combustion process. Acid gas releases accounted for over 99.9% of the facility on-site releases. Small amounts of metal compounds are also formed during combustion because of metallic impurities in the coal and

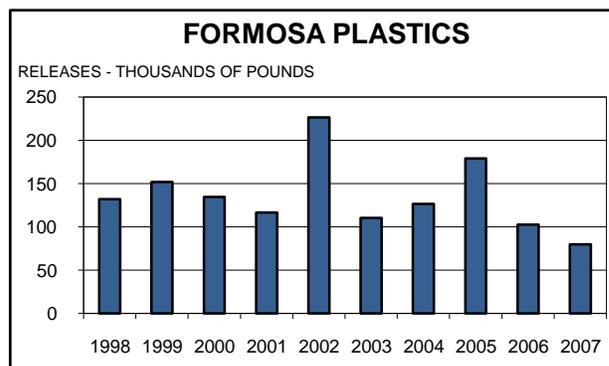
are largely (97%) captured in the fly ash and bottom ash. The ash is sent to an off-site facility for use in cement, and also to a landfill for disposal.

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 that 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. Although electricity production declined 24% in 2006, estimated release of hydrochloric acid increased to 100,000 pounds, a 213% increase over 2005. This increase was because of a change in coal suppliers in 2006. Analyses showed the new coal to have a higher chlorine content than previously fired coals. In 2007, electricity production increased 39%, and on-site releases increased in proportion to the increase in electricity production.



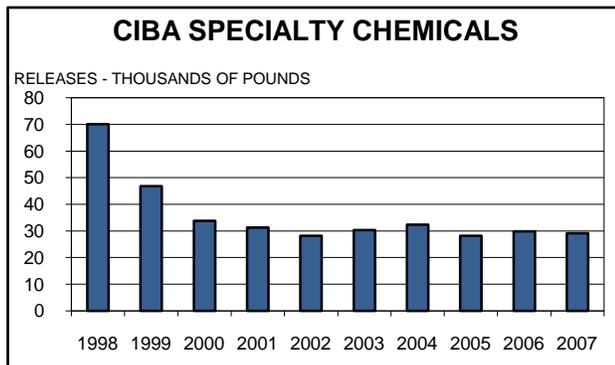
**Rank #10 - Formosa Plastics** - Formosa Plastics, located in the Delaware City Industrial complex, produces polyvinyl chloride (PVC) resin for bulk sale to other industries that produce PVC based products, such as containers, flooring, carpet backing, upholstery, toys, and gloves.

Formosa reported 3 TRI chemicals for 2007. Vinyl acetate accounted for 35% of Formosa's on-site releases for 2007. Vinyl acetate is also a raw material used in certain products and is released through the drying process. Vinyl chloride monomer (VCM) accounted for 47% of the facility 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. Ammonia is also used in several of Formosa's products and is released during the PVC drying process. Ammonia accounted for 18% of Formosa's on-site releases in 2007.



Formosa started using a material balance 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 #11 - 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 2007. All on-site releases were to air.

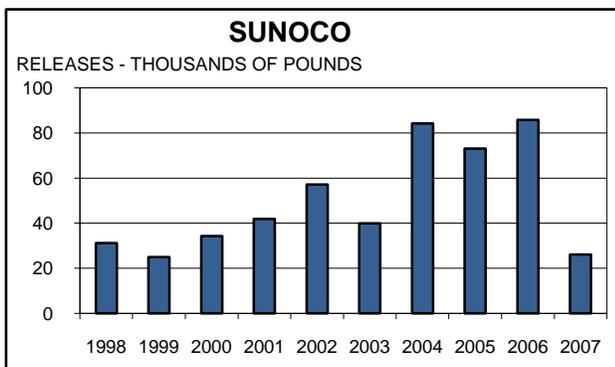


Methanol was the predominant chemical released on-site in 2007 (93% of total on-site releases). Methanol is used as a reactant and a solvent in the pigment manufacturing process. A significant portion of methanol used at the facility is recycled.

Total pigment production was up slightly in 2007, but overall on-site releases decreased 2.5% because of a different pigment assortment manufactured. Ciba has expanded and modernized their facility since

1998. Although facility capacity has more than doubled since 1998, they have achieved a 58% reduction in on-site releases during this time. They have also reduced transfers of methanol to off-site water treatment by 78% since 1998, including a 124,000-pound reduction in 2007.

**Rank #12 - Sunoco Refining and Marketing** – Although Sunoco is located in Marcus Hook, PA, part of the facility extends into the North Claymont area of Delaware. The Marcus Hook facility can process 180,000 barrels a day of crude oil into fuels – including gasoline, aviation fuel, 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 2007. Ethylene and ethylene oxide accounted for 78% of the total on-site

Delaware releases for 2007, and smaller amounts of benzene and xylene were also reported as released to air from tanks in Delaware.

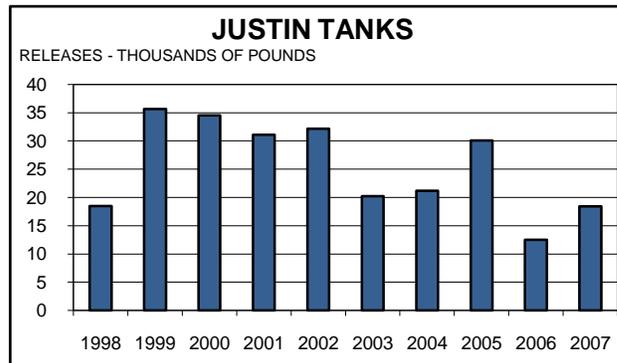
For 2007, on-site releases decreased by 59,581 pounds (69%) and included reductions in all four chemicals reported. Ethylene decreased the most at 56,115 pounds (73%), followed by ethylene oxide at 2,680 pounds (67%). The decrease in ethylene and ethylene oxide releases were a result of new emissions data from recent stack tests.

**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.

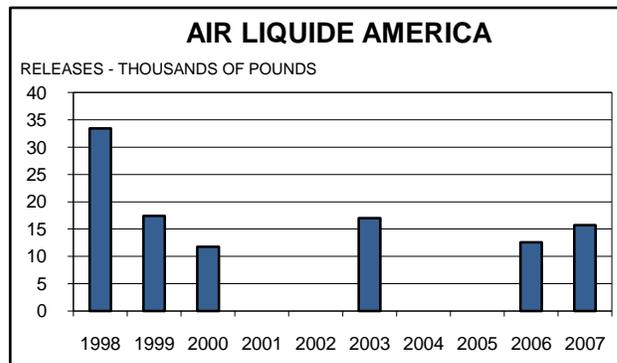
Justin reported on one TRI chemical, styrene, for 2007. Styrene is used as a monomer in the polymerization of fiberglass resin. The majority of the styrene is released to the air during the

application process of fiberglass to the tank. During polymerization and curing, small amounts of styrene are released, and 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 5,900 pounds (47%) compared to 2006, the result of a 70% increase in production. Use of lower styrene monomer resins and the completion of equipment improvements in 2006 to reduce styrene releases during the application process helped to keep the increase in reported styrene releases below the increase in production.



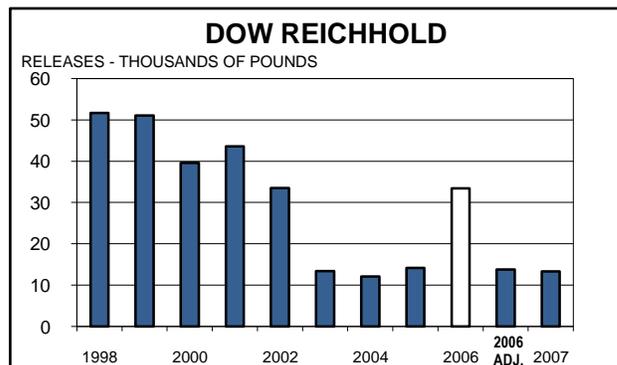
**Rank #14 - Rank #14 - Air Liquide America** Air Liquide is located in Delaware City and produces liquified carbon dioxide from a gas stream received from a nearby facility. The carbon dioxide is used by many industrial and food processing facilities in the region. Air Liquide reported on one chemical, ammonia, in 2007. Ammonia is used in the refrigeration systems that condense the carbon dioxide. The gaps in data for 2001-2002 and 2004-2005 are because this facility did not meet the minimum threshold for reporting to the TRI program in those years. The reported increase for 2007 was because of a condenser leak. The condenser was replaced in January 2008. Since 1998, on-site releases of ammonia have decreased by 53%.



**Rank #15 - Rank #15 - 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 10 TRI chemicals in 2007. Most of these are raw materials used to form emulsion polymers.

In 2006, a railcar containing styrene at the facility spontaneously polymerized, releasing styrene to the air, resulting in the large increase in 2006. The railcar was not attached to any plant processes and no fire or explosion occurred at the facility. There were no serious injuries at the facility or in the nearby community. If on-site releases are adjusted for this non-production related release as shown on the above graph, releases in 2006 would have been 3% lower than the 2005

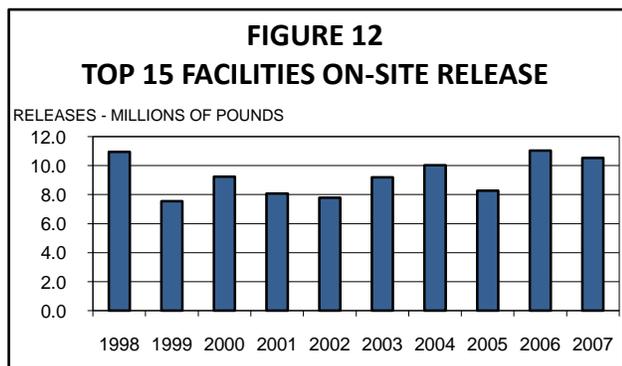


amount. In 2007, reported on-site releases were 412 pounds lower (3% lower) than the adjusted amount for 2006, while production increased by 6%. The facility reported little change in releases for 2007 compared to the 2006 releases adjusted for the styrene railcar incident.

Release of 1,3 butadiene accounted for 35% of the total on-site production releases in 2007. Between 1998 and 2007, releases of 1,3 butadiene have been reduced by 84%. Release of styrene accounted for 11% of the total on-site production releases in 2007. Between 1998 and 2007, production related styrene releases have been reduced by 75%. Pollution control equipment processed the residual monomers and achieved 98.0-99.9% removal efficiency before releasing its exhaust to the air. Although production increased slightly in 2007, it has declined by 45% since 1998. During the same time frame, Dow Reichhold's production-related on-site releases have decreased by 74%. The reductions are partially the result of declining production, but also the result of implementing a more rigorous Leak Detection and Repair (LDAR) program that exceeds current regulations, and improving the performance of the emission control equipment. Some of the reduction is also attributable to improvements in the conversion of monomer in the production formulas.

In August 2008, Dow Reichhold announced that this facility would close by the end of the year. DNREC is working closely with the facility to ensure that reporting and cleanup obligations are met and that there will be no adverse environmental impact as a result of the closing.

**Combined Top 15 Facilities Trend** - Figure 12 shows the totals for reported on-site releases for the top 15 facilities during 1998-2007. The total on-site release trend for these 15 facilities is down 4.4% since 2006. These facilities represent almost 99% of the total on-site releases in

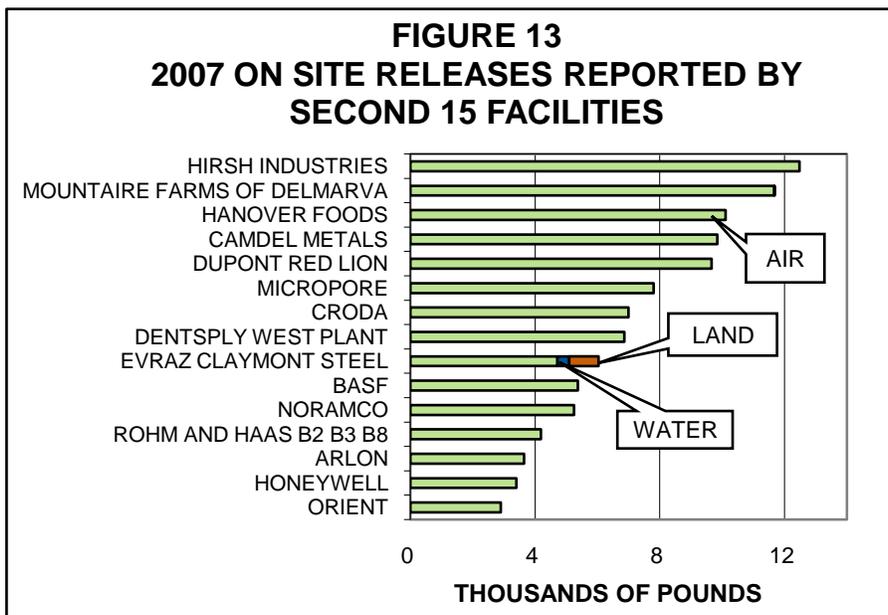


the State for 2007. Seven facilities had increases in 2007. The largest was the 208,000 pounds increase reported by the Edge Moor/Hay Road power plants (#3). Eight facilities had decreases, the largest being the 413,043-pound decrease reported by the Premcor Refinery (#2). All reportable chemicals are included without adjustment to the data shown on this graph and the ones above for the individual facilities.

## 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. Again, the ranking is based on the total facility reported on-site release. Releases to air constitute about 98.75% of this group's total on-site release, while releases to water and land each contribute less than 1%. Figure 13 shows the amounts and relative portions released to air, water, and land by each of the second 15 facilities.

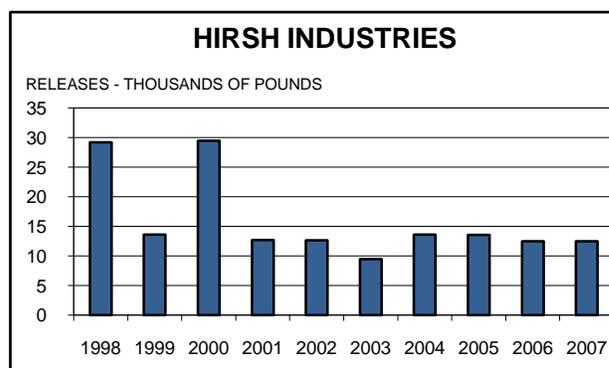
On-site releases increased by 6% for this group of facilities for 2007. Five of these facilities had reductions, the largest being Honeywell (#14 in 2006 to #29 in 2007). Ten facilities



had increases or were new for 2007. The facility with the largest increase was Mountaire Farms of Delmarva (#17), new for 2007. The trend of this group is shown in Figure 14 on page 36. Over time, some facilities may move up to the top 15 group or out of the top 30 entirely.

**Rank #16 - 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 in North Dover.

Hirsh reported one TRI chemical in 2007, certain glycol ethers. It is used as a component in the water based coatings for their painting process. The volume of production activities involving certain glycol ethers was unchanged in 2007, and on-site releases were also unchanged. Total on-site release is now at 43% of the 1998 amount. The earlier downward trend during 2000-2003 is partially the result of a decline in production, which has stabilized in recent years.

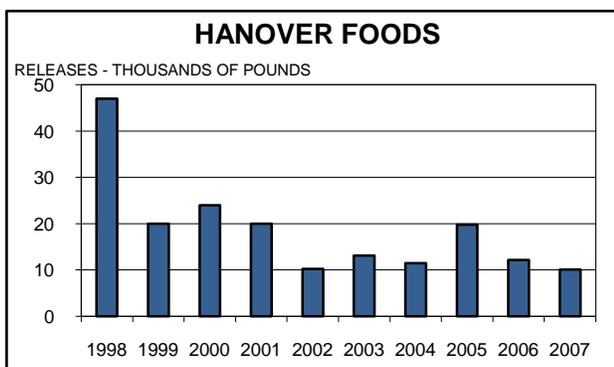


Recent initiatives were directed toward reduction of on-site releases include the introduction of several new and reformulated coatings with reduced Volatile Organic Compounds and Hazardous Air Pollutants content. This, along with a more effective painting process and Hirsh using more accurate methods of estimating releases, accounts for the decrease in 2005-2006.

**Rank #17 - Mountaire Farms of Delmarva** – This facility, located in Selbyville, produces retail, wholesale and export chicken products. Mountaire reported on three TRI chemicals for 2007. The predominant chemical reported is ammonia. Ammonia is used at this facility for refrigeration.

This facility has not reported to TRI since 2001, having crossed the reporting threshold for ammonia and two other chemicals in 2007. Since this is only the first year of TRI reporting for this facility since 2001, no trend is available.

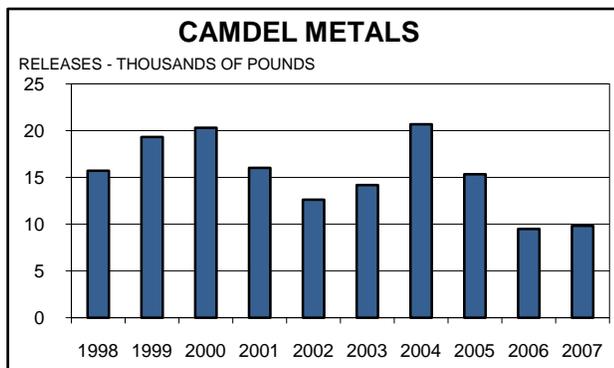
**Rank #18 - Hanover Foods** - Hanover Foods Corporation produces a variety of fresh, frozen, and canned vegetables, soups, refrigerated and frozen entrees, and snack foods. Customers for these products include the retail, foodservice, military, club store, and industrial markets.



The Hanover Foods facility located in Clayton, freezes fresh vegetables including corn, peas, lima beans, spinach, and squash, as well as prepares, freezes, and packages entrees. Hanover reported ammonia releases for the past several years. This was primarily due to leaks and other losses in their refrigeration equipment. In 1999, with the assistance of DNREC's Emergency Planning and Response Branch, a program to reduce ammonia releases was

begun, and Hanover's on-site releases have decreased by 78% since 1998. In recent years, the increase and decrease of ammonia releases reflect the level of production. In 2005, production increased 50% but the reported ammonia release increased 72%, the result of leaks and losses associated with the installation of additional equipment. In 2006-7, production declined 17% and releases fell along with production.

**Rank #19 - Camdel Metals** - Camdel Metals Corporation, located in Camden, DE, 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 subsea umbilical applications. Camdel produces continuous seamless coils that can be in excess of 6,000 feet in length. The tubing ranges in size from 0.020 to 3/4 inch diameter.

Trichloroethylene (TCE) 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 related to TCE use in 2003 (15%) and 2004 (43%) accounted for most of the on-site release increases since 2002, and releases generally tracked production. Although production volume related to use of trichloroethylene fell 15% in 2006, trichloroethylene releases fell by 38%, the result of improved process control and waste

management. In 2007, production declined by 7%, but TCE releases increased by 4%, the result of a non-production release. This release occurred when a drum containing trichloroethylene was accidentally punctured. The spill was immediately isolated and cleaned up with no chemical remaining in the ground. Over 99.5% of the scrap metal generated at the facility is sent off site for recycling.

**Rank #20 - DuPont Red Lion** – This facility, located north of the Premcor Delaware City refinery, manufactures sulfuric acid derived from spent sulfuric acid and refinery gas received from the refinery. The spent sulfuric acid and refinery gas are received by pipeline, and the fresh acid is shipped from the facility via pipeline, tank trucks and tank cars. The facility has the capacity to manufacture 550 tons/day of sulfuric acid. The approximate volume of sulfuric acid manufactured by this facility in 2007, its second year of full operation, was 410 tons/day.

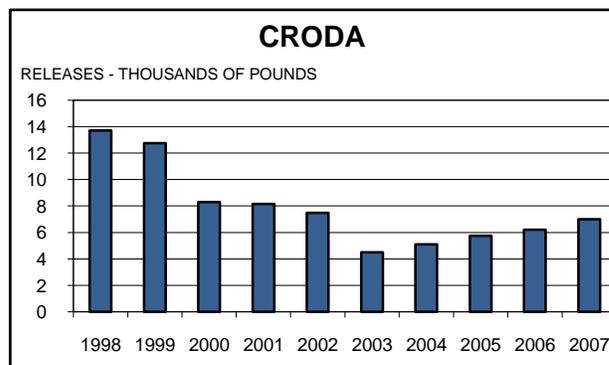
This facility is new, starting up and reporting on a partial year of production for the 2005 reporting year. On-site releases from this facility for 2007 were 9,658 pounds of sulfuric acid gas released to air, an increase of 19%, proportionate to the 21% increase in production for 2007. Since this is only the second year of full operation for this facility, no trend is yet available.

**Rank #21 - Micropore** – This facility, located in the Pencader Industrial Park in Newark, manufactures CO<sub>2</sub> absorbent materials. These materials are used in Scuba rebreathing and rescue applications where fresh air is limited or not available. Micropore uses n-hexane to remove processing oil from its products. The hexane and oil are distilled and reused in the process.

This facility is new to TRI, having recently expanded and crossed the reporting threshold for n-hexane in 2007. Since this is only the first year of TRI reporting for this facility, no trend is yet available.

**Rank # 22 - CRODA** - Formerly ICI Atlas Point, then Uniqema; these companies have occupied this site located in New Castle near the Delaware Memorial Bridge since 1971. Croda International Plc acquired Uniqema in September 2006. Founded in 1950 and headquartered in the United Kingdom, Croda is a manufacturer and supplier of natural-based specialty chemicals for the Personal Care, Pharmaceutical, Household, and Industrial markets.

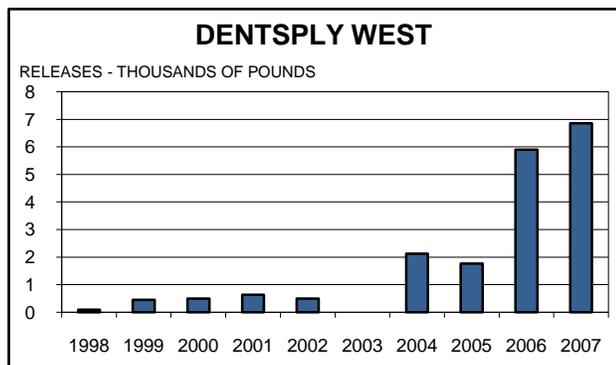
The Croda facility manufactures products, known as surfactants, that promote the mixing of oil and water based ingredients in many consumer products, such as baby shampoo, shaving cream, mouthwash, pharmaceuticals, and many other personal care and industrial products.



Croda reported on 12 chemicals for 2007. The majority (78%) of the on-site chemical releases were from ethylene oxide, methanol, and propylene oxide. All on-site releases for 2007 were to air. Croda TRI releases increased 13% in 2005, 8% in 2006, and 13% in 2007. Since 1998 overall site emissions have decreased 49%. The recent increases in 2005-2007 were the result of the addition of a MultiPurpose Plant to the facility in 2005 and a modification to the product portfolio in response to market conditions. In July 2005, Uniqema

brought on line the first phase of a 20 million lb/year expansion to manufacture amine-based chemicals. In 2006, the second phase of the expansion became operational.

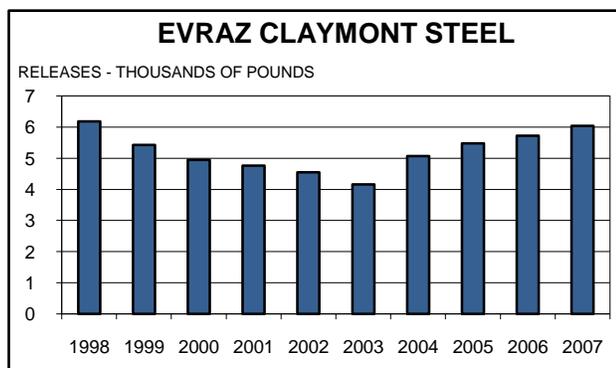
**Rank #23 - Dentsply West** – Dentsply produces a line of consumable products for the dental industry. These products include dental adhesives, dental impression materials, and restoratives. These products are used in dental maintenance and restoration applications. Caulk’s East Masten Circle facility (Dentsply West) and the West Clarke Avenue facility (Dentsply Main) are located in Milford.



Dentsply West reported three TRI chemicals in 2007. The predominant chemical released on-site was toluene. It is used as a cleaning solvent in their process. On-site releases have increased significantly since 2004 because of increased production, addition of new equipment, and more accurate reporting methods. In 2006, the facility reported significant increases in on-site releases for toluene and methyl methacrylate (MMA). The facility reported on-site release of methanol in 2007 for the first time since 2002, and total on-site releases for 2007 increased by 16% compared to 2006. Reported on-site releases of toluene and MMA were almost unchanged for 2007.

The Dentsply Main facility is one of two facilities in the state that report on elemental mercury. Virtually all of the mercury at Dentsply is used in their products or recycled, with no reported on-site mercury releases.

**Rank #24 – Evraz Claymont Steel** - Located on a 425 acre site in Claymont, Evraz Claymont Steel, formerly known as CitiSteel and Claymont Steel, manufactures carbon steel plate for heavy industrial applications. The facility purchases and recycles over 500,000 tons of scrap steel annually and melts it in an electric arc furnace making this facility the largest recycler in the State of Delaware. 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.



Evraz Claymont Steel reported on-site releases of eight TRI chemicals including seven metallic compounds and dioxin compounds, for 2007. Most of the releases, 78%, were to air. Zinc compounds was the largest on-site release, at 51% of the total. For 2007, on-site releases increased 5.5%. The increase in the 2007 on-site amount total was due to an 8 percent increase in production compared to 2006.

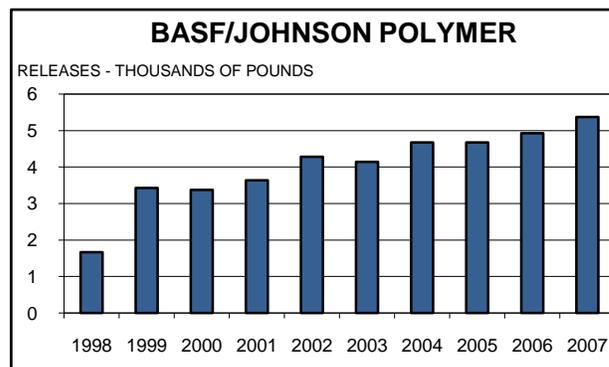
In early 2006, in an effort to more accurately measure emissions and releases of toxic chemicals, Evraz Claymont Steel conducted tests on exhaust air leaving their dust collector. The results of these tests showed that in 2005 most chemicals were higher than previously reported, although one was lower. Mercury compounds in particular, was higher than expected, increasing to 361 pounds, up from 36 pounds reported in 2004. Manganese and

nickel compounds were also significantly higher in 2005, while lead compounds was 33% lower than reported in 2004. Because accurate reporting is important to the community, and to TRI, DNREC directed Claymont Steel to conduct a second emissions test to verify the accuracy of the initial test. The two tests were done by different independent emissions testing contractors and laboratories. The amounts reported for 2005 were the result of the early 2006 test and the amounts reported for 2006 are based on the results of both tests conducted in 2006. Mercury emissions testing conducted in 2007 report a further reduction in mercury emissions of 50 pounds (16%), following a reduction of 11% for 2006 as a result of Claymont Steel implementing a comprehensive Mercury Source Reduction Program.

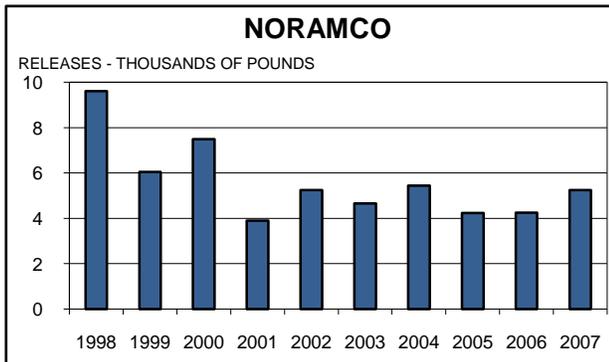
In August 2006, as part of the Source Reduction Program, Claymont Steel joined with other stakeholders and the EPA in announcing the National Vehicle Mercury Switch Recovery Program. This program is designed to recover mercury switches used in lighting and braking systems in 2002 and older vehicles as they are being prepared for recycle. Mercury in these switches can contaminate steel scrap destined for recycling, and a portion of this mercury 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. Further reductions are expected during following years.

**Rank #25 - BASF** – This facility is located in Seaford, and formerly known as Johnson Polymer, changed ownership in 2006. BASF was responsible for preparation of the 2007 TRI data for the facility. This BASF facility 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.

BASF reported on six TRI chemicals in 2007. The total amount of individual releases reported in 2007 increased by 9%, the result of a production increase and changes in product mix. Ammonia was the highest on-site release reported by BASF for 2007. It is used to adjust pH in the process and accounted for 72% of all on-site releases. Reported on-site releases of all chemicals have increased by 220% since 1998 primarily due to changes in methods used to more accurately estimate release amounts.



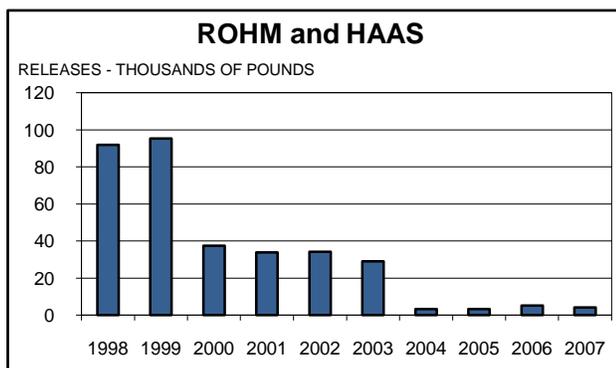
**Rank #26 - Noramco** - Located in Wilmington, Noramco was formed in 1979. Noramco produces bulk active pharmaceutical ingredients used in pain relief medicines. The pharmaceutical products are primarily sold to Johnson & Johnson pharmaceutical sector finishing facilities and several large generic pharmaceutical companies in the United States. Noramco reported on-site releases of six TRI chemicals in 2007. Dichloromethane and methanol made up 73% of the total on-site releases. All on-site releases for 2007 were to air.



Although on-site releases increased by 23% in 2007, Noramco on-site releases have decreased to 55% of the 1998 amounts, with year-to-year variations reflecting the levels of production related to use of the specific chemicals, amounts of specific products produced, and efforts to reduce releases.

For 2007, overall site production increased by 15%, with production increasing in those processes using dichloromethane. In May 2007, an accidental release of 960 pounds of dichloromethane occurred, and that also contributed to the increase in on-site releases reported for 2007.

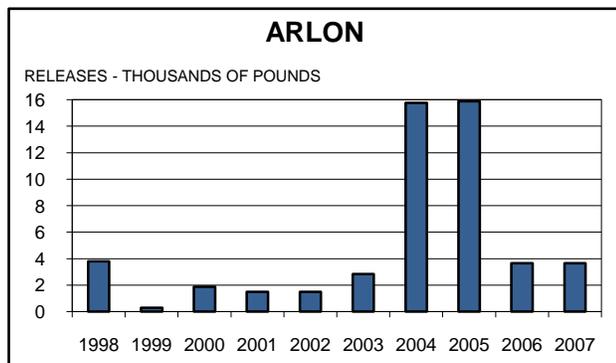
**Rank #27 - Rohm and Haas** – This facility manufactures polishing pads and slurries for the semiconductor, electronics, and glass industries. The facility is located south of Newark in the Diamond State Industrial Park.



Rohm & Haas reported on three TRI chemicals for 2007. N,n-Dimethylformamide (DMF), is used as a solvent carrier in the polishing pad manufacturing process and accounted for all of their on-site releases. Although facility production increased by 8% in 2007, total DMF releases decreased 18% as a result of improvements in scrubber operating efficiency. On-site releases are only 5% of the facility 1998 levels. Releases of DMF mostly occur through evaporation from the poromerics coating and washing

process. The majority of the DMF used is recycled in the distillation equipment for reuse in the process. All on-site releases of DMF were to air, and were primarily stack emissions from the scrubber and oxidizer used to control process emissions.

**Rank #28 - 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.



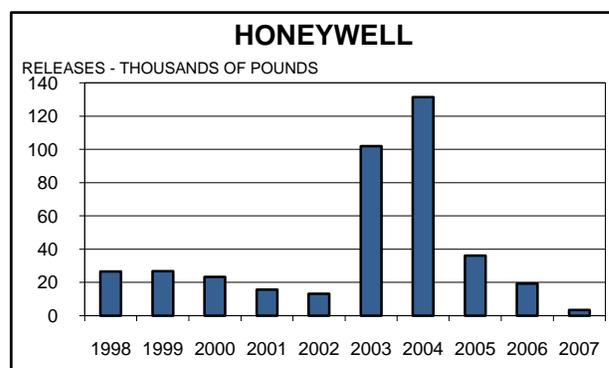
Arlon reported three TRI chemicals, ethylbenzene, xylene and copper, in 2007. Arlon uses xylene as a chemical processing aid in the coating of fiberglass with the silicone rubber dispersion. Ethylbenzene is a component found in many commercial grades of xylene. A vast majority of the solvents used in the coating process is

destroyed in the on-site thermal oxidizer system. Copper is used in the antenna assemblies, and 95% of the copper waste was recycled.

On-site release amounts reported by Arlon increased significantly in 2004 because of a failure in the heat exchanger in the thermal oxidizers that destroy solvent releases from the coating process. The heat exchanger was repaired in September 2005, and the release amount returned to near historical levels in 2006. Production increased by 8% in 2007, but on-site releases were unchanged compared to 2006.

**Rank #29 - Honeywell International** - Honeywell, located in Claymont, manufactures specialty chemicals that are used in agricultural, pharmaceutical, and household products. This facility also produces boron trifluoride, used in the production of hydrocarbon resins, lubricants, and adhesives.

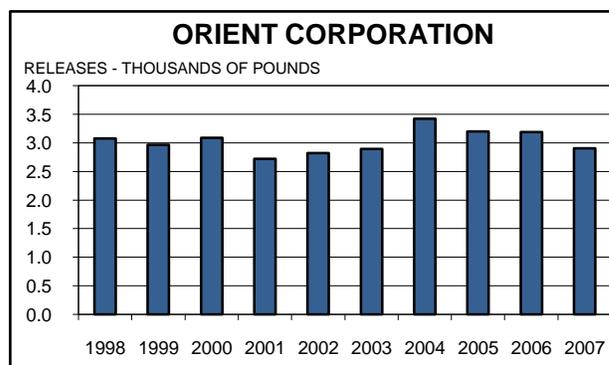
The Honeywell facility reported on six TRI chemicals in 2007. Releases of boron trifluoride, n-hexane, and hydrogen fluoride accounted for over 99.7% of the on-site releases. Although production increased 17% in 2003, the primary reason for the increase in the reported amount that year was that Honeywell performed stack testing and is using this more accurate basis for estimating releases.



In 2004, production increased 31% and the increase in on-site releases was a direct result of the production increase. During 2005, Honeywell completed a two phase emission control project that reduced on-site emissions by 72%, even with a production increase of 11%. In 2006, the combination of 11% reduced production and the full year impact of the phase one of the emission reductions project further reduced on-site releases by another 47%. Most of this impact was for n-hexane, falling by 60% compared to 2005. In 2007, total on-site releases fell by 15,865 pounds (82%) compared to 2006 due to the full year impact of the phase two emission reduction control project. Although production fell by 15%, releases of n-hexane fell by 8,827 pounds (82%), and releases of boron trifluoride fell by 1,173 pounds (70%).

**Rank #30 - 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.

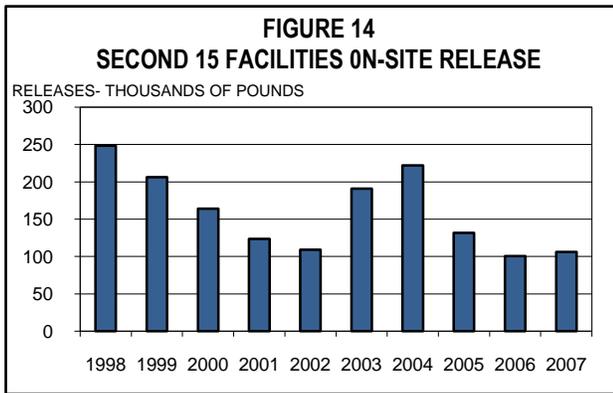
In order to meet the increasing demand for its products, Orient Corporation of America moved its manufacturing operations to Seaford, Delaware in 1991 where it constructed a new manufacturing facility for the production of Nigrosine Dye, a product used in phenolic and polyamide resins and special paints.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



Orient reported on four TRI chemicals for 2007. All on-site releases were to air, and compared to 2006, were lower by 9% while production for 2007 was lower by 16%. Aniline was the predominant on-site release and accounted for 92% of the total. The remaining 8% on-site release was for nitrobenzene. Aniline and nitrobenzene are used in the production of dyes. Chromium and zinc compounds are purchased, repackaged, and sold as is with no releases. A small amount of nitrobenzene was sent off-site for treatment. Aniline waste was treated for recovery from on-site air, as well as sent off site for energy recovery.

Although production levels have increased 19% since 1998, on-site releases have decreased 6%, the result of higher efficiency due to lengthening of the production cycle and a corresponding reduction of startup/shutdown times.

**Combined Second 15 Facilities Trend - Figure 14 shows a trend of the totals for the facilities ranked #16-30 for reported on-site releases.**



The trend is up by 6% for 2007 and down by 57% since 1998. Because of the decrease in amounts of the Second 15 group, its contribution to the state total decreased from 3% in 1998 to 1% in 2007. 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, 2000-2007**

For reporting year 2000 and beyond, EPA established substantially lower reporting thresholds for 12 existing chemicals and one chemical category that are highly persistent and bioaccumulative in the environment (PBTs). Six new chemicals and one new category were also added to the PBT list for 2000. The new thresholds apply regardless of whether the PBT chemical is manufactured, processed, or otherwise used. Table 7 provides a current list of the PBT chemicals and their thresholds.

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

PBTs are receiving increased scrutiny as we learn more about them, and reporting of PBTs is being progressively more emphasized. 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, the thresholds for lead and lead compounds were reduced to 100 pounds, down from the previous 25,000 pounds for manufactured and processed and 10,000 pounds for otherwise used, except lead contained in stainless steel, brass, or bronze alloys.

Chemical or Chemical Category	Threshold (Pounds)	2007 REPORTS
Aldrin	100	0
Benzo[g,h,i]perylene	10	11
Chlorodane	10	0
Dioxin and dioxin-like compounds category	0.1 grams	6
Heptachlor	10	0
Hexachlorobenzene	10	1
Isodrin	10	0
Lead *	100	1
Lead and lead compounds *	100	15
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	16
Tetrabromobisphenol A	100	0
Toxaphene	10	0
Trifluralin	100	0

\* Lower Threshold For 2001 Reports

TOTAL

63

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, 16 facilities reported lead or lead compounds in 2007 compared to seven in 2000. All of these facilities were in operation prior to 2001. Additional release information on all PBTs reported to the Delaware TRI program can be found starting on the following page.

**TABLE 8**  
**2007 TRI PBT DATA SUMMARY**  
(REPORTED AMOUNTS IN POUNDS)

	PBTs only 2005	PBTs only 2006	PBTs only 2007	All Data 2007
No. of facilities	28	26	30	69
No. of Form As	NA	6	4	44
No. of Form Rs	61	54	59	294
No. of Chemicals	11	11	11	102
<b>On-site Releases</b>				
Air	4,095	4,076	4,173	6,920,246
Water	1,857	1,405	1,565	3,327,675
Land	26,559	25,309	15,270	406,188
<b>Total On-Site</b>	<b>32,510</b>	<b>30,790</b>	<b>21,008</b>	<b>10,654,109</b>
<b>Off-site Transfers</b>				
POTWs	11	7	5	1,243,120
Recycle	5,488,166	3,451,059	3,127,121	8,179,183
Energy Recovery	1	0	0	4,910,600
Treatment	12	4	9	171,044
Disposal	80,633	66,199	113,770	7,144,231
<b>Total Transfers</b>	<b>5,568,822</b>	<b>3,517,269</b>	<b>3,240,905</b>	<b>21,648,179</b>
<b>On-Site Waste Mgmt.</b>				
Recycle	50,619	54,993	3	10,945,896
Energy Recovery	0	0	0	20,387,061
Treatment	749	769	858	39,879,302
<b>Total On-Site Mgmt.</b>	<b>51,368</b>	<b>55,762</b>	<b>861</b>	<b>71,212,259</b>
<b>Total Waste</b>	<b>5,652,701</b>	<b>3,603,820</b>	<b>3,262,774</b>	<b>103,514,547</b>

Table 8 shows the results of PBT reporting for 2005-2007 compared to total 2007 TRI data. PBT on-site releases for 2007 comprise about 0.20% of the total TRI on-site releases. Total PBT wastes are about 3.2% of total TRI wastes. Total reported PBT wastes decreased by 341,000 pounds (9.5%) in 2007, largely because of decreased transfers to off-site recycle. PBT on-site releases were also lower for 2007 by 9,782 pounds (32%); the reduction entirely because of a lower amount of lead and mercury compounds disposed in the Indian River Power Plant on-site landfill. PBT reports could be filed on Form A for the first time in 2006, as explained on page 3. Six PBT reports were filed using Form A in 2006, and four were filed for 2007, so this may have influenced some or all of the amounts, although the total of 63 PBT reports is close to the counts of 2005 and 2006.

Table 9 below shows the amounts of each PBT chemical reported as released by the TRI reporting facilities in 2007. Lead compounds, largely released from coal-fired power plants, made up over 95% of the total on-site PBT releases. Over 88% of the lead compounds transferred off-site were for recycle from Johnson Controls. Almost the entire amount of mercury transferred off-site was for recycle from the closure of the Occidental Chemical chlor-alkali facility.

**TABLE 9**  
**2007 PBT RELEASE SUMMARY**  
(REPORTED AMOUNTS IN POUNDS)

2007 PBT CHEMICAL	FORM R REPORTS	FORM A REPORTS	ON-SITE RELEASES				TRANSFERS OFF-SITE	ON-SITE WASTE MGMT.
			TOTAL AIR	TOTAL WATER	TOTAL LAND	ON-SITE TOTAL		
BENZO (G,H,I)PERYLENE	9	2	1.79	5.01	0.82	7.62	0.17	471.00
DIOXIN AND DIOXIN-LIKE COMPOUNDS	6	0	0.02	0.01	0.00	0.03	48.79	0.00
HEXACHLOROBENZENE	1	0	0.00	0.70	0.00	0.70	1,325.60	0.00
LEAD	1	0	3.30	6.00	0.00	9.30	0.00	0.00
LEAD COMPOUNDS	15	0	2,984.76	1,541.72	14,605.00	19,131.48	3,212,552.23	0.00
MERCURY	2	0	11.32	5.43	0.00	16.75	26,382.00	0.00
MERCURY COMPOUNDS	7	0	626.10	2.00	46.00	674.10	127.47	0.00
OCTACHLOROSTYRENE	1	0	0.00	0.00	0.00	0.00	172.80	0.00
PENTACHLOROBENZENE	2	0	18.30	0.09	0.00	18.39	23.10	0.00
POLYCHLORINATED BIPHENYLS (PCBs)	1	0	0.00	0.00	0.00	0.00	34.20	0.00
POLYCYCLIC AROMATIC COMPOUNDS	14	2	527.31	4.06	618.43	1,149.80	238.59	390.14
<b>TOTALS</b>	<b>59</b>	<b>4</b>	<b>4,172.93</b>	<b>1,565.02</b>	<b>15,270.25</b>	<b>21,008.20</b>	<b>3,240,904.95</b>	<b>861.14</b>

Source: 2007 DNREC Database December 2008

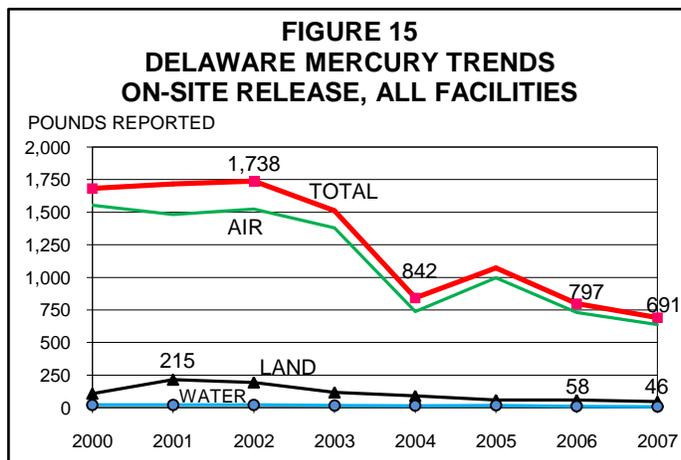
Dioxins are reportable in grams and have been converted to pounds

PBTs were eligible to report on Form A starting in 2006 in some cases

Premcor reported almost the entire amount of on-site PBT chemical waste management with 471 pounds of benzo(g,h,i)perylene and 387 pounds of polycyclic aromatic compounds being treated 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. Overall total mercury and mercury compounds releases in Delaware for 2007 have decreased by 60% compared to the peak of 1,738 pounds in 2002. Figure 15 shows the combined trend for mercury and mercury compounds. We can also expect significant reductions in the future as a result of Delaware's Multi-P rule (see page 50) starting in 2009.

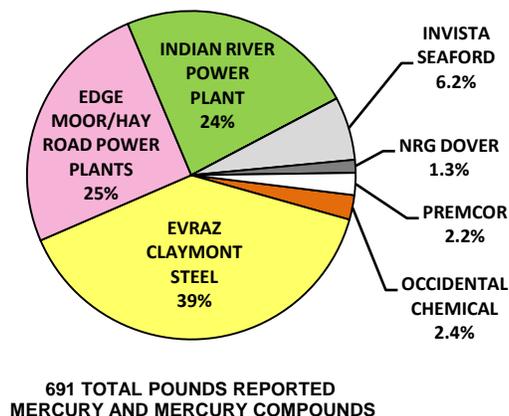


Reported **elemental mercury** on-site release amounts were lower by 34 pounds as Occidental Chemical transitions through its chlor-alkali plant shutdown. Occidental Chemical sent about 20,000 pounds of mercury off-site for recycling in 2007, following 540,000 pounds in 2005-6 as part of the shutdown activity starting November 2005. Occidental contributed virtually all 17 pounds of elemental mercury released on-site in 2007, down from a peak of 1,097 pounds reported in 2000. This amount will continue to decline as the facility completes the shutdown.

Reports of on-site releases of **mercury compounds** by Delaware facilities decreased 106 pounds (13%) in 2007 from normal changes in facility operations and also from the reduction in release to land noted on pages 19 and 38 for the Indian River Power Plant.

Figure 16 shows the percentage contributed by each of the facilities that reported a mercury or mercury compound release in 2007. Two facilities, Dentsply Caulk Lakeview and Intervet, were required to report because of mercury activity, but did not have any on-site mercury releases to report in 2007. On-site release amounts for mercury and mercury compounds can also be found in the Appendices on pages F-10-11 and I-2.

**FIGURE 16  
2007 ON-SITE MERCURY RELEASES  
FROM DELAWARE FACILITIES**



## Carcinogenic TRI Chemicals

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

**TABLE 10**  
**CARCINOGENS REPORTED BY**  
**DELAWARE FACILITIES FOR 2007**

CHEMICAL NAME	IARC	NO. OF
		REPORTS
ARSENIC	1	1
ARSENIC COMPOUNDS	1	2
BENZENE	1	5
CHROMIUM COMPOUNDS	1	9
ETHYLENE OXIDE	1	2
NICKEL COMPOUNDS	1	6
VINYL CHLORIDE	1	1
1,3-BUTADIENE	2A	2
4,4'-METHYLENEBIS(2-CHLOROANILINE)	2A	2
ACRYLAMIDE	2A	1
CREOSOTE	2A	1
FORMALDEHYDE	2A	1
POLYCHLORINATED BIPHENYLS (PCBs)	2A	1
TRICHLOROETHYLENE	2A	1
POLYCYCLIC AROMATIC COMPOUNDS	2A,B	16
ACRYLONITRILE	2B	1
COBALT COMPOUNDS	2B	4
DICHLOROMETHANE	2B	1
ETHYL ACRYLATE	2B	2
ETHYLBENZENE	2B	4
HEXACHLOROBENZENE	2B	1
LEAD	2B	1
LEAD COMPOUNDS	2B	15
NAPHTHALENE	2B	8
NICKEL	2B	3
NITROBENZENE	2B	1
P-CHLOROANILINE	2B	1
PROPYLENE OXIDE	2B	1
STYRENE	2B	5
TETRACHLOROETHYLENE	2B	1
TOLUENE DIISOCYANATE (MIXED ISOMERS)	2B	3
VINYL ACETATE	2B	2
TOTAL =		105

Source: 2007 DNREC Database, November, 2008

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 2007. 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 10.3 million pounds of TRI chemicals reported by facilities as released on-site to the environment in 2007, 2.3% (231,971 pounds) were known or suspected carcinogens. For additional information on cancer rates and causes, please go to the Department of Public Health cancer web site listed in the "For Further Information" section on page 55.

### **Carcinogens Trend, 1998-2007**

Releases on-site of all carcinogens decreased 39% (150,000 pounds) compared to 2006 data and have decreased 73% (624,940 pounds) since the peak in 1998. The number of carcinogen reports increased by five to 105 in 2007, and the total number of carcinogen chemicals remained at 32 following a large increase in the number of lead and lead compounds reporting facilities in 2001 (because of the reduced reporting threshold). Additional information on lead and lead compounds is in the PBT section on pages 37-39.

Table 11 on the next page 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 only 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**  
**1998-2007 TRI CARCINOGENS**  
**REPORTED ON-SITE RELEASES, NOT ADJUSTED**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>KNOWN</b>										
AIR	209,094	219,970	209,828	209,295	177,473	123,191	96,562	98,107	66,475	56,287
WATER	10,246	3,048	4,395	9,114	9,682	9,339	9,817	4,643	5,222	6,435
LAND	363,793	306,630	258,008	169,197	170,074	312,576	173,414	134,194	143,115	46,021
<b>KNOWN TOTAL</b>	<b>583,133</b>	<b>529,648</b>	<b>472,231</b>	<b>387,606</b>	<b>357,229</b>	<b>445,106</b>	<b>279,793</b>	<b>236,944</b>	<b>214,812</b>	<b>108,743</b>
<b>PROBABLE</b>										
AIR	53,558	139,293	55,418	44,326	35,581	24,216	27,417	23,600	18,946	18,628
WATER	0	0	0	0	0	4	4	4	4	4
LAND	0	0	0	0	0	0	0	0	0	8,212
<b>PROBABLE TOTAL</b>	<b>53,558</b>	<b>139,293</b>	<b>55,418</b>	<b>44,326</b>	<b>35,581</b>	<b>24,220</b>	<b>27,421</b>	<b>23,604</b>	<b>18,950</b>	<b>26,845</b>
<b>POSSIBLE</b>										
AIR	167,420	186,506	135,946	91,851	189,296	98,699	99,543	104,480	102,415	70,722
WATER	1,175	290	271	4,873	2,109	1,431	2,308	3,416	1,544	1,655
LAND	51,625	142	40	21,607	17,475	21,714	49,266	44,500	44,251	24,005
<b>POSSIBLE TOTAL</b>	<b>220,220</b>	<b>186,938</b>	<b>136,257</b>	<b>118,331</b>	<b>208,880</b>	<b>121,844</b>	<b>151,117</b>	<b>152,396</b>	<b>148,210</b>	<b>96,383</b>
TOTAL AIR	430,072	545,769	401,192	345,472	402,350	246,106	223,522	226,188	187,836	145,638
TOAL WATER	11,421	3,338	4,666	13,987	11,791	10,773	12,129	8,062	6,770	8,094
TOTAL LAND	415,418	306,772	258,048	190,804	187,549	334,290	222,680	178,694	187,366	78,238
<b>GRAND TOTAL</b>	<b>856,911</b>	<b>855,879</b>	<b>663,906</b>	<b>550,263</b>	<b>601,690</b>	<b>591,169</b>	<b>458,331</b>	<b>412,943</b>	<b>381,972</b>	<b>231,971</b>

Source: DNREC TRI 2007 Database, December 2008

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 taking place 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 19,141 pounds of exclusions in 2007. Lead and lead compounds reports, under the previous higher thresholds, were not excluded if the facility was already reporting them for 2000 or before. In both the adjusted and unadjusted trends, the downward trend continued in 2007. The primary reason for this reduction is the carcinogens transferred off-site (68,367pounds for 2007) that had previously been disposed on-site at the Indian River Power Plant. Additional carcinogen detail is reported in Appendix J.

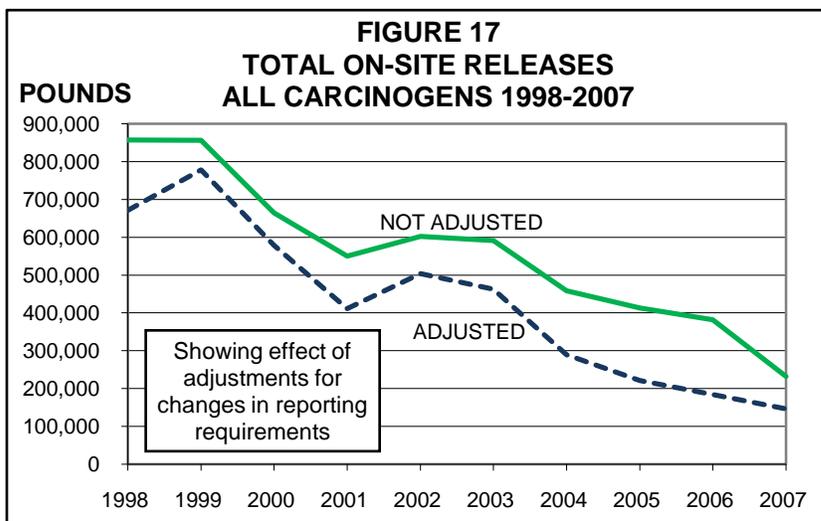
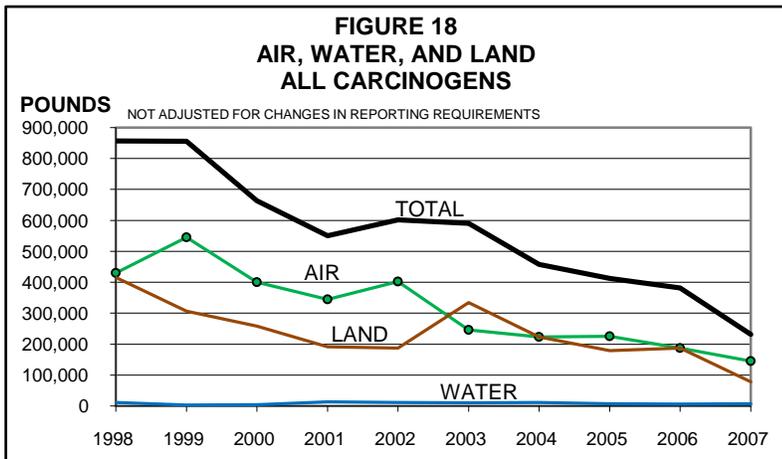


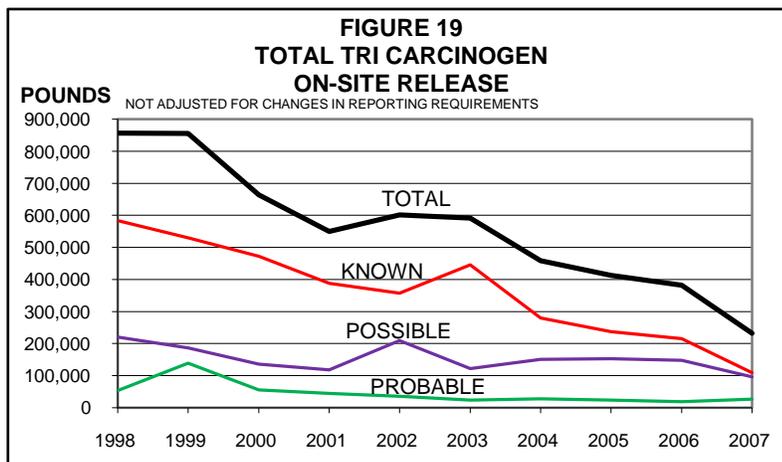
Figure 18 shows the portion of each of the media category releases on the total reported carcinogen release trend. As in Figure 17, the trend is down. Releases to air and land largely influence the total, depending on the year, while releases to water play a much smaller part.



### Known Carcinogens

Figure 19 shows the trend of each of the three carcinogen groups and their effect on the total on-site release. On-site releases of known carcinogens are down 49% since 2006. Releases of known carcinogens to land are 52% of all known carcinogen on-site releases. Two known carcinogens were reported as released to land for 2007. Fuel combustion produces ash

containing chromium and nickel compounds. Chromium compounds, 91% of which are released to land, and are the highest amount of known carcinogen released, at 29,987 pounds to land, with the Indian River Power Plant and INVISTA contributing over 99% of these releases to land.



Nickel compounds, 64% of which is released to land, is the second of the on-site releases in the known carcinogen category at 16,034 pounds. The Indian River Power Plant reported almost all of the nickel compounds releases to land for 2007. From 1997-2000, the release to land reports of nickel compounds, a product of fuel combustion at Premcor, greatly influenced the values

for known carcinogens. Their 1997 value was 283,000 pounds. Now, the ash and chemicals in the ash are transferred out-of-state for waste management. Arsenic compounds, the remaining known carcinogen released to land for 2006 (31,000 pounds) and released by the Indian River Power Plant, was not reported for 2007 because it was below the reporting threshold.

Releases of known carcinogens to air are 42% of all known carcinogen on-site releases. Reported releases to air of known carcinogens decreased by 15% in 2007 and are now at 27% of the amount reported in 1995. Vinyl chloride contributed 67% of the known carcinogen category releases to air in 2007. Vinyl chloride contributed 26% of all carcinogen releases to air and 16% of carcinogen total on-site releases to air, water, and land in 2007. Vinyl chloride, with a total release to air of 37,460 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, now almost

all from Premcor and Sunoco, have declined from 58,000 pounds in 1995 (from Premcor and the now closed Metachem facility) to 9,826 pounds in 2007. Benzene made up 18% of the known carcinogen releases to air for 2007, compared to 23% in 1995.

Releases to on-site water of known carcinogens were 6% of the known carcinogen total for 2007. Nickel compounds, mainly released to water from Premcor refinery and the Edge Moor/Hay Road power plant, contributed 87% (5,572 pounds) of all the known carcinogen releases to water, with chromium compounds contributing 13% (860 pounds).

### **Possible Carcinogens**

About 73% of the total amount is reported released to air, 25% to land, and about 2% to water. The trend for 2007 is down by 35%, or 52,000 pounds. The highest chemical release in this category is vinyl acetate at 28,897 pounds, 97% of which was reported released by Formosa Plastics. The Formosa Plastics release was estimated using a higher basis starting in 2002. Although the 27,987 pounds reported by Formosa for 2007 is much higher than the 2,000 pounds reported for 2001, the actual amount from prior years may not be much different because of the change in basis in 2002. Vinyl acetate reported as released to air by the Formosa Plastics facility decreased by 34% to 29,987 pounds for 2007. Styrene is the second highest release in the possible carcinogen category. In 2006 Dow Reichhold reported a release of 21,372 pounds of styrene to air when a tank car at the facility containing styrene monomer spontaneously polymerized. For 2007, Dow Reichhold reported styrene releases of 1,492 pounds. Justin Tanks reported 18,400 pounds, 81% of the total styrene release for 2007, and the remainder was split between smaller releases at Dow Reichhold and three other facilities. Ethylbenzene is the third highest amount, at 6,521 pounds, reported released in this category. All of these releases were to air, and the majority of the releases were from the Chrysler and Premcor facilities.

### **Probable Carcinogens**

The probable carcinogen total increased by 7,895 pounds for 2006-2007 and is now at 26,845 pounds. The primary reason for this increase was the 8,502-pound release to land of creosote reported by the DuPont Edge Moor facility. This release was from the replacement of approximately 1,000 railroad ties on the DuPont site. Probable carcinogens are now at 24% of the 1995 amount and 19% of the 1999 amount. The total probable carcinogen release to air peak in 1999 (139,293 pounds) was due to an 83,000-pound reported release of formaldehyde from Premcor. The majority of the 26,845 pounds of five probable carcinogens was reported released to on-site air during 2007. The largest release to air was trichloroethylene, reported by Camdel Metals, and 1,3,-butadiene, reported by Dow Reichhold and the Premcor refinery. They combined for 82% of the 18,628 pounds of probable carcinogen released to air. The trend for trichloroethylene release increased 339 pounds (4%) from 2006-2007 but has declined 66% from 1995-2007, down from 29,332 pounds in 1995 to 9,844 pounds in 2007. The trend for 1,3,-butadiene, reported by Premcor and Dow Reichhold, is down 1,481 pounds (21.6%) for 2007 to 5,384 pounds, and is only 7.4% of the 72,439 pounds reported in 1995. Both facilities reported decreases in 1,3-butadiene releases for 2007.

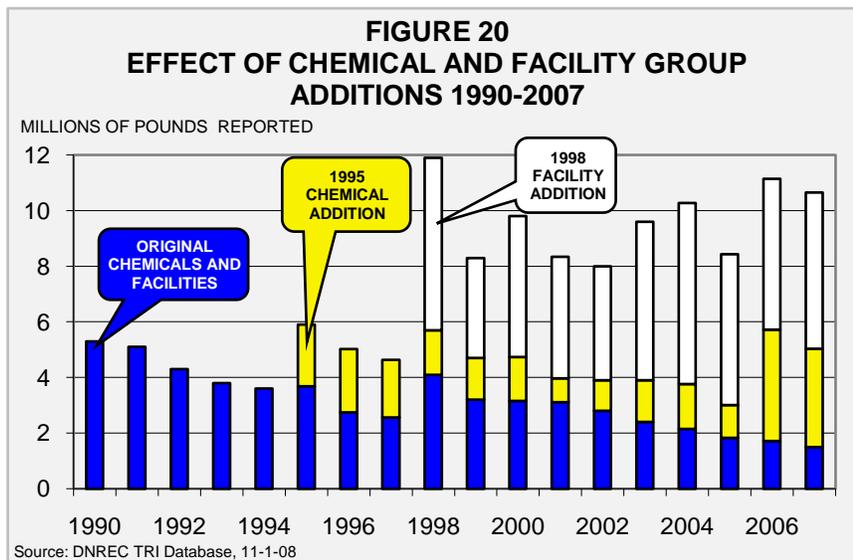
As before, in *Limitations of TRI Data* on Pages 3-4, we urge caution when using this data, as THIS DATA DOES NOT INDICATE AMOUNT OF HUMAN EXPOSURE.

Discussion about specific facilities and their releases can be found on pages 17-36 in the Top 15 and Second 15 Facilities Sections.

## Trend Analysis

### Effect of Chemical and Facility Group Additions, 1990-2007

As previously mentioned on page 5, 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. Figure 20 shows these effects starting in 1990 and following the trend of each group since it was added to the TRI program. Data from the beginning of the TRI program in 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 Trends Analysis section. All groups show generally decreasing trends over time, but the in the group of chemicals added in 1995, a Premcor report for nitrate compounds in the amount of 2.7 million pounds for 2006 caused an increase of 2.9 million pounds for that group.

The table below shows the amount reported in millions of pounds for each group at the time it was added, the 2007 reported amount, and the amount of change since the time it was added. If each group had remained constant at the time of its addition, amounts reported for 2007 would be 13.7 million pounds instead of the 10.7 million pounds actually reported for 2007. The reporting facilities in Delaware have effected a reduction of 3.07 million pounds, or 22.4%, in their reported TRI chemical releases since 1990.

GROUP	STARTING YEAR AMOUNT Millions of Pounds	2007 AMOUNT Millions of Pounds	CHANGE SINCE STARTING Millions of Pounds
Original Facilities and Chemicals	5.30	1.50	-3.80
1995 Chemical Addition	2.23	3.54	+1.31
1998 Facility Addition	6.20	5.62	-0.58
TOTAL	13.73	10.66	-3.07

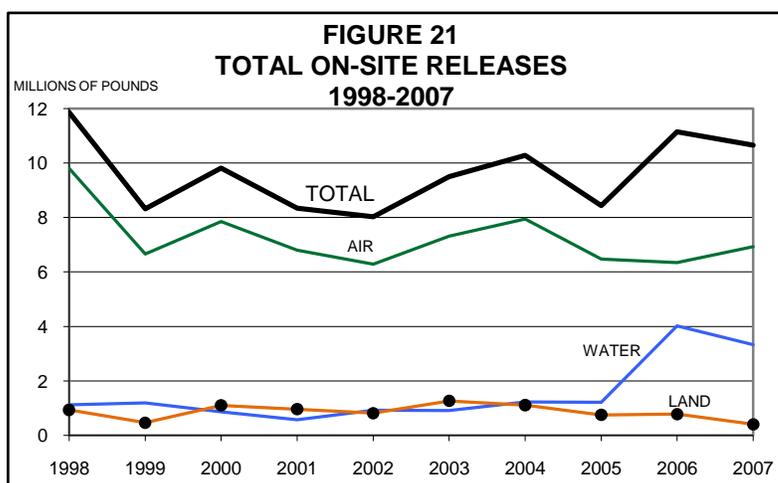
## Release and Waste Management Trends, 1998-2007

TRI data is available back to 1987, the first year of the TRI program. Changes in 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 5, significant changes to TRI reporting occurred in 1995, 1998 and 2000, when large increases in chemicals (1995), industries subject to reporting (1998), and reductions in PBT thresholds (2000) occurred. **This section shows all reporting results including these additions.** Comparison of this data with earlier data must be done carefully, as some chemicals and/or industries may not have been required to report over the entire time.

The analysis presented in this section uses 1998 as a base year for presenting trends for all reportable chemicals and facilities and is **not adjusted** for any changes in reporting requirements. Figure 21 below shows the on-site release trends during the entire 1998-2007 period and Table 12 on the next page shows amounts reported for the last 10 years.

### **On-Site Releases, 1998-2007**

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. On-site release amounts decreased 4.4% (491,000 pounds) since 2006. Figure 21 shows the trend of on-site releases without adjustments. The trend begins in 1998 when the change in reporting requirements required that a large number of new facilities



start to report that year. Significant changes reported in 2007 include the facilities and chemicals shown in the table below.

FACILITY	CHEMICAL	MEDIA	CHANGE (pounds)
Indian River Power Plant	Hydrochloric acid	Air	+300,000
Edge Moor/Hay Rd. Power Plants	Hydrochloric acid	Air	+180,000
Premcor	Propylene	Air	+135,000
Perdue Georgetown	Nitrate Compounds	Water	-183,000
Premcor	Nitrate Compounds	Water	-424,000

Some of these changes (higher or lower) like the propylene reported for 2007 or the nitrate compounds reported for 2006 by Premcor have been caused by improvements in the way facilities estimate amounts. Other changes were caused by normal year-to-year changes in business at the facility. These reports are the primary reason for the large changes in the total for 2006-7. These changes are also discussed in the Top 15 or Second 15 facility profiles on pages 17-34. In addition, you may contact the facility for a more in-depth discussion of the reasons for specific changes.

**TABLE 12**  
**1998-2007 TRI DATA SUMMARY**  
**(IN POUNDS)**

NOT ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
No. of Facilities	80	76	80	82	83	85	74	73	70	69
No of Form As	75	72	61	57	55	55	52	53	45	44
No of Form Rs	277	254	310	316	317	327	309	295	286	294
No. of Chemicals	106	101	109	104	106	103	102	103	100	102
<b>On-Site Releases</b>										
Air	9,796,431	6,651,166	7,841,017	6,796,684	6,281,850	7,308,283	7,935,922	6,468,896	6,341,614	6,920,246
Water	1,126,527	1,197,861	866,312	573,937	928,813	918,650	1,231,061	1,211,798	4,022,175	3,327,675
Land	937,708	462,579	1,103,632	965,666	814,385	1,268,396	1,111,392	752,894	781,701	406,188
<b>Unadjusted On-Site Release</b>	<b>11,860,666</b>	<b>8,311,606</b>	<b>9,810,961</b>	<b>8,336,287</b>	<b>8,025,048</b>	<b>9,495,329</b>	<b>10,278,375</b>	<b>8,433,588</b>	<b>11,145,489</b>	<b>10,654,109</b>
<b>Off-Site Transfers</b>										
POTW's	3,286,302	2,996,401	2,199,807	1,575,732	1,201,161	1,452,241	1,466,465	1,514,246	1,421,321	1,243,120
Recycle	12,002,926	9,295,315	8,649,678	8,845,326	9,248,730	8,376,865	9,852,872	11,355,866	8,528,336	8,179,183
Energy Recovery	1,491,543	1,389,936	2,543,840	2,642,626	2,538,090	2,834,075	2,755,903	2,716,779	4,202,150	4,910,600
Treatment	630,761	894,822	901,604	183,567	398,572	370,950	174,893	194,679	237,073	171,044
Disposal	3,983,506	3,056,466	3,816,862	3,878,689	4,196,691	4,084,899	3,919,599	4,400,539	4,739,121	7,144,231
<b>Total Transfers</b>	<b>21,395,038</b>	<b>17,632,940</b>	<b>18,111,791</b>	<b>17,125,940</b>	<b>17,583,245</b>	<b>17,119,029</b>	<b>18,169,731</b>	<b>20,182,110</b>	<b>19,128,001</b>	<b>21,648,179</b>
<b>On-Site Waste Mgmt.</b>										
Recycle	34,549,050	32,671,856	31,188,694	24,133,885	25,033,817	22,404,667	8,772,135	10,079,028	10,594,593	10,945,896
Energy Recovery	16,155,665	22,981,591	29,095,221	25,863,740	15,740,469	16,323,700	23,440,027	19,786,104	17,937,031	20,387,061
Treatment	68,475,327	69,501,151	64,404,879	40,734,134	33,392,650	30,443,585	31,807,455	38,330,991	39,516,068	39,879,302
<b>Total On-Site Mgmt.</b>	<b>119,180,042</b>	<b>125,154,598</b>	<b>124,688,794</b>	<b>90,731,759</b>	<b>74,166,935</b>	<b>69,171,952</b>	<b>64,019,617</b>	<b>68,196,123</b>	<b>68,047,692</b>	<b>71,212,259</b>
<b>Total Waste</b>	<b>152,435,746</b>	<b>151,099,144</b>	<b>152,611,546</b>	<b>116,193,986</b>	<b>99,775,229</b>	<b>95,786,309</b>	<b>92,467,723</b>	<b>96,811,821</b>	<b>98,321,183</b>	<b>103,514,547</b>

NOT ADJUSTED FOR CHANGES IN REPORTING REQUIREMENTS EXCEPT PBT'S AS NOTED

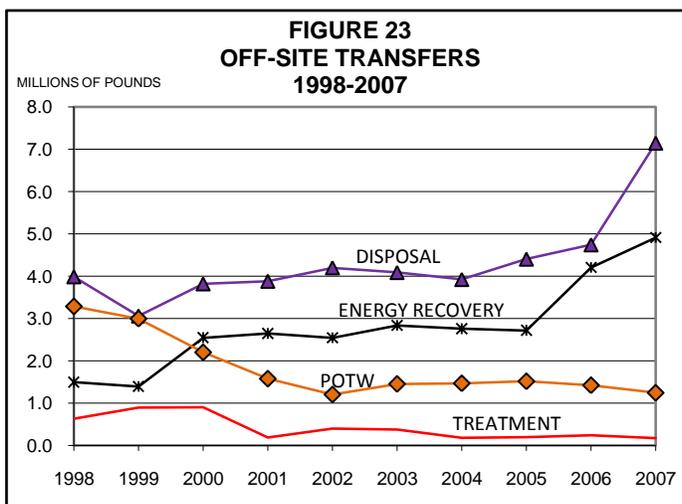
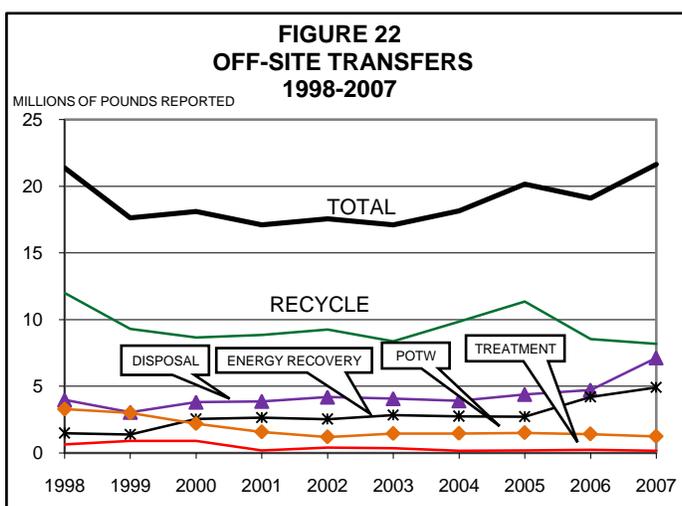
SOURCE: DNREC 2007 DATABASE, NOVEMBER 2008



## Off-Site Transfers, 1998-2007

An off-site transfer is a transfer of toxic chemicals 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, disposal, energy recovery, or non-POTW treatment facility. 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.

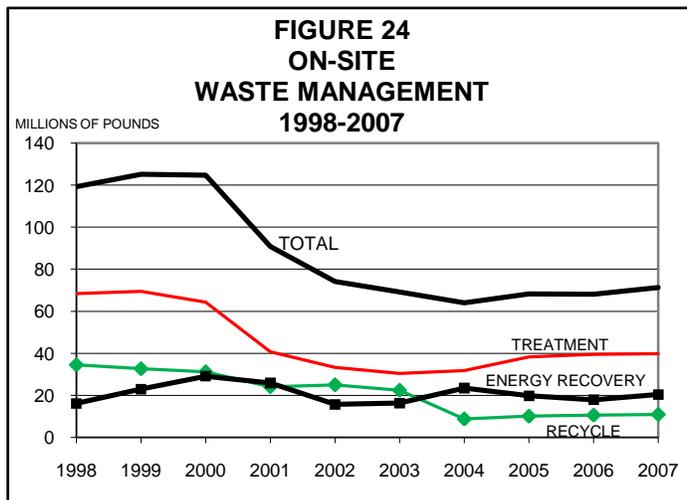
As noted on page 10 and in Table 12 on page 46, the amounts reported as transferred off-site are over twice as much as the amounts of on-site releases. Off-site transfers increased 13% in 2007, driven by disposals and energy recovery. Increases in disposal amounts were seen in reports from the DuPont Edge Moor facility for manganese and vanadium compounds and from the Indian River Power Plant for barium compounds. Increases in off-site energy recovery amounts were driven by an increase in toluene from Noramco. Figures 22 and 23 show the trends in amounts of TRI chemicals in wastes transferred off-site for all facilities and chemicals reporting since 1998. To increase clarity, the lower portion (0.0 - 8.0 million pounds) of Figure 22 is expanded in Figure 23. The amount of recycle had been relatively steady from 1999-2003, but the increases in 2004 and 2005 were erased with decreases in 2006-7. The amounts sent to POTW and non-POTW treatment have shown little change. For comparison, please look at the corresponding values in Table 12. Significant changes affecting the off-site transfer trends in 2007 are:



FACILITY	CHEMICAL	OFF-SITE METHOD	CHANGE (pounds)
DuPont Edge Moor	Manganese Cpds.	Disposal	+1,183,000
Noramco	Toluene	Energy Recovery	+506,000
DuPont Edge Moor	Vanadium Cpds.	Disposal	+331,000
Indian River Power Plant	Barium Cpds.	Disposal	+240,000
Cytec Industries	Methanol	POTW	-240,000
Ciba	Methanol	POTW, Recycle	-281,000

## On-Site Waste Management, 1998-2007

In some facilities, wastes are 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 materials (raw materials and/or 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 treated or recycled 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. Also, most waste management operations are not 100% efficient, so a small portion of the



waste being treated in these operations may be released on-site and must be accounted for in the on-site releases reported by the facility. Figure 24 shows the trends for the on-site waste management activities since 1998. 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 Premcor, and a decrease of 8,000,000 pounds in hydrochloric acid treatment at DuPont Edge Moor.

Some significant changes reported in on-site waste management amounts for 2007 are:

Some significant changes reported in on-site waste management amounts for 2007 are:

FACILITY	CHEMICAL	ON-SITE WASTE MANAGEMENT METHOD	AMOUNT OF CHANGE (pounds)
Premcor	Carbonyl sulfide	Energy recovery & treatment	+5,200,000
Premcor	Carbon Disulfide	Treatment	+2,200,000
Premcor	Ammonia	Energy recovery	+1,900,000
DuPont Edge Moor	Chlorine	Treatment	-613,000
Premcor	Propylene	Treatment	-815,000
DuPont Edge Moor	Hydrochloric acid	Treatment	-3,600,000

These changes were balanced by other smaller increases and decreases from other reports. Total pounds for on-site waste management increased by 5% since 2006, but have decreased 40% since 1998. The on-site waste management amount totals are in Table 12 on page 46, and Figure 6 on page 11 shows the relative amounts.

## Receiving TRI Chemicals in Wastes

When a facility transfers TRI chemical waste off-site, these wastes go to a receiving facility. Table 13 shows the total amounts of TRI chemicals reported as sent to Delaware facilities from other TRI facilities, both in-state and out-of-state. Few of the receiving facilities in Delaware also report to the TRI program (only one for 2007), but most do not, based on the reporting requirements shown on pages 2 and 3. Only 0.22% of the TRI chemical wastes transferred to Delaware facilities were transferred to a TRI facility in 2007. DNREC TRI 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 13  
SUMMARY OF REPORTED TRI TRANSFERS  
TO DELAWARE FACILITIES  
FROM OTHER TRI FACILITIES IN 2007**

(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	140	140
CANNON IRON & METAL	89,191	0	89,191
CLEAN EARTH OF NEW CASTLE	265,701	233	265,933
CLEAN EARTH OF NEWARK	0	69	69
DELAWARE RECYCLABLE PRODUCTS	16	0	16
DSWA RECYCLING CENTER	17,539	0	17,539
DELAWARE SOLID WASTE AUTHORITY CHERRY ISLAND	8	0	8
DELAWARE SOLID WASTE AUTHORITY GEORGETOWN	0	0.0	0
DELAWARE SOLID WASTE AUTHORITY SANDTOWN	302	0	302
DUPONT EXPERIMENTAL STATION	0	19,539	19,539
KENT COUNTY WASTEWATER TREATMENT PLANT	80,385	0	80,385
INDUSTRIAL RESOURCE NETWORK, INC.	0	250	250
INTERNATIONAL PETROLEUM CORP. U.S. FILTER	0	6	6
KROEGERS SALVAGE	0	3	3
NEW CASTLE WASTEWATER TREATMENT PLANT	129,582	0	129,582
PIGEON POINT LANDFILL	0	1,246	1,246
SIEMENS	14	19,320	19,334
SOUTHERN METAL PROCESSING	1,600	0	1,600
<b>CRODA *</b>	3,704	0	3,704
VFL TECHNOLOGY CORPORATION	398	23,930	24,328
WILMINGTON WASTEWATER TREATMENT PLANT	1,012,537	6,518	1,019,055
<b>TOTAL TRI TRANSFERS REPORTED</b>	<b>1,600,977</b>	<b>71,253</b>	<b>1,672,229</b>

Source: U.S. EPA 2007 Data Run, October 30, 2008

\* TRI Reporting Facility

The top receiving facility is the Wilmington Wastewater Treatment Plant, receiving TRI chemicals in wastewater from regional customers. Clean Earth of New Castle received the second highest amount, a variety of chemicals from one in-state facility and one out-of-state facility. The New Castle Wastewater Treatment Plant received the third highest amount. Cannon Iron and Metal received the fourth largest amount, for recycle, from one Delaware customer. The fifth largest amount was to the Kent County Wastewater Treatment Plant, receiving TRI chemicals in wastewater from three facilities. These five receiving facilities accounted for over 94% 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, commercial and service organizations, 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 (P2) 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 2007, 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 [Delaware Air Quality Report](#) on page 56 of this report.

DNREC has developed a new "Multi-P" 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 (NOx), sulfur oxides (SOx), 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. The reduction in NOx, SO<sub>2</sub>, and mercury emissions will:

1. Reduce the impact of those emissions on public health;
2. Aid in Delaware's attainment of the State and National Ambient Air Quality Standard (NAAQS) for ground level ozone and fine particulate matter;
3. Help address local scale fine particulate and mercury problems attributable to coal and residual oil-fired electric generating units;
4. Satisfy Delaware's obligations under the Clean Air Mercury Rule (CAMR); and,
5. Improve visibility and help satisfy Delaware's EGU-related regional haze obligations.

## **NATIONAL PERSPECTIVE**

The national 2007 TRI report has not been released by the U.S. EPA as of the writing of this report. However, placing the 2007 Delaware reports alongside the 2006 EPA reports yields some rankings that provide a perspective for Delaware in the national TRI picture. Changes in the 2007 national values may change these rankings.

This data shows that Delaware ranks 42<sup>nd</sup> in the nation in total on-site releases by state for all TRI chemicals. This is 0.28% of the total on-site release amounts nationwide. Releases can also be based on other criteria. Because Delaware has a small population and area, releases are spread over fewer people, increasing the ranking on a per-person or per-square mile basis.

State	Rank	Total On-Site Release (Pounds)	Rank, Based on Release Per Person	Rank, Based on Release Per Square Mile
Alaska	1	667,396,704	1	22
Ohio	2	229,882,265	14	1
Nevada	3	215,924,117	2	15
<b>Delaware</b>	42	10,654,109	23	2

The reported totals for thirteen states were each over 100 million pounds in 2006.

For on-site releases, 53 facilities in the nation each released more individually than all the facilities in Delaware combined.

Facility, State	Rank	Total On-Site Release (Pounds)
Red Dog Operations, Alaska	1	615,316,765
Kennecott Copper Mine, Utah	2	147,785,196
Phelps Dodge Miami, Arizona	3	57,515,751
<b>All Facilities Combined, Delaware</b>	54	10,654,109

Nineteen facilities each reported over 20 million pounds released on site in 2006.

For on-site release of **dioxins\***, Delaware ranked 29<sup>th</sup> in the nation.

State	Rank	Total On-Site Release (Grams)
Mississippi	1	28,174.13
Michigan	2	25,797.46
Tennessee	3	11,187.71
<b>Delaware</b>	29	15.80

The reported totals for each of twelve states were over 100 grams released on-site in 2006.

\* See pages 5 and 22 for notes on "Dioxins." The amounts reported do not differentiate between the highly toxic and the less toxic dioxins and dioxin-like compounds in this chemical group.

Thirty-five facilities each released more **dioxins\* on-site** than all the facilities in Delaware combined. Two Delaware facilities, Evraz Claymont Steel (#55), and DuPont Edge Moor (#75) were in the top 100 for **on-site releases** of dioxins.

Facility, State	Rank	Total On-Site Dioxin Release (Grams)
DuPont Delisle Plant, Mississippi	1	27,823.58
Dow Chemical, Midland, Michigan	2	25,782.25
DuPont Johnsonville, Tennessee	3	11,143.54
<b>Delaware, All Facilities Combined</b>	36	15.80

Nineteen facilities each reported over 50 grams of **dioxins\*** released on site in 2006.

\*See pages 6 and 23 for notes on “Dioxins.” Delaware ranks #1 for **total production** of Dioxins. Almost this entire amount was transferred off-site to a permitted out-of-state landfill.

State	Rank	Production – Dioxin, Grams	Off-Site Transfer – Dioxin, Grams	On-Site Dioxin Release or Disposal - Grams (Rank)
<b>Delaware</b>	1	22,146.46	22,130.66	15.80 (29)
Mississippi	2	28,175.42	1.29	28,174.13 (1)
Michigan	3	25,797.46	78.71	25,876.16 (2)
Texas	4	9,734.78	14,776.02	24,510.80 (4)

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, and Claymont Steel ranks #55 for on-site release of dioxins. Premcor ranks #2 nationally for all on-site releases for petroleum facilities (SIC 2911 or NAICS 324110), #25 for all U.S. facilities in release of nitrate compounds, and #43 for all U.S. facilities for release of cyanide compounds. Formosa Plastics ranks #4 in the nation for on-site release of vinyl chloride and #23 for on-site release of vinyl acetate.

No Delaware facility is in the top 100 for on-site release of mercury compounds. Occidental Chemical no longer ranks in the top 100 for on-site release of mercury (#82 for 2006), but is #4 in the nation for total off-site disposal of elemental mercury. Occidental Chemical closed their mercury-related chlor-alkali operation as of November 2005. The State of Delaware ranks #39 within the states for on-site release of mercury for 2007. The Indian River Power Plant ranks #47 and the Edge Moor/Hay Road Power Plant ranks #92 for on-site release of hydrochloric acid. Delaware is ranked #20 within the state rankings for on-site release of hydrochloric acid. Chrysler ranks #49 for on-site release certain glycol ethers, and General Motors ranks #50 for on-site release on xylene. The Indian River Power Plant ranks #78 within the coal and oil-fired electric generating facilities group (NAICS 221112, or SIC 4911, 4931, and 4939) for total on-site release of all TRI chemicals.

Again, these comparisons are made using the 2007 Delaware TRI data and the 2006 National TRI data, so changes in the 2007 national amounts may change these rankings.

## **Nearby Facilities in Adjacent States**

Some facilities, although not in Delaware, may be important to the environment in Delaware. These facilities are located near our border and may release TRI chemicals, particularly to the air or water, which may migrate into Delaware. Starting on the next page is a listing of some nearby facilities with significant TRI release amounts. This data is from the TRI electronic facility Data Release (e-FDR) database using the 2007 reporting year data.

## Nearby Facilities in Adjacent States

Facility	State	Chemical	Media	Amount (Pounds)
DuPont Chambers Works, Deepwater	New Jersey	Nitrate compounds	Water	4,110,000 **
DuPont Chambers Works, Deepwater	New Jersey	Sodium nitrite	Water	111,857 **
Deepwater Generating Station	New Jersey	Hydrochloric acid	Air	488,222
B.L. England Power Plant, Cape May	New Jersey	Hydrochloric acid	Air	235,532
Eddystone Power Plant, Chester	Pennsylvania	Sulfuric acid	Air	206,726
Sunoco, Marcus Hook	Pennsylvania	Ammonia	Air	318,907 **
Sunoco, Marcus Hook	Pennsylvania	Benzene	Air	20,967 **
Sunoco, Marcus Hook	Pennsylvania	N-Hexane	Air	30,670 **
Sunoco, Marcus Hook	Pennsylvania	Toluene	Air	51,011 **
Sunoco, Philadelphia	Pennsylvania	Ammonia	Air	271,761 **
Sunoco, Philadelphia	Pennsylvania	Benzene	Air	28,824 **
Sunoco, Philadelphia	Pennsylvania	Cumene	Air	48,787 **
Sunoco, Philadelphia	Pennsylvania	N-Hexane	Air	19,698 *
Sunoco, Philadelphia	Pennsylvania	Toluene	Air	36,892 **
Grace Davison Curtis Bay Works, Baltimore	Maryland	Ammonia	Air	217,300 **
Brandon Shores Power Plant, Baltimore	Maryland	Hydrochloric acid	Air	17,000,000 **
Brandon Shores Power Plant, Baltimore	Maryland	Sulfuric acid	Air	1,100,000 **
Salisbury Feed & Grain	Maryland	N-hexane	Air	189,000 **
Plymouth Tube, Salisbury	Maryland	Trichloroethylene	Air	78,000 **
U.S. Marine/Brunswick Boat, Salisbury	Maryland	Styrene	Air	39,812 **

\* Near the Delaware state total for this chemical

\*\* Exceeds the Delaware state total for this chemical

As noted on page 4, these amounts do not indicate the amount of human exposure. They do provide a comparison between releases in Delaware and some TRI chemicals released by some nearby facilities in neighboring states.

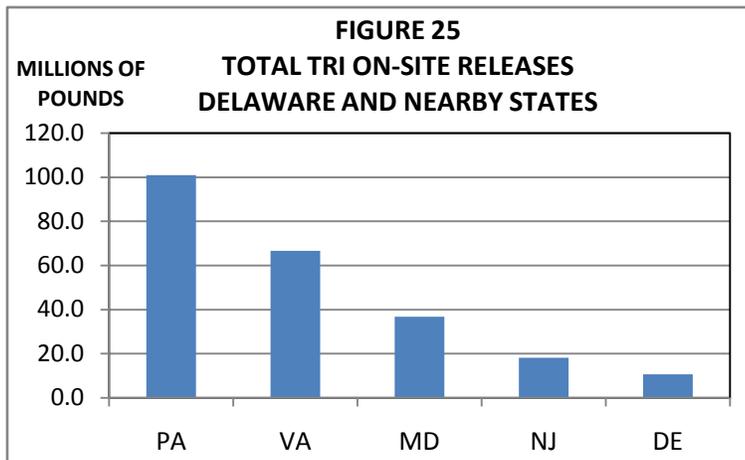


Figure 25 shows the magnitude of TRI on-site releases reported by neighboring states. This figure shows the amounts of on-site releases reported by four nearby states for 2006, the latest year for which state totals are available, and for Delaware for 2007. Pennsylvania reported an amount of 101,024,409 pounds of TRI chemicals released on-site for 2006.

## International “TRI”

The United State's Toxics Release Inventory (TRI) is one of several similar programs established, or being established, by countries around the world. Industrial facilities in these countries are required to report their emissions and other waste management of toxic chemicals to databases in their respective countries. These databases are designed to track the quantities of chemicals that are released to the air, land or water, or transferred to another site for recycling, treatment or disposal. The term used internationally for these TRI-like systems is Pollutant Release and Transfer Register (PRTR). Corporate leaders, environmental advocates, policy makers and the public alike can use this PRTR information to track pollution performance and develop strategies to reduce emissions and protect our shared environment and improve quality of life.

Each country that develops a PRTR often expands on these basic elements. The U.S. TRI, for example, provides the public with data for on-site waste management of chemicals. The Canadian PRTR, called the National Pollutant Release Inventory (NPRI) collects data on the number of employees at each facility. Mexico implemented a mandatory PRTR, Registro de Emisiones y Transferencia de Contaminantes (RETC), which reported for the first time for 2004, but fewer chemicals are reported at this time.

In North America, the governments of the U.S., Canada and Mexico are working together to improve the ability to compare data from their three PRTR systems. This work is coordinated by the North American Commission for Environmental Cooperation (NACEC), an organization created with the North American Free Trade Association (NAFTA). The NACEC's work includes publishing an annual report titled *Taking Stock* that compiles and compares the PRTR data, and operating a searchable website of comparable North American PRTR data.

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## 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 2007 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) 739-9405 during business hours. An on-line FOIA application is also available at: [http://www.dnrec.state.de.us/air/aqm\\_page/foia.htm](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](http://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 2006 TRI data, and later this year to 2007 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/](http://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](http://www.epa.gov/tri/tridata/index.htm). The 2007 edition of this report will be available early 2009 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](http://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.rtknet.org](http://www.rtknet.org).

**Delaware Dept. of 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 (RSEI)*. 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](http://www.epa.gov/opptintr).

**Delaware's Pollution Prevention Program** can be accessed at:

<http://www.dnrec.state.de.us/dnrec2000/p2/> .

**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](http://www.scorecard.org).

**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](http://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>.

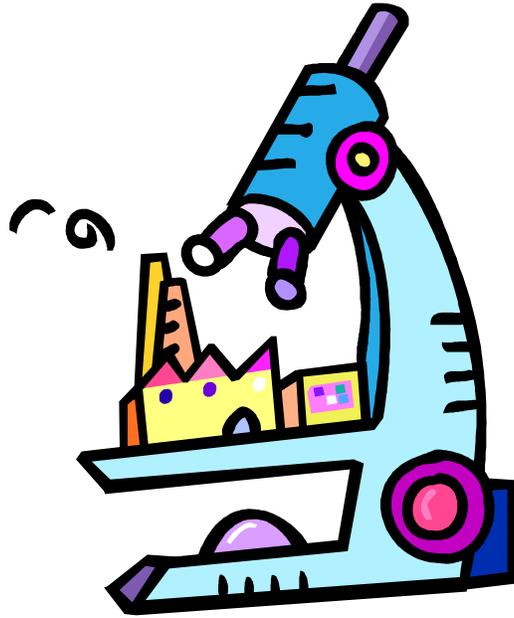
**Delaware's Department of Natural Resources and Environmental Control** has a variety of environmental information, publications, and reports available at:

<http://www.dnrec.delaware.gov/info/pages/ELibrary.aspx>.

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>.

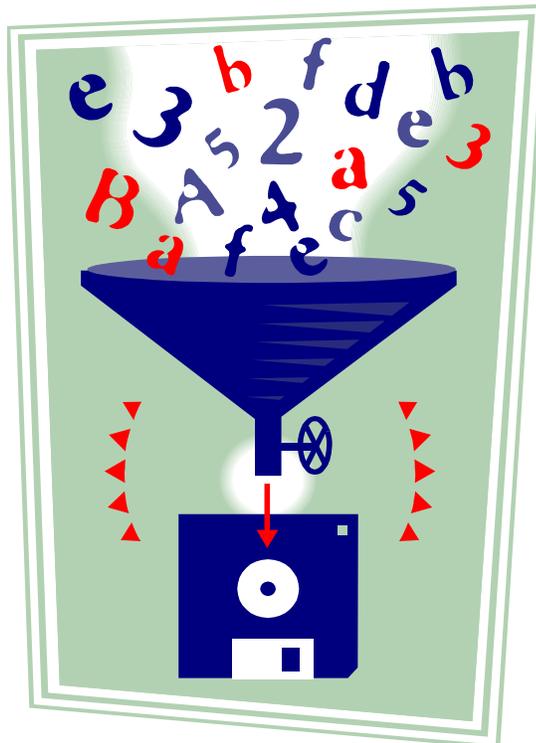
Questions or comments regarding the TRI program are welcome. Please direct questions, comments, or requests to:

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



# APPENDICES

## 2007





## APPENDIX A

# WHAT IS COMMUNITY RIGHT-TO-KNOW?

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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

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, can be filed on-line using Tier II Manager™ and data is available immediately for use by the EPCRA Reporting Program and emergency planning and response agencies. The data provides information on the identity, hazards, amounts, and locations of reportable chemicals at the facility.

### **TOXICS RELEASE INVENTORY (TRI) REPORTING**

Facilities covered under TRI are required to file annual reports on-site releases, off-site transfers, and on-site waste management activities related to their use of certain toxic chemicals. These reports can be filed electronically at the same time to EPA and DNREC using EPA's TRI-ME (TRI Made Easy) program. This data 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.awm.delaware.gov/EPR/Pages/AccidentalReleasePrevention.aspx>.



## APPENDIX B

# FACILITY ADDRESSES AND PUBLIC CONTACTS

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### **AGILENT TECHNOLOGIES NEWPORT**

ROBERT LYDUM  
538 FIRST STATE BLVD  
NEWPORT, DE 19804  
(302) 633-8065

### **AIR LIQUIDE INDUSTRIAL**

PETE COLEMAN  
4442 WRANGLE HILL RD  
DELAWARE CITY, DE 19706  
(713) 624-8726

### **ALLEN'S HATCHERY**

TOM BRINSON  
RT 13 A  
DELMAR, DE 19940  
(410) 943-3989

### **ARLON**

ROBERT CARINI  
1100 GOVERNOR LEA RD  
BEAR, DE 19701  
(302) 834-2100

### **BASF**

STEVEN DANLEY  
100 INDUSTRIAL BLVD  
SEAFORD, DE 19973  
(302) 629-6200

### **BUCK ALGONQUIN**

STEPHEN GASTON  
370 NORTH MAIN STREET  
SMYRNA, DE 19977  
(302) 659-6900

### **CAMDEL METALS**

JOHN P. COATES  
12244 WILLOW GROVE RD  
CAMDEN, DE 19934  
(302) 697-9521

### **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

### **CHRYSLER, LLC**

STEVE HEITZMANN  
550 SOUTH COLLEGE ST.  
NEWARK, DE 19713  
(302) 453-5282

### **CIBA**

NICHOLAS R. SAPONE  
205 S JAMES ST  
NEWPORT, DE 19804  
(302) 992-5600

### **CLARIANT**

STEVE SNOW  
745 MCCOLLEY ST  
MILFORD, DE 19963  
(508) 829-6321

### **CLAYMONT STEEL**

JEFF BRADLEY  
4001 PHILADELPHIA PIKE  
CLAYMONT, DE 19703  
(302) 792-5411

### **CRODA**

ROBERT J. TOUHEY  
231 & 315 CHERRY LN  
NEW CASTLE, DE 19720  
(302) 574-1177

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### **CUSTOM DECORATIVE MOULDINGS**

JOSHUA SWAIN  
12136 SUSSEX HIGHWAY  
GREENWOOD, DE 19950  
(302) 349-4937

### **DENTSPLY MAIN PLANT**

THOMAS LEONARDI  
38 W CLARKE AVE  
MILFORD, DE 19963  
(302) 422-4511

### **DENTSPLY WEST PLANT**

THOMAS LEONARDI  
779 E MASTEN CIR  
MILFORD, DE 19963  
(302) 422-4511

### **DOVER AFB**

SUSAN WALLS  
436 CES/CC 600 CHEVRON AVE  
DOVER AFB, DE 19902  
(302) 677-3350

### **DOW REICHHOLD**

MICHAEL GALBUS  
144 FORKBRANCH RD  
DOVER, DE 19904  
(302) 736-9165

### **DUPONT EDGE MOOR**

ROBERTO NELSON  
104 HAY ROAD  
EDGE MOOR, DE 19809  
(302) 761-2131

### **DUPONT RED LION**

JOHN M. JEFFRIES  
766 GOVERNOR 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**

VICTORIA LUTTRELL  
200 HAY RD  
WILMINGTON, DE 19809  
(302) 451-5111

### **FORMOSA PLASTICS**

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

### **FUJIFILM IMAGING COLORANTS**

STEVE POORMAN  
233 CHERRY LANE  
NEW CASTLE, DE 19720  
(302) 472-1218

### **GAC SEAFORD**

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

### **GE ENERGY USA**

MARK CAMPBELL  
231 LAKE DRIVE  
NEWARK, DE 19702  
(302) 451-2649

### **GENERAL MOTORS WILMINGTON**

DAN FLORES  
801 BOXWOOD ROAD  
NEWPORT, DE 19804  
(313) 665-4629



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# FACILITY ADDRESSES AND PUBLIC CONTACTS

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### **HANESBRANDS**

HANESBRANDS, INC.  
631 RIDGELY STREET - SUITE #1  
DOVER, DE 19904-2772  
(336) 519-4400

### **HANOVER FOODS**

WILLIAM D. SIMPSON  
ROUTE 6 AND DUCK CREEK ROAD  
CLAYTON, DE 19938  
(302) 653-9281

### **HIRSH INDUSTRIES**

KEN MURR  
1525 MCKEE RD  
DOVER, DE 19904  
(302) 678-3454

### **HONEYWELL**

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

### **IKO WILMINGTON**

DAVID FOULKES  
120 HAY RD  
WILMINGTON, DE 19809  
(302) 764-3100

### **INDIAN RIVER POWER PLANT**

MEREDITH MOORE  
29416 POWER PLANT RD  
MILLSBORO, DE 19966-0408  
(609) 524-4522

### **INSTEEL WIRE**

W. GARY LOGAN  
800 NEW CASTLE AVE  
WILMINGTON, DE 19801  
(302) 656-3121

### **INTERVET**

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

### **INVISTA S.À R.L. SEAFORD**

GARY R. KNIGHT  
25876 DUPONT RD  
SEAFORD, DE 19973  
(302) 629-1376

### **JOHNSON CONTROLS**

RICK THOMPSON  
700 NORTH BROAD STREET  
MIDDLETOWN, DE 19709  
(302) 378-9985

### **JUSTIN TANKS**

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

### **KUEHNE COMPANY**

ALAN ROGERS  
1645 RIVER RD  
DELAWARE CITY, DE 19706  
(302) 824-4557

### **MACDERMID AUTOTYPE**

PHILIP FONTENELLE  
701 INDUSTRIAL DRIVE  
MIDDLETOWN, DE 19709  
(302) 738-5794

### **MCKEE RUN POWER PLANT**

VINCENT SCIRE  
880 BUTTNER PL  
DOVER, DE 19904  
(302) 672-6304

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# FACILITY ADDRESSES AND PUBLIC CONTACTS



### **MEDAL**

STEPHEN FORBES  
305 WATER ST.  
NEWPORT, DE 19804  
(302) 225-2137

### **METAL MASTERS**

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

### **MICROPORE**

MITCH FISHBEIN  
350 PENCADER DR.  
NEWARK, DE 19702  
(302) 731-4100

### **MOUNTAIRE FARMS FRANKFORD**

ROGER MARINO  
11 DAISEY ST  
FRANKFORD, DE 19945  
(302) 934-3123

### **MOUNTAIRE FARMS OF DELAWARE**

ROGER MARINO  
29106 JOHN J WILLIAMS HWY  
MILLSBORO, DE 19966  
(302) 934-3123

### **MOUNTAIRE FARMS OF DELMARVA**

ROGER MARINO  
HOOSIER STREET & RAILROAD AVE  
SELBYVILLE, DE 19975  
(302) 934-3123

### **NORAMCO**

ROBERT BREDE  
500 SWEDES LANDING RD  
WILMINGTON, DE 19801  
(302) 888-4477

### **NRG DOVER**

MEREDITH MOORE  
1280 W N ST  
DOVER, DE 19904-7756  
(609) 524-4522

### **OCCIDENTAL CHEMICAL**

JOHN B. ARMSTRONG  
1657 RIVER RD  
NEW CASTLE, DE 19720-5194  
(302) 834-3831

### **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

### **PERDUE MILFORD**

JULIE DEYOUNG  
225 NORTH REHOBOTH BLVD  
MILFORD, DE 19963  
(410) 543-3166

### **PICTSWEET**

WESLEY F. EUBANKS  
18215 WESLEY CHURCH ROAD  
BRIDGEVILLE, DE 19933  
(731) 663-7600



## APPENDIX B

### FACILITY ADDRESSES AND PUBLIC CONTACTS

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#### **PINNACLE FOODS**

DOUG EMMETT  
29984 PINNACLE WAY  
MILLSBORO, DE 19966  
(973) 541-8646

#### **PPG DOVER**

MITCH MAGEE  
1886 LYNNBURY WOODS ROAD  
DOVER, DE 19904  
(302) 678-9800

#### **PREMCOR REFINING GROUP**

MARYKATE MCLAUGHLIN  
4550 WRANGLE HILL ROAD  
DELAWARE CITY, DE 19706  
(302) 834-6070

#### **PRINCE MINERALS**

PAUL SMART  
301 PIGEON POINT RD  
NEW CASTLE, DE 19720  
(646) 747-4175

#### **ROHM AND HAAS B2 B3 B8**

DANA THURESSON  
451 BELLEVUE RD  
NEWARK, DE 19713  
(302) 366-0500

#### **ROHM AND HAAS B5 B6**

DANA THURESSON  
351 BELLEVUE RD  
NEWARK, DE 19713  
(302) 366-0500

#### **ROHM AND HAAS B7 B15**

DANA THURESSON  
50 BELLEVUE RD  
NEWARK, DE 19713  
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#### **SERVICE ENERGY DOVER**

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

#### **SPI PHARMA**

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

#### **SPI POLYOLS**

STEPHEN F. FREEBERY  
321 CHERRY LANE  
NEW CASTLE, DE 19720-2780  
(302) 576-8692

#### **SUNOCO MARCUS HOOK REFINERY**

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

#### **THE MARBLE WORKS**

WARREN WILKERSON  
12982 MENNONITE SCHOOL ROAD  
GREENWOOD, DE 19950  
(302) 349-5445

#### **VP RACING FUELS**

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

# APPENDIX C

## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>AGILENT TECHNOLOGIES NEWPORT</b>							
ACETONITRILE	22	0	0	22	10,048	0	
METHANOL	456	0	0	456	21,659	0	
TOLUENE	122	0	0	122	89,041	0	
<b>AGILENT TECHNOLOGIES NEWPORT Total</b>	<b>600</b>	<b>0</b>	<b>0</b>	<b>600</b>	<b>120,748</b>	<b>0</b>	
<b>AIR LIQUIDE INDUSTRIAL</b>							
AMMONIA	15,731	0	0	15,731	0	0	
<b>AIR LIQUIDE INDUSTRIAL Total</b>	<b>15,731</b>	<b>0</b>	<b>0</b>	<b>15,731</b>	<b>0</b>	<b>0</b>	
<b>ALLEN'S HATCHERY</b>							
ARSENIC	0	0	0	0	0	0	1
COPPER COMPOUNDS	0	0	0	0	0	0	1
MANGANESE COMPOUNDS	0	0	0	0	0	0	1
ZINC COMPOUNDS	0	0	0	0	0	0	1
<b>ALLEN'S HATCHERY Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>ARLON</b>							
COPPER	0	0	0	0	3,900	0	
ETHYLBENZENE	540	0	0	540	1,420	24,000	
XYLENE (MIXED ISOMERS)	3,100	0	0	3,100	8,100	130,000	
<b>ARLON Total</b>	<b>3,640</b>	<b>0</b>	<b>0</b>	<b>3,640</b>	<b>13,420</b>	<b>154,000</b>	
<b>BASF</b>							
AMMONIA	3,886	0	0	3,886	649	0	
BUTYL ACRYLATE	192	0	0	192	5	66	
CERTAIN GLYCOL ETHERS	10	0	0	10	1,854	0	
ETHYL ACRYLATE	317	0	0	317	0	1,057	
METHYL METHACRYLATE	480	0	0	480	0	1,979	
STYRENE	483	0	0	483	1,236	1,494	
<b>BASF Total</b>	<b>5,368</b>	<b>0</b>	<b>0</b>	<b>5,368</b>	<b>3,744</b>	<b>4,596</b>	

APPENDIX C

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# APPENDIX C

## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>BUCK ALGONQUIN</b>							
COPPER	0	0	0	0	8,000	0	
<b>BUCK ALGONQUIN Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,000</b>	<b>0</b>	
<b>CAMDEL METALS</b>							
CHROMIUM	0	0	0	0	45,892	0	
MANGANESE	0	0	0	0	4,924	0	
NICKEL	0	0	0	0	38,808	0	
TRICHLOROETHYLENE	9,844	0	0	9,844	12,253	0	
<b>CAMDEL METALS Total</b>	<b>9,844</b>	<b>0</b>	<b>0</b>	<b>9,844</b>	<b>101,877</b>	<b>0</b>	
<b>CARL KING</b>							
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	1
NAPHTHALENE	0	0	0	0	0	0	1
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	1
<b>CARL KING Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>CHROME DEPOSIT</b>							
CHROMIUM COMPOUNDS	0	0	0	0	2,300	1,200	
LEAD COMPOUNDS	0	0	0	0	8,500	0	
<b>CHROME DEPOSIT Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,800</b>	<b>1,200</b>	
<b>CHRYSLER</b>							
1,2,4-TRIMETHYLBENZENE	13,300	0	0	13,300	2,168	12,000	
BENZENE	117	0	0	117	0	0	
CERTAIN GLYCOL ETHERS	83,000	0	0	83,000	95,780	30,000	
ETHYLBENZENE	3,330	0	0	3,330	3,500	0	
ETHYLENE GLYCOL	8	0	0	8	52	0	
LEAD COMPOUNDS	0	0	0	0	66	0	
METHANOL	280	0	0	280	8	0	
METHYL ISOBUTYL KETONE	16,500	0	0	16,500	19,000	0	
N-BUTYL ALCOHOL	23,200	0	0	23,200	2,782	22,000	
N-HEXANE	703	0	0	703	0	0	
NITRATE COMPOUNDS	0	0	0	0	26,022	0	
NITRIC ACID	27	0	0	27	0	2,700	
N-METHYL-2-PYRROLIDONE	15,900	0	0	15,900	467	11,000	
SODIUM NITRITE	1,200	0	0	1,200	2	2,100	

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# APPENDIX C

## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
TOLUENE	1,670	0	0	1,670	45	0	
XYLENE (MIXED ISOMERS)	18,900	0	0	18,900	20,000	0	
ZINC COMPOUNDS	1	0	0	1	4,555	0	
<b>CHRYSLER Total</b>	<b>178,136</b>	<b>0</b>	<b>0</b>	<b>178,136</b>	<b>174,447</b>	<b>79,800</b>	
<b>CIBA</b>							
ANILINE	33	0	0	33	171,649	1,220	
BIPHENYL	124	0	0	124	277,029	8,760	
CYCLOHEXANE	50	0	0	50	22,600	5,090	
METHANOL	27,163	0	0	27,163	1,837,008	822,703	
NITRATE COMPOUNDS	0	0	0	0	27,232	0	
NITRIC ACID	0	0	0	0	0	27,671	
P-CHLOROANILINE	11	0	0	11	99,902	4,947	
XYLENE (MIXED ISOMERS)	1,738	0	0	1,738	1,269	8,089	
<b>CIBA Total</b>	<b>29,119</b>	<b>0</b>	<b>0</b>	<b>29,119</b>	<b>2,436,689</b>	<b>878,480</b>	
<b>CLARIANT</b>							
CHROMIUM COMPOUNDS	0	0	0	0	0	0	1
ZINC COMPOUNDS	0	0	0	0	0	0	1
<b>CLARIANT Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>CLAYMONT STEEL</b>							
CHROMIUM COMPOUNDS	138	3	87	228	33,637	0	
COPPER COMPOUNDS	142	52	28	222	38,601	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0.0157	0.0000	0.0000	
LEAD COMPOUNDS	585	75	49	709	258,052	0	
MANGANESE COMPOUNDS	456	32	558	1,046	225,570	0	
MERCURY COMPOUNDS	270	0	0	270	0	0	
NICKEL COMPOUNDS	32	12	34	78	5,436	0	
ZINC COMPOUNDS	3,088	208	185	3,481	2,090,986	0	
<b>CLAYMONT STEEL Total</b>	<b>4,711</b>	<b>382</b>	<b>941</b>	<b>6,034</b>	<b>2,652,282</b>	<b>0</b>	

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# APPENDIX C

## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>CRODA</b>							
4,4'-ISOPROPYLIDENEDIPHENOL	10	0	0	10	0	0	
ACRYLIC ACID	250	0	0	250	0	0	
BIS(2-CHLOROETHYL) ETHER	10	0	0	10	35,212	0	
CERTAIN GLYCOL ETHERS	500	0	0	500	2,670	0	
CHLOROACETIC ACID	0	0	0	0	0	0	
DIETHANOLAMINE	500	0	0	500	8,360	0	
ETHYLENE OXIDE	2,300	0	0	2,300	0	0	
MALEIC ANHYDRIDE	10	0	0	10	0	0	
METHANOL	2,150	0	0	2,150	57,075	0	
NAPHTHALENE	10	0	0	10	9,520	0	
PHENOL	255	0	0	255	2,090	0	
PROPYLENE OXIDE	1,000	0	0	1,000	0	0	
<b>CRODA Total</b>	<b>6,995</b>	<b>0</b>	<b>0</b>	<b>6,995</b>	<b>114,927</b>	<b>0</b>	
<b>CUSTOM DECORATIVE MOULDINGS</b>							
DIISOCYANATES	0	0	0	0	0	0	1
<b>CUSTOM DECORATIVE MOULDINGS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>DENTSPLY MAIN PLANT</b>							
MERCURY	0	0	0	0	2,458	0	
<b>DENTSPLY MAIN PLANT Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,458</b>	<b>0</b>	
<b>DENTSPLY WEST PLANT</b>							
METHANOL	1,000	0	0	1,000	14,219	0	
METHYL METHACRYLATE	2,608	0	0	2,608	1,396	0	
TOLUENE	3,250	0	0	3,250	11,884	0	
<b>DENTSPLY WEST PLANT Total</b>	<b>6,858</b>	<b>0</b>	<b>0</b>	<b>6,858</b>	<b>27,499</b>	<b>0</b>	
<b>DOVER AFB</b>							
ETHYLBENZENE	33	0	0	33	0	0	
NAPHTHALENE	8	0	0	8	0	0	
<b>DOVER AFB Total</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>0</b>	

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# APPENDIX C

## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>DOW REICHHOLD</b>							
1,3-BUTADIENE	4,609	0	0	4,609	0	1,306,955	
ACRYLAMIDE	0	0	0	0	0	0	1
ACRYLIC ACID	1,120	0	0	1,120	0	0	
ACRYLONITRILE	2,279	0	0	2,279	1	538,500	
BUTYL ACRYLATE	139	0	0	139	0	162	
ETHYL ACRYLATE	81	0	0	81	0	181	
FORMALDEHYDE	1,965	0	0	1,965	0	0	
METHYL METHACRYLATE	760	0	0	760	0	419	
STYRENE	1,492	0	0	1,492	289	158,263	
VINYL ACETATE	910	0	0	910	0	22,249	
<b>DOW REICHHOLD Total</b>	<b>13,355</b>	<b>0</b>	<b>0</b>	<b>13,355</b>	<b>290</b>	<b>2,026,729</b>	<b>1</b>
<b>DUPONT EDGE MOOR</b>							
BARIUM COMPOUNDS	1	4,174	0	4,175	64,249	0	
BENZO(G,H,I)PERYLENE	0	0	1	1	0	0	
CARBONYL SULFIDE	208,265	0	0	208,265	0	0	
CHLORINE	2,982	0	0	2,982	0	2,270,817	
CHROMIUM COMPOUNDS	1	35	0	36	312,656	0	
COBALT COMPOUNDS	0	33	0	33	16,680	0	
CREOSOTE	908	0	7,594	8,502	0	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0.0113	48.7883	0.0000	
HEXACHLOROBENZENE	0	1	0	1	1,326	0	
HYDROCHLORIC ACID	3,771	0	0	3,771	6,350	14,481,740	
LEAD COMPOUNDS	0	57	0	57	75,466	0	
MANGANESE COMPOUNDS	1	10,304	0	10,305	5,196,925	0	
NICKEL COMPOUNDS	2	592	0	594	40,281	0	
OCTACHLOROSTYRENE	0	0	0	0	173	0	
PENTACHLOROBENZENE	0	0	0	0	23	0	
PHOSGENE	358	0	0	358	0	168,690	
POLYCHLORINATED BIPHENYLS	0	0	0	0	34	0	
POLYCYCLIC AROMATIC COMPOUNDS	74	0	618	692	0	0	
TITANIUM TETRACHLORIDE	106	0	0	106	0	1,875,182	

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## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

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	TO AIR	TO WATER	TO LAND	TOTAL			
TOLUENE	1,374	0	0	1,374	15	0	
VANADIUM COMPOUNDS	1	793	0	794	391,513	0	
ZINC COMPOUNDS	10	50	0	60	77,158	0	
<b>DUPONT EDGE MOOR Total</b>	<b>217,854</b>	<b>16,039</b>	<b>8,213</b>	<b>242,106</b>	<b>6,182,898</b>	<b>18,796,429</b>	
<b>DUPONT RED LION</b>							
SULFURIC ACID	9,658	0	0	9,658	0	0	
<b>DUPONT RED LION Total</b>	<b>9,658</b>	<b>0</b>	<b>0</b>	<b>9,658</b>	<b>0</b>	<b>0</b>	
<b>E-A-R SPECIALTY COMPOSITES</b>							
DIISOCYANATES	2	0	0	2	1,355	0	
TOLUENE DIISOCYANATE (MIXED ISOMERS)	1	0	0	1	1,600	0	
<b>E-A-R SPECIALTY COMPOSITES Total</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2,955</b>	<b>0</b>	
<b>EDGE MOOR/HAY ROAD POWER PLANTS</b>							
AMMONIA	22,387	1	0	22,388	1,205	0	
BARIUM COMPOUNDS	6,817	1,031	0	7,848	136,087	0	
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	
CHROMIUM COMPOUNDS	947	514	0	1,461	33,730	0	
COBALT COMPOUNDS	658	0	0	658	27,911	0	
COPPER COMPOUNDS	649	3,762	0	4,411	26,794	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0.0048	0.0000	0.0000	
HYDROCHLORIC ACID	1,584,375	0	0	1,584,375	0	0	
HYDROGEN FLUORIDE	97,197	0	0	97,197	0	10,949	
LEAD COMPOUNDS	1,031	1,344	0	2,375	11,872	0	
MANGANESE COMPOUNDS	1,117	534	0	1,651	30,827	0	
MERCURY COMPOUNDS	174	0	0	174	67	0	
NICKEL COMPOUNDS	2,351	1,028	0	3,379	27,272	0	
NITRATE COMPOUNDS	0	12	0	12	0	0	
PENTACHLOROBENZENE	18	0	0	18	0	0	
POLYCYCLIC AROMATIC COMPOUNDS	113	0	0	113	0	0	
SULFURIC ACID	73,464	0	0	73,464	0	153,425	
VANADIUM COMPOUNDS	717	0	0	717	61,247	0	
<b>EDGE MOOR/HAY ROAD POWER PLANTS Total</b>	<b>1,792,016</b>	<b>8,226</b>	<b>0</b>	<b>1,800,241</b>	<b>357,012</b>	<b>164,374</b>	

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FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>FORMOSA PLASTICS</b>							
AMMONIA	14,182	0	0	14,182	0	0	
VINYL ACETATE	27,987	0	0	27,987	0	0	
VINYL CHLORIDE	37,460	3	0	37,463	0	266,498	
<b>FORMOSA PLASTICS Total</b>	<b>79,629</b>	<b>3</b>	<b>0</b>	<b>79,632</b>	<b>0</b>	<b>266,498</b>	
<b>FUJIFILM IMAGING COLORANTS</b>							
COPPER COMPOUNDS	0	0	0	0	555	0	
NITRATE COMPOUNDS	0	0	0	0	3,271	0	
<b>FUJIFILM IMAGING COLORANTS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,826</b>	<b>0</b>	
<b>GAC SEAFORD</b>							
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	1
<b>GAC SEAFORD Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>GE ENERGY USA</b>							
LEAD COMPOUNDS	1	0	0	1	398	0	
<b>GE ENERGY USA Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>398</b>	<b>0</b>	
<b>GENERAL MOTORS WILMINGTON</b>							
1,2,4-TRIMETHYLBENZENE	33,890	0	0	33,890	56,610	5,600	
BENZENE	223	0	0	223	12	0	
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	
CERTAIN GLYCOL ETHERS	4,200	0	0	4,200	20,790	10,000	
ETHYLENE GLYCOL	41	0	0	41	430	0	
METHANOL	5,590	0	0	5,590	16,145	3,200	
N-BUTYL ALCOHOL	16,290	0	0	16,290	590	11,000	
NITRATE COMPOUNDS	0	0	0	0	43,000	0	
NITRIC ACID	0	0	0	0	0	38,000	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	
SODIUM NITRITE	0	0	0	0	0	16,000	
TOLUENE	1,837	0	0	1,837	285	2,200	
XYLENE (MIXED ISOMERS)	97,900	0	0	97,900	300,710	7,200	
ZINC COMPOUNDS	52	0	0	52	914	0	
<b>GENERAL MOTORS WILMINGTON Total</b>	<b>160,023</b>	<b>0</b>	<b>0</b>	<b>160,023</b>	<b>439,486</b>	<b>93,200</b>	

APPENDIX C

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# APPENDIX C

## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>HANESBRANDS</b>							
NITRATE COMPOUNDS	0	0	0	0	80,055	0	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	
<b>HANESBRANDS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80,055</b>	<b>0</b>	
<b>HANOVER FOODS</b>							
AMMONIA	10,110	0	0	10,110	0	0	
<b>HANOVER FOODS Total</b>	<b>10,110</b>	<b>0</b>	<b>0</b>	<b>10,110</b>	<b>0</b>	<b>0</b>	
<b>HIRSH INDUSTRIES</b>							
CERTAIN GLYCOL ETHERS	12,481	0	0	12,481	0	0	
<b>HIRSH INDUSTRIES Total</b>	<b>12,481</b>	<b>0</b>	<b>0</b>	<b>12,481</b>	<b>0</b>	<b>0</b>	
<b>HONEYWELL</b>							
BORON TRIFLUORIDE	500	0	0	500	6,118	144,803	
HYDROGEN FLUORIDE	476	0	0	476	58	58	
LEAD COMPOUNDS	0	0	0	0	0	0	
MANGANESE COMPOUNDS	0	0	0	0	0	0	1
METHANOL	10	0	0	10	1,148	7	
N-HEXANE	2,413	0	0	2,413	36,886	155,861	
ZINC COMPOUNDS	0	0	0	0	0	0	1
<b>HONEYWELL Total</b>	<b>3,399</b>	<b>0</b>	<b>0</b>	<b>3,399</b>	<b>44,210</b>	<b>300,729</b>	<b>2</b>
<b>IKO WILMINGTON</b>							
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	77	3	
<b>IKO WILMINGTON Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>3</b>	
<b>INDIAN RIVER POWER PLANT</b>							
AMMONIA	21,000	0	0	21,000	0	660,000	
BARIUM COMPOUNDS	4,805	750	220,000	225,555	240,000	0	
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	
CHROMIUM COMPOUNDS	755	250	27,000	28,005	25,000	0	
COBALT COMPOUNDS	255	5	9,400	9,660	11,000	0	
COPPER COMPOUNDS	255	2,700	22,000	24,955	24,000	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0.0007	0.0000	0.0000	
HYDROCHLORIC ACID	2,900,000	0	0	2,900,000	0	0	

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## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
INDIAN RIVER POWER PLANT							
HYDROGEN FLUORIDE	230,000	0	0	230,000	0	25,000	
LEAD COMPOUNDS	679	0	12,756	13,435	14,367	0	
MANGANESE COMPOUNDS	755	5	31,000	31,760	34,000	0	
MERCURY COMPOUNDS	117	0	46	163	53	0	
NAPHTHALENE	0	0	0	0	0	0	1
NICKEL COMPOUNDS	755	250	16,000	17,005	18,000	0	
POLYCYCLIC AROMATIC COMPOUNDS	2	0	0	2	0	0	
SULFURIC ACID	110,000	0	0	110,000	0	440,000	
VANADIUM COMPOUNDS	755	5	37,000	37,760	41,000	0	
ZINC COMPOUNDS	1,105	750	13,000	14,855	14,000	0	
<b>INDIAN RIVER POWER PLANT Total</b>	<b>3,271,238</b>	<b>4,715</b>	<b>388,202</b>	<b>3,664,155</b>	<b>421,420</b>	<b>1,125,000</b>	<b>1</b>
INSTEEL WIRE							
LEAD COMPOUNDS	0	0	0	0	459	0	
<b>INSTEEL WIRE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>459</b>	<b>0</b>	
INTERVET							
MERCURY COMPOUNDS	0	0	0	0	0	0	
<b>INTERVET Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
INVISTA S.À R.L. SEAFORD							
ANTIMONY COMPOUNDS	16	0	16	32	0	0	
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	
BIPHENYL	7,780	0	0	7,780	1,000	0	
CHROMIUM COMPOUNDS	29	0	2,900	2,929	1,607	0	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0.0012	0.0000	0.0000	
HYDROCHLORIC ACID	210,000	0	0	210,000	0	13,000	
LEAD COMPOUNDS	47	0	1,800	1,847	6	0	
MERCURY COMPOUNDS	43	0	0	43	0	0	
NAPHTHALENE	8	0	0	8	1	0	
NITRATE COMPOUNDS	0	460,000	0	460,000	1,900	0	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	
SODIUM NITRITE	0	260	0	260	1,900	370,000	
SULFURIC ACID	77,000	0	0	77,000	0	0	
ZINC COMPOUNDS	87	7	4,100	4,194	73	0	
<b>INVISTA S.À R.L. SEAFORD Total</b>	<b>295,011</b>	<b>460,267</b>	<b>8,816</b>	<b>764,094</b>	<b>6,487</b>	<b>383,000</b>	

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FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>JOHNSON CONTROLS</b>							
ANTIMONY COMPOUNDS	0	0	0	0	85,316	0	
LEAD COMPOUNDS	456	24	0	480	2,842,752	0	
<b>JOHNSON CONTROLS Total</b>	<b>456</b>	<b>24</b>	<b>0</b>	<b>480</b>	<b>2,928,068</b>	<b>0</b>	
<b>JUSTIN TANKS</b>							
STYRENE	18,400	0	0	18,400	470	0	
<b>JUSTIN TANKS Total</b>	<b>18,400</b>	<b>0</b>	<b>0</b>	<b>18,400</b>	<b>470</b>	<b>0</b>	
<b>KUEHNE COMPANY</b>							
CHLORINE	752	0	0	752	0	0	
<b>KUEHNE COMPANY Total</b>	<b>752</b>	<b>0</b>	<b>0</b>	<b>752</b>	<b>0</b>	<b>0</b>	
<b>MACDERMID AUTOTYPE</b>							
TOLUENE DIISOCYANATE (MIXED ISOMERS)	13	0	0	13	0	607	
<b>MACDERMID AUTOTYPE Total</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>607</b>	
<b>MCKEE RUN POWER PLANT</b>							
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	
NAPHTHALENE	2	0	0	2	580	0	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	162	0	
<b>MCKEE RUN POWER PLANT Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>742</b>	<b>0</b>	
<b>MEDAL</b>							
METHANOL	600	0	0	600	47,141	2,227,104	
N-HEXANE	1,200	0	0	1,200	0	1,855,920	
N-METHYL-2-PYRROLIDONE	840	0	0	840	146,699	0	
<b>MEDAL Total</b>	<b>2,640</b>	<b>0</b>	<b>0</b>	<b>2,640</b>	<b>193,840</b>	<b>4,083,024</b>	
<b>METAL MASTERS</b>							
CHROMIUM	5	0	0	5	262,290	0	
NICKEL	1	0	0	1	88,554	0	
<b>METAL MASTERS Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>350,844</b>	<b>0</b>	

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## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>MICROPORE</b>							
N-HEXANE	7,800	0	0	7,800	0	110	
<b>MICROPORE Total</b>	<b>7,800</b>	<b>0</b>	<b>0</b>	<b>7,800</b>	<b>0</b>	<b>110</b>	
<b>MOUNTAIRE FARMS FRANKFORD</b>							
ARSENIC COMPOUNDS	0	0	0	0	0	0	1
COPPER COMPOUNDS	0	0	0	0	0	0	1
MANGANESE COMPOUNDS	0	0	0	0	0	0	1
POLYCYCLIC AROMATIC COMPOUNDS	1	0	0	1	0	0	
ZINC COMPOUNDS	0	0	0	0	0	0	1
<b>MOUNTAIRE FARMS FRANKFORD Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>MOUNTAIRE FARMS OF DELAWARE</b>							
ARSENIC COMPOUNDS	0	0	0	0	0	0	1
COPPER COMPOUNDS	0	0	0	0	0	0	1
MANGANESE COMPOUNDS	0	0	0	0	0	0	1
NAPHTHALENE	0	0	0	0	0	0	1
POLYCYCLIC AROMATIC COMPOUNDS	2	0	0	2	0	0	
ZINC COMPOUNDS	0	0	0	0	0	0	1
<b>MOUNTAIRE FARMS OF DELAWARE Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>5</b>
<b>MOUNTAIRE FARMS OF DELMARVA</b>							
AMMONIA	11,653	4	0	11,657	5,017	0	
BENZO(G,H,I)PERYLENE	1	0	0	1	0	0	
POLYCYCLIC AROMATIC COMPOUNDS	23	0	0	23	0	0	
<b>MOUNTAIRE FARMS OF DELMARVA Total</b>	<b>11,676</b>	<b>4</b>	<b>0</b>	<b>11,680</b>	<b>5,017</b>	<b>0</b>	
<b>NORAMCO</b>							
DICHLOROMETHANE	2,209	0	0	2,209	81,279	876,883	
FORMIC ACID	8	0	0	8	0	0	
METHANOL	1,628	0	0	1,628	876,040	0	
N,N-DIMETHYLANILINE	0	0	0	0	28,719	0	
N-BUTYL ALCOHOL	19	0	0	19	87,466	0	
TOLUENE	1,379	0	0	1,379	2,395,377	0	
<b>NORAMCO Total</b>	<b>5,243</b>	<b>0</b>	<b>0</b>	<b>5,243</b>	<b>3,468,881</b>	<b>876,883</b>	

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## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>NRG DOVER</b>							
HYDROCHLORIC ACID	140,000	0	0	140,000	0	0	
LEAD COMPOUNDS	3	0	0	3	443	0	
MERCURY COMPOUNDS	9	0	0	9	7	0	
SULFURIC ACID	13,000	0	0	13,000	0	41,000	
<b>NRG DOVER Total</b>	<b>153,012</b>	<b>0</b>	<b>0</b>	<b>153,012</b>	<b>450</b>	<b>41,000</b>	
<b>OCCIDENTAL CHEMICAL</b>							
MERCURY	11	5	0	17	23,924	0	
SODIUM NITRITE	0	0	0	0	26,235	0	
<b>OCCIDENTAL CHEMICAL Total</b>	<b>11</b>	<b>5</b>	<b>0</b>	<b>17</b>	<b>50,159</b>	<b>0</b>	
<b>ORIENT</b>							
ANILINE	2,682	0	0	2,682	6,965	10,424	
CHROMIUM COMPOUNDS	0	0	0	0	0	0	
NITROBENZENE	220	0	0	220	8,045	0	
ZINC COMPOUNDS	0	0	0	0	0	0	
<b>ORIENT Total</b>	<b>2,902</b>	<b>0</b>	<b>0</b>	<b>2,902</b>	<b>15,010</b>	<b>10,424</b>	
<b>PERDUE BRIDGEVILLE</b>							
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	1
COPPER COMPOUNDS	0	0	0	0	0	0	1
MANGANESE COMPOUNDS	0	0	0	0	0	0	1
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	1
ZINC COMPOUNDS	0	0	0	0	0	0	1
<b>PERDUE BRIDGEVILLE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>
<b>PERDUE GEORGETOWN</b>							
AMMONIA	2,500	100	16	2,616	0	39,000	
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	1
NITRATE COMPOUNDS	0	487,300	0	487,300	0	0	
PERACETIC ACID	0	0	0	0	0	11,000	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	1
<b>PERDUE GEORGETOWN Total</b>	<b>2,500</b>	<b>487,400</b>	<b>16</b>	<b>489,916</b>	<b>0</b>	<b>50,000</b>	<b>2</b>

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## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>PERDUE MILFORD</b>							
PERACETIC ACID	0	0	0	0	0	14,000	
<b>PERDUE MILFORD Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,000</b>	
<b>PICTSWEET</b>							
AMMONIA	0	0	0	0	0	0	
<b>PICTSWEET Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>PINNACLE FOODS</b>							
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	
POLYCYCLIC AROMATIC COMPOUNDS	2	0	0	2	0	0	
<b>PINNACLE FOODS Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	
<b>PPG DOVER</b>							
CERTAIN GLYCOL ETHERS	10	0	0	10	14,943	0	
DIBUTYL PHTHALATE	0	0	0	0	1,300	0	
ETHYLENE GLYCOL	10	0	0	10	500	0	
LEAD COMPOUNDS	0	0	0	0	2	0	
ZINC COMPOUNDS	255	0	0	255	507	0	
<b>PPG DOVER Total</b>	<b>275</b>	<b>0</b>	<b>0</b>	<b>275</b>	<b>17,252</b>	<b>0</b>	
<b>PREMCO REFINING GROUP</b>							
1,2,4-TRIMETHYLBENZENE	1,565	0	0	1,565	0	7,680	
1,3-BUTADIENE	775	0	0	775	0	84	
2,4-DIMETHYLPHENOL	0	172	0	172	0	34,151	
AMMONIA	34,832	3,739	0	38,571	0	14,364,500	
ANTHRACENE	1	0	0	1	0	0	
BENZENE	5,126	0	0	5,126	124	236,642	
BENZO(G,H,I)PERYLENE	1	5	0	6	0	471	
CARBON DISULFIDE	1,422	0	0	1,422	0	4,470,050	
CARBONYL SULFIDE	32,811	0	0	32,811	0	15,470,882	
CHROMIUM COMPOUNDS	115	58	0	173	5,500	0	
COBALT COMPOUNDS	52	64	0	116	17,609	0	
CRESOL (MIXED ISOMERS)	0	343	0	343	34	338,559	
CUMENE	455	0	0	455	0	747	
CYANIDE COMPOUNDS	1,446	544	0	1,990	0	53,867	
CYCLOHEXANE	1,361	0	0	1,361	0	862	

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	TO AIR	TO WATER	TO LAND	TOTAL			
DIETHANOLAMINE	0	0	0	0	0	178,121	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0.0012	0.0000	0.0000	
ETHYLBENZENE	2,618	0	0	2,618	110	7,884	
ETHYLENE	10,230	0	0	10,230	0	8,328	
ETHYLENE GLYCOL	0	322	0	322	0	32,236	
FORMIC ACID	0	0	0	0	0	421,394	
HYDROCHLORIC ACID	287	0	0	287	0	294,331	
HYDROGEN CYANIDE	2,405	758	0	3,163	0	401,875	
LEAD COMPOUNDS	182	42	0	224	161	0	
MANGANESE COMPOUNDS	1,087	1,941	0	3,028	2,783	0	
MERCURY COMPOUNDS	13	2	0	15	0	0	
METHANOL	3,953	0	0	3,953	0	0	
MOLYBDENUM TRIOXIDE	0	0	0	0	0	0	
NAPHTHALENE	2,504	0	0	2,504	0	2,199	
N-HEXANE	8,794	0	0	8,794	0	27,425	
NICKEL COMPOUNDS	263	3,690	0	3,953	158,010	0	
NITRATE COMPOUNDS	0	2,320,881	0	2,320,881	0	0	
PHENANTHRENE	2	0	0	2	0	41	
PHENOL	148	172	0	320	36	266,862	
POLYCYCLIC AROMATIC COMPOUNDS	310	4	0	314	0	387	
PROPYLENE	142,676	0	0	142,676	0	10,918	
STYRENE	369	0	0	369	0	12	
SULFURIC ACID	273,615	0	0	273,615	0	0	
TETRACHLOROETHYLENE	66	0	0	66	0	0	
TOLUENE	13,480	0	0	13,480	231	74,909	
VANADIUM COMPOUNDS	270	16,703	0	16,973	239,827	0	
XYLENE (MIXED ISOMERS)	7,873	0	0	7,873	319	38,198	
ZINC COMPOUNDS	878	1,074	0	1,952	2,398	0	
<b>PREMCOR REFINING GROUP Total</b>	<b>551,985</b>	<b>2,350,514</b>	<b>0</b>	<b>2,902,499</b>	<b>427,142</b>	<b>36,743,615</b>	
<b>PRINCE MINERALS</b>							
BARIUM	33	11	0	44	0	0	
LEAD	3	6	0	9	0	0	
MANGANESE COMPOUNDS	1,309	74	0	1,383	0	0	
NICKEL	7	5	0	12	0	0	
<b>PRINCE MINERALS Total</b>	<b>1,352</b>	<b>96</b>	<b>0</b>	<b>1,448</b>	<b>0</b>	<b>0</b>	

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FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>ROHM AND HAAS B2 B3 B8</b>							
DIISOCYANATES	0	0	0	0	1,218	0	
N,N-DIMETHYLFORMAMIDE	4,187	0	0	4,187	795,096	5,118,558	
PHTHALIC ANHYDRIDE	0	0	0	0	0	0	1
<b>ROHM AND HAAS B2 B3 B8 Total</b>	<b>4,187</b>	<b>0</b>	<b>0</b>	<b>4,187</b>	<b>796,314</b>	<b>5,118,558</b>	<b>1</b>
<b>ROHM AND HAAS B5 B6</b>							
4,4'-METHYLENEBIS(2-CHLOROANILINE)	0	0	0	0	0	0	1
DIISOCYANATES	2	0	0	2	5,771	0	
N-METHYL-2-PYRROLIDONE	1,807	0	0	1,807	133,203	0	
TOLUENE DIISOCYANATE (MIXED ISOMERS)	0	0	0	0	0	0	1
<b>ROHM AND HAAS B5 B6 Total</b>	<b>1,809</b>	<b>0</b>	<b>0</b>	<b>1,809</b>	<b>138,974</b>	<b>0</b>	<b>2</b>
<b>ROHM AND HAAS B7 B15</b>							
4,4'-METHYLENEBIS(2-CHLOROANILINE)	0	0	0	0	0	0	1
N-METHYL-2-PYRROLIDONE	1,371	0	0	1,371	10,945	0	
<b>ROHM AND HAAS B7 B15 Total</b>	<b>1,371</b>	<b>0</b>	<b>0</b>	<b>1,371</b>	<b>10,945</b>	<b>0</b>	<b>1</b>
<b>SERVICE ENERGY DOVER</b>							
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	1
TOLUENE	0	0	0	0	0	0	1
<b>SERVICE ENERGY DOVER Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>SPI PHARMA</b>							
CHLORINE	0	0	0	0	0	0	1
NITRIC ACID	0	0	0	0	0	0	1
<b>SPI PHARMA Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>SPI POLYOLS</b>							
NICKEL COMPOUNDS	0	0	0	0	9,238	0	
NITRIC ACID	0	0	0	0	28,360	0	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	
<b>SPI POLYOLS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>37,598</b>	<b>0</b>	

APPENDIX C

Source: DNREC TRI Database, November, 2008  
A "1" in the Form A column indicates a Form A report  
Form A does not report any amounts

All amounts are in pounds

# APPENDIX C

## 2007 ON-SITE RELEASES BY FACILITY AND CHEMICAL

FACILITY / CHEMICAL	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>SUNOCO MARCUS HOOK REFINERY</b>							
BENZENE	4,360	0	0	4,360	0	0	
ETHYLENE	20,427	0	0	20,427	0	0	
ETHYLENE OXIDE	1,313	0	0	1,313	0	0	
XYLENE (MIXED ISOMERS)	56	0	0	56	0	0	
<b>SUNOCO MARCUS HOOK REFINERY Total</b>	<b>26,156</b>	<b>0</b>	<b>0</b>	<b>26,156</b>	<b>0</b>	<b>0</b>	
<b>THE MARBLE WORKS</b>							
STYRENE	1,873	0	0	1,873	0	0	
<b>THE MARBLE WORKS Total</b>	<b>1,873</b>	<b>0</b>	<b>0</b>	<b>1,873</b>	<b>0</b>	<b>0</b>	
<b>VP RACING FUELS</b>							
BENZENE	0	0	0	0	0	0	1
LEAD COMPOUNDS	0	0	0	0	8	0	
METHANOL	0	0	0	0	0	0	1
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0	1
TOLUENE	0	0	0	0	0	0	1
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	1
<b>VP RACING FUELS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>5</b>
<b>STATE TOTAL</b>	<b>6,920,246</b>	<b>3,327,675</b>	<b>406,188</b>	<b>10,654,109</b>	<b>21,648,179</b>	<b>71,212,259</b>	<b>44</b>

APPENDIX C

Source: DNREC TRI Database, November, 2008  
 A "1" in the Form A column indicates a Form A report  
 Form A does not report any amounts

All amounts are in pounds

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY		DISPOSAL	TOTAL	RECYCLE ON SITE	ENERGY		TOTAL
			RECOVERY	TREATMENT				RECOVERY	TREATMENT	
<b>AGILENT TECHNOLOGIES NEWPORT</b>										
ACETONITRILE	0	0	10,048	0	0	10,048	0	0	0	0
METHANOL	0	0	21,659	0	0	21,659	0	0	0	0
TOLUENE	0	0	89,041	0	0	89,041	0	0	0	0
<b>AGILENT TECHNOLOGIES NEWPORT Total</b>	<b>0</b>	<b>0</b>	<b>120,748</b>	<b>0</b>	<b>0</b>	<b>120,748</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>AIR LIQUIDE INDUSTRIAL</b>										
AMMONIA	0	0	0	0	0	0	0	0	0	0
<b>AIR LIQUIDE INDUSTRIAL Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ALLEN'S HATCHERY</b>										
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
<b>ALLEN'S HATCHERY Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ARLON</b>										
COPPER	0	3,700	0	0	200	3,900	0	0	0	0
ETHYLBENZENE	0	0	0	1,420	0	1,420	0	0	24,000	24,000
XYLENE (MIXED ISOMERS)	0	0	0	8,100	0	8,100	0	0	130,000	130,000
<b>ARLON Total</b>	<b>0</b>	<b>3,700</b>	<b>0</b>	<b>9,520</b>	<b>200</b>	<b>13,420</b>	<b>0</b>	<b>0</b>	<b>154,000</b>	<b>154,000</b>
<b>BASF</b>										
AMMONIA	459	0	0	190	0	649	0	0	0	0
BUTYL ACRYLATE	0	0	0	5	0	5	0	0	66	66
CERTAIN GLYCOL ETHERS	1,173	0	0	681	0	1,854	0	0	0	0
ETHYL ACRYLATE	0	0	0	0	0	0	0	0	1,057	1,057
METHYL METHACRYLATE	0	0	0	0	0	0	0	0	1,979	1,979
STYRENE	13	0	0	0	1,223	1,236	0	0	1,494	1,494
<b>BASF Total</b>	<b>1,645</b>	<b>0</b>	<b>0</b>	<b>876</b>	<b>1,223</b>	<b>3,744</b>	<b>0</b>	<b>0</b>	<b>4,596</b>	<b>4,596</b>

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	ENERGY						RECYCLE	ENERGY		
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL
<b>BUCK ALGONQUIN</b>										
COPPER	0	8,000	0	0	0	8,000	0	0	0	0
<b>BUCK ALGONQUIN Total</b>	<b>0</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CAMDEL METALS</b>										
CHROMIUM	0	45,728	0	0	164	45,892	0	0	0	0
MANGANESE	0	4,909	0	0	15	4,924	0	0	0	0
NICKEL	0	38,554	0	0	254	38,808	0	0	0	0
TRICHLOROETHYLENE	0	0	0	12,253	0	12,253	0	0	0	0
<b>CAMDEL METALS Total</b>	<b>0</b>	<b>89,191</b>	<b>0</b>	<b>12,253</b>	<b>433</b>	<b>101,877</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CARL KING</b>										
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	0	0	0	0	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
<b>CARL KING Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CHROME DEPOSIT</b>										
CHROMIUM COMPOUNDS	0	0	0	0	2,300	2,300	1,200	0	0	1,200
LEAD COMPOUNDS	0	3,100	0	0	5,400	8,500	0	0	0	0
<b>CHROME DEPOSIT Total</b>	<b>0</b>	<b>3,100</b>	<b>0</b>	<b>0</b>	<b>7,700</b>	<b>10,800</b>	<b>1,200</b>	<b>0</b>	<b>0</b>	<b>1,200</b>
<b>CHRYSLER</b>										
1,2,4-TRIMETHYLBENZENE	0	28	1,800	340	0	2,168	0	0	12,000	12,000
BENZENE	0	0	0	0	0	0	0	0	0	0
CERTAIN GLYCOL ETHERS	95,000	110	280	390	0	95,780	0	0	30,000	30,000
ETHYLBENZENE	0	0	3,500	0	0	3,500	0	0	0	0
ETHYLENE GLYCOL	52	0	0	0	0	52	0	0	0	0
LEAD COMPOUNDS	0	13	0	0	53	66	0	0	0	0
METHANOL	0	0	8	0	0	8	0	0	0	0
METHYL ISOBUTYL KETONE	0	0	19,000	0	0	19,000	0	0	0	0
N-BUTYL ALCOHOL	0	52	2,100	630	0	2,782	0	0	22,000	22,000
N-HEXANE	0	0	0	0	0	0	0	0	0	0
NITRATE COMPOUNDS	26,000	22	0	0	0	26,022	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	2,700	2,700
N-METHYL-2-PYRROLIDONE	0	27	0	440	0	467	0	0	11,000	11,000
SODIUM NITRITE	0	2	0	0	0	2	0	0	2,100	2,100

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	ENERGY						RECYCLE	ENERGY		
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL
TOLUENE	0	0	45	0	0	45	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	20,000	0	0	20,000	0	0	0	0
ZINC COMPOUNDS	830	3,400	0	0	325	4,555	0	0	0	0
<b>CHRYSLER Total</b>	<b>121,882</b>	<b>3,654</b>	<b>46,733</b>	<b>1,800</b>	<b>378</b>	<b>174,447</b>	<b>0</b>	<b>0</b>	<b>79,800</b>	<b>79,800</b>
<b>CIBA</b>										
ANILINE	21,139	129	150,283	98	0	171,649	0	0	1,220	1,220
BIPHENYL	61,104	259	215,508	126	32	277,029	0	0	8,760	8,760
CYCLOHEXANE	0	22,600	0	0	0	22,600	0	0	5,090	5,090
METHANOL	430,317	1,402,684	3,679	328	0	1,837,008	517,137	0	305,566	822,703
NITRATE COMPOUNDS	27,232	0	0	0	0	27,232	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	27,671	27,671
P-CHLOROANILINE	3,205	129	96,448	120	0	99,902	0	0	4,947	4,947
XYLENE (MIXED ISOMERS)	350	0	887	22	10	1,269	0	0	8,089	8,089
<b>CIBA Total</b>	<b>543,347</b>	<b>1,425,801</b>	<b>466,805</b>	<b>694</b>	<b>42</b>	<b>2,436,689</b>	<b>517,137</b>	<b>0</b>	<b>361,343</b>	<b>878,480</b>
<b>CLARIANT</b>										
CHROMIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
<b>CLARIANT Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CLAYMONT STEEL</b>										
CHROMIUM COMPOUNDS	0	31,769	0	0	1,868	33,637	0	0	0	0
COPPER COMPOUNDS	0	34,620	0	0	3,981	38,601	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0
LEAD COMPOUNDS	0	257,950	0	0	102	258,052	0	0	0	0
MANGANESE COMPOUNDS	0	215,863	0	0	9,707	225,570	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0
NICKEL COMPOUNDS	0	3,788	0	0	1,648	5,436	0	0	0	0
ZINC COMPOUNDS	0	2,090,753	0	0	233	2,090,986	0	0	0	0
<b>CLAYMONT STEEL Total</b>	<b>0</b>	<b>2,634,743</b>	<b>0</b>	<b>0</b>	<b>17,539</b>	<b>2,652,282</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	POTW	RECYCLE	ENERGY		DISPOSAL	TOTAL	RECYCLE ON SITE	ENERGY		TOTAL
			RECOVERY	TREATMENT				RECOVERY	TREATMENT	
<b>CRODA</b>										
4,4'-ISOPROPYLIDENEDIPHENOL	0	0	0	0	0	0	0	0	0	0
ACRYLIC ACID	0	0	0	0	0	0	0	0	0	0
BIS(2-CHLOROETHYL) ETHER	17,602	0	17,610	0	0	35,212	0	0	0	0
CERTAIN GLYCOL ETHERS	2,670	0	0	0	0	2,670	0	0	0	0
CHLOROACETIC ACID	0	0	0	0	0	0	0	0	0	0
DIETHANOLAMINE	8,360	0	0	0	0	8,360	0	0	0	0
ETHYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
MALEIC ANHYDRIDE	0	0	0	0	0	0	0	0	0	0
METHANOL	1,900	0	55,175	0	0	57,075	0	0	0	0
NAPHTHALENE	0	0	0	0	9,520	9,520	0	0	0	0
PHENOL	2,090	0	0	0	0	2,090	0	0	0	0
PROPYLENE OXIDE	0	0	0	0	0	0	0	0	0	0
<b>CRODA Total</b>	<b>32,622</b>	<b>0</b>	<b>72,785</b>	<b>0</b>	<b>9,520</b>	<b>114,927</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CUSTOM DECORATIVE MOULDINGS</b>										
DIISOCYANATES	0	0	0	0	0	0	0	0	0	0
<b>CUSTOM DECORATIVE MOULDINGS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>DENTSPLY MAIN PLANT</b>										
MERCURY	0	2,458	0	0	0	2,458	0	0	0	0
<b>DENTSPLY MAIN PLANT Total</b>	<b>0</b>	<b>2,458</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,458</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>DENTSPLY WEST PLANT</b>										
METHANOL	129	0	14,090	0	0	14,219	0	0	0	0
METHYL METHACRYLATE	197	0	1,199	0	0	1,396	0	0	0	0
TOLUENE	0	0	11,884	0	0	11,884	0	0	0	0
<b>DENTSPLY WEST PLANT Total</b>	<b>326</b>	<b>0</b>	<b>27,173</b>	<b>0</b>	<b>0</b>	<b>27,499</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>DOVER AFB</b>										
ETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	0	0	0	0	0	0	0	0	0	0
<b>DOVER AFB Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	ENERGY						RECYCLE	ENERGY		
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL
<b>DOW REICHHOLD</b>										
1,3-BUTADIENE	0	0	0	0	0	0	0	0	1,306,955	1,306,955
ACRYLAMIDE	0	0	0	0	0	0	0	0	0	0
ACRYLIC ACID	0	0	0	0	0	0	0	0	0	0
ACRYLONITRILE	0	0	0	0	1	1	0	0	538,500	538,500
BUTYL ACRYLATE	0	0	0	0	0	0	0	0	162	162
ETHYL ACRYLATE	0	0	0	0	0	0	0	0	181	181
FORMALDEHYDE	0	0	0	0	0	0	0	0	0	0
METHYL METHACRYLATE	0	0	0	0	0	0	0	0	419	419
STYRENE	4	0	285	0	0	289	0	0	158,263	158,263
VINYL ACETATE	0	0	0	0	0	0	0	0	22,249	22,249
<b>DOW REICHHOLD Total</b>	<b>4</b>	<b>0</b>	<b>285</b>	<b>0</b>	<b>1</b>	<b>290</b>	<b>0</b>	<b>0</b>	<b>2,026,729</b>	<b>2,026,729</b>
<b>DUPONT EDGE MOOR</b>										
BARIUM COMPOUNDS	0	0	0	0	64,249	64,249	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	2,270,817	2,270,817
CHROMIUM COMPOUNDS	0	0	0	0	312,656	312,656	0	0	0	0
COBALT COMPOUNDS	0	0	0	0	16,680	16,680	0	0	0	0
CREOSOTE	0	0	0	0	0	0	0	0	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	49	49	0	0	0	0
HEXACHLOROBENZENE	0	0	0	0	1,326	1,326	0	0	0	0
HYDROCHLORIC ACID	0	0	0	6,350	0	6,350	0	0	14,481,740	14,481,740
LEAD COMPOUNDS	0	0	0	0	75,466	75,466	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	5,196,925	5,196,925	0	0	0	0
NICKEL COMPOUNDS	0	0	0	0	40,281	40,281	0	0	0	0
OCTACHLOROSTYRENE	0	0	0	0	173	173	0	0	0	0
PENTACHLOROBENZENE	0	0	0	0	23	23	0	0	0	0
PHOSGENE	0	0	0	0	0	0	0	0	168,690	168,690
POLYCHLORINATED BIPHENYLS	0	0	0	0	34	34	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	1,875,182	1,875,182

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	ENERGY						RECYCLE	ENERGY		
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL
TOLUENE	0	0	0	6	9	15	0	0	0	0
VANADIUM COMPOUNDS	0	0	0	0	391,513	391,513	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	77,158	77,158	0	0	0	0
<b>DUPONT EDGE MOOR Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,356</b>	<b>6,176,542</b>	<b>6,182,898</b>	<b>0</b>	<b>0</b>	<b>18,796,429</b>	<b>18,796,429</b>
<b>DUPONT RED LION</b>										
SULFURIC ACID	0	0	0	0	0	0	0	0	0	0
<b>DUPONT RED LION Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>E-A-R SPECIALTY COMPOSITES</b>										
DIISOCYANATES	0	0	0	1,355	0	1,355	0	0	0	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)	0	0	0	1,600	0	1,600	0	0	0	0
<b>E-A-R SPECIALTY COMPOSITES Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,955</b>	<b>0</b>	<b>2,955</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>EDGE MOOR/HAY ROAD POWER PLANTS</b>										
AMMONIA	1,205	0	0	0	0	1,205	0	0	0	0
BARIUM COMPOUNDS	0	0	0	0	136,087	136,087	0	0	0	0
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
CHROMIUM COMPOUNDS	2	0	0	0	33,728	33,730	0	0	0	0
COBALT COMPOUNDS	0	0	0	0	27,911	27,911	0	0	0	0
COPPER COMPOUNDS	87	0	0	0	26,707	26,794	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	10,949	10,949
LEAD COMPOUNDS	2	0	0	0	11,870	11,872	0	0	0	0
MANGANESE COMPOUNDS	0	0	0	0	30,827	30,827	0	0	0	0
MERCURY COMPOUNDS	0	0	0	0	67	67	0	0	0	0
NICKEL COMPOUNDS	7	0	0	0	27,265	27,272	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	153,425	153,425
VANADIUM COMPOUNDS	0	0	0	0	61,247	61,247	0	0	0	0
<b>EDGE MOOR/HAY ROAD POWER PLANTS Total</b>	<b>1,303</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>355,709</b>	<b>357,012</b>	<b>0</b>	<b>0</b>	<b>164,374</b>	<b>164,374</b>

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	ENERGY						RECYCLE	ENERGY		
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL
<b>FORMOSA PLASTICS</b>										
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	266,498	266,498
<b>FORMOSA PLASTICS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>266,498</b>	<b>266,498</b>
<b>FUJIFILM IMAGING COLORANTS</b>										
COPPER COMPOUNDS	178	0	0	0	377	555	0	0	0	0
NITRATE COMPOUNDS	2,367	0	904	0	0	3,271	0	0	0	0
<b>FUJIFILM IMAGING COLORANTS Total</b>	<b>2,545</b>	<b>0</b>	<b>904</b>	<b>0</b>	<b>377</b>	<b>3,826</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GAC SEAFORD</b>										
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0
<b>GAC SEAFORD Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GE ENERGY USA</b>										
LEAD COMPOUNDS	0	282	0	0	116	398	0	0	0	0
<b>GE ENERGY USA Total</b>	<b>0</b>	<b>282</b>	<b>0</b>	<b>0</b>	<b>116</b>	<b>398</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GENERAL MOTORS WILMINGTON</b>										
1,2,4-TRIMETHYLBENZENE	0	56,000	310	0	300	56,610	0	0	5,600	5,600
BENZENE	0	0	12	0	0	12	0	0	0	0
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
CERTAIN GLYCOL ETHERS	13,000	0	7,600	0	190	20,790	0	0	10,000	10,000
ETHYLENE GLYCOL	430	0	0	0	0	430	0	0	0	0
METHANOL	0	16,000	88	0	57	16,145	0	0	3,200	3,200
N-BUTYL ALCOHOL	0	0	330	0	260	590	0	0	11,000	11,000
NITRATE COMPOUNDS	43,000	0	0	0	0	43,000	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	38,000	38,000
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
SODIUM NITRITE	0	0	0	0	0	0	0	0	16,000	16,000
TOLUENE	0	0	260	0	25	285	0	0	2,200	2,200
XYLENE (MIXED ISOMERS)	0	300,000	240	0	470	300,710	0	0	7,200	7,200
ZINC COMPOUNDS	64	0	0	0	850	914	0	0	0	0
<b>GENERAL MOTORS WILMINGTON Total</b>	<b>56,494</b>	<b>372,000</b>	<b>8,840</b>	<b>0</b>	<b>2,152</b>	<b>439,486</b>	<b>0</b>	<b>0</b>	<b>93,200</b>	<b>93,200</b>

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						RECYCLE	ENERGY			
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL	
<b>HANESBRANDS</b>											
NITRATE COMPOUNDS	80,055	0	0	0	0	80,055	0	0	0	0	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
<b>HANESBRANDS Total</b>	<b>80,055</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80,055</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>HANOVER FOODS</b>											
AMMONIA	0	0	0	0	0	0	0	0	0	0	
<b>HANOVER FOODS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>HIRSH INDUSTRIES</b>											
CERTAIN GLYCOL ETHERS	0	0	0	0	0	0	0	0	0	0	
<b>HIRSH INDUSTRIES Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>HONEYWELL</b>											
BORON TRIFLUORIDE	0	255	0	2,093	3,770	6,118	0	0	144,803	144,803	
HYDROGEN FLUORIDE	58	0	0	0	0	58	0	0	58	58	
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	0	0	0	881	267	1,148	0	0	7	7	
N-HEXANE	0	17,778	0	16,998	2,110	36,886	155,559	0	302	155,861	
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
<b>HONEYWELL Total</b>	<b>58</b>	<b>18,033</b>	<b>0</b>	<b>19,972</b>	<b>6,147</b>	<b>44,210</b>	<b>155,559</b>	<b>0</b>	<b>145,170</b>	<b>300,729</b>	
<b>IKO WILMINGTON</b>											
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	77	77	3	0	0	3	
<b>IKO WILMINGTON Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>77</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	
<b>INDIAN RIVER POWER PLANT</b>											
AMMONIA	0	0	0	0	0	0	0	0	660,000	660,000	
BARIIUM COMPOUNDS	0	0	0	0	240,000	240,000	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	25,000	25,000	0	0	0	0	
COBALT COMPOUNDS	0	0	0	0	11,000	11,000	0	0	0	0	
COPPER COMPOUNDS	0	0	0	0	24,000	24,000	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	

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						RECYCLE	ENERGY			
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL	
INDIAN RIVER POWER PLANT Total	0	0	0	0	421,420	421,420	0	0	1,125,000	1,125,000	
HYDROGEN FLUORIDE	0	0	0	0	0	0	0	0	25,000	25,000	
LEAD COMPOUNDS	0	0	0	0	14,367	14,367	0	0	0	0	
MANGANESE COMPOUNDS	0	0	0	0	34,000	34,000	0	0	0	0	
MERCURY COMPOUNDS	0	0	0	0	53	53	0	0	0	0	
NAPHTHALENE	0	0	0	0	0	0	0	0	0	0	
NICKEL COMPOUNDS	0	0	0	0	18,000	18,000	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	440,000	440,000	
VANADIUM COMPOUNDS	0	0	0	0	41,000	41,000	0	0	0	0	
ZINC COMPOUNDS	0	0	0	0	14,000	14,000	0	0	0	0	
INSTEEL WIRE	0	459	0	0	0	459	0	0	0	0	
INSTEEL WIRE Total	0	459	0	0	0	459	0	0	0	0	
INTERVET	0	0	0	0	0	0	0	0	0	0	
INTERVET Total	0	0	0	0	0	0	0	0	0	0	
INVISTA S.À R.L. SEAFORD	0	0	0	0	0	0	0	0	0	0	
ANTIMONY COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0	
BIPHENYL	0	0	0	1,000	0	1,000	0	0	0	0	
CHROMIUM COMPOUNDS	0	0	0	0	1,607	1,607	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	
LEAD COMPOUNDS	0	0	0	0	6	6	0	0	0	0	
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
NAPHTHALENE	0	0	0	1	0	1	0	0	0	0	
NITRATE COMPOUNDS	0	0	0	1,900	0	1,900	0	0	0	0	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
SODIUM NITRITE	0	0	0	1,900	0	1,900	0	0	370,000	370,000	
SULFURIC ACID	0	0	0	0	0	0	0	0	0	0	
ZINC COMPOUNDS	0	0	0	0	73	73	0	0	0	0	
INVISTA S.À R.L. SEAFORD Total	0	0	0	4,801	1,686	6,487	0	0	383,000	383,000	

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	ENERGY						RECYCLE	ENERGY		
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL
<b>JOHNSON CONTROLS</b>										
ANTIMONY COMPOUNDS	0	85,316	0	0	0	85,316	0	0	0	0
LEAD COMPOUNDS	3	2,842,616	0	0	133	2,842,752	0	0	0	0
<b>JOHNSON CONTROLS Total</b>	<b>3</b>	<b>2,927,932</b>	<b>0</b>	<b>0</b>	<b>133</b>	<b>2,928,068</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>JUSTIN TANKS</b>										
STYRENE	0	0	0	0	470	470	0	0	0	0
<b>JUSTIN TANKS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>470</b>	<b>470</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>KUEHNE COMPANY</b>										
CHLORINE	0	0	0	0	0	0	0	0	0	0
<b>KUEHNE COMPANY Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>MACDERMID AUTOTYPE</b>										
TOLUENE DIISOCYANATE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	607	607
<b>MACDERMID AUTOTYPE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>607</b>	<b>607</b>
<b>MCKEE RUN POWER PLANT</b>										
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	0	0
NAPHTHALENE	0	109	0	31	441	580	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	30	0	9	123	162	0	0	0	0
<b>MCKEE RUN POWER PLANT Total</b>	<b>0</b>	<b>139</b>	<b>0</b>	<b>40</b>	<b>563</b>	<b>742</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>MEDAL</b>										
METHANOL	0	0	0	47,141	0	47,141	2,227,104	0	0	2,227,104
N-HEXANE	0	0	0	0	0	0	1,855,920	0	0	1,855,920
N-METHYL-2-PYRROLIDONE	129,524	17,175	0	0	0	146,699	0	0	0	0
<b>MEDAL Total</b>	<b>129,524</b>	<b>17,175</b>	<b>0</b>	<b>47,141</b>	<b>0</b>	<b>193,840</b>	<b>4,083,024</b>	<b>0</b>	<b>0</b>	<b>4,083,024</b>
<b>METAL MASTERS</b>										
CHROMIUM	0	261,330	0	0	960	262,290	0	0	0	0
NICKEL	0	88,204	0	0	350	88,554	0	0	0	0
<b>METAL MASTERS Total</b>	<b>0</b>	<b>349,534</b>	<b>0</b>	<b>0</b>	<b>1,310</b>	<b>350,844</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						RECYCLE	ENERGY			TOTAL
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL	
<b>MICROPORE</b>											
N-HEXANE	0	0	0	0	0	0	110	0	0	110	
<b>MICROPORE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110</b>	<b>0</b>	<b>0</b>	<b>110</b>	
<b>MOUNTAIRE FARMS FRANKFORD</b>											
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	
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	
<b>MOUNTAIRE FARMS FRANKFORD Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>MOUNTAIRE FARMS OF DELAWARE</b>											
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	
NAPHTHALENE	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	
<b>MOUNTAIRE FARMS OF DELAWARE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>MOUNTAIRE FARMS OF DELMARVA</b>											
AMMONIA	5,017	0	0	0	0	5,017	0	0	0	0	
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	
<b>MOUNTAIRE FARMS OF DELMARVA Total</b>	<b>5,017</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,017</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>NORAMCO</b>											
DICHLOROMETHANE	8	0	81,271	0	0	81,279	876,883	0	0	876,883	
FORMIC ACID	0	0	0	0	0	0	0	0	0	0	
METHANOL	988	0	875,052	0	0	876,040	0	0	0	0	
N,N-DIMETHYLANILINE	28,719	0	0	0	0	28,719	0	0	0	0	
N-BUTYL ALCOHOL	15	0	87,451	0	0	87,466	0	0	0	0	
TOLUENE	0	0	2,395,377	0	0	2,395,377	0	0	0	0	
<b>NORAMCO Total</b>	<b>29,730</b>	<b>0</b>	<b>3,439,151</b>	<b>0</b>	<b>0</b>	<b>3,468,881</b>	<b>876,883</b>	<b>0</b>	<b>0</b>	<b>876,883</b>	

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# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	ENERGY						RECYCLE	ENERGY		
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL
<b>NRG DOVER</b>										
HYDROCHLORIC ACID	0	0	0	0	0	0	0	0	0	0
LEAD COMPOUNDS	0	0	0	0	443	443	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	41,000	41,000
<b>NRG DOVER Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>450</b>	<b>450</b>	<b>0</b>	<b>0</b>	<b>41,000</b>	<b>41,000</b>
<b>OCCIDENTAL CHEMICAL</b>										
MERCURY	0	20,100	0	0	3,824	23,924	0	0	0	0
SODIUM NITRITE	0	0	0	26,235	0	26,235	0	0	0	0
<b>OCCIDENTAL CHEMICAL Total</b>	<b>0</b>	<b>20,100</b>	<b>0</b>	<b>26,235</b>	<b>3,824</b>	<b>50,159</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ORIENT</b>										
ANILINE	5	0	6,960	0	0	6,965	0	0	10,424	10,424
CHROMIUM COMPOUNDS	0	0	0	0	0	0	0	0	0	0
NITROBENZENE	1	0	8,044	0	0	8,045	0	0	0	0
ZINC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
<b>ORIENT Total</b>	<b>6</b>	<b>0</b>	<b>15,004</b>	<b>0</b>	<b>0</b>	<b>15,010</b>	<b>0</b>	<b>0</b>	<b>10,424</b>	<b>10,424</b>
<b>PERDUE BRIDGEVILLE</b>										
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
<b>PERDUE BRIDGEVILLE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PERDUE GEORGETOWN</b>										
AMMONIA	0	0	0	0	0	0	0	0	39,000	39,000
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
PERACETIC ACID	0	0	0	0	0	0	0	0	11,000	11,000
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
<b>PERDUE GEORGETOWN Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>50,000</b>

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY		DISPOSAL	TOTAL	RECYCLE ON SITE	ENERGY		TOTAL	
			RECOVERY	TREATMENT				RECOVERY	TREATMENT		
<b>PERDUE MILFORD</b>											
PERACETIC ACID	0	0	0	0	0	0	0	0	14,000	14,000	
<b>PERDUE MILFORD Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,000</b>	<b>14,000</b>	
<b>PICTSWEET</b>											
AMMONIA	0	0	0	0	0	0	0	0	0	0	
<b>PICTSWEET Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>PINNACLE FOODS</b>											
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	
<b>PINNACLE FOODS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>PPG DOVER</b>											
CERTAIN GLYCOL ETHERS	13,943	0	0	750	250	14,943	0	0	0	0	
DIBUTYL PHTHALATE	0	0	0	0	1,300	1,300	0	0	0	0	
ETHYLENE GLYCOL	0	0	0	250	250	500	0	0	0	0	
LEAD COMPOUNDS	0	0	0	0	2	2	0	0	0	0	
ZINC COMPOUNDS	2	0	0	0	505	507	0	0	0	0	
<b>PPG DOVER Total</b>	<b>13,945</b>	<b>0</b>	<b>0</b>	<b>1,000</b>	<b>2,307</b>	<b>17,252</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>PREMCOR REFINING GROUP</b>											
1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	7,680	7,680	
1,3-BUTADIENE	0	0	0	0	0	0	0	0	84	84	
2,4-DIMETHYLPHENOL	0	0	0	0	0	0	0	0	34,151	34,151	
AMMONIA	0	0	0	0	0	0	0	14,349,704	14,796	14,364,500	
ANTHRACENE	0	0	0	0	0	0	0	0	0	0	
BENZENE	0	0	8	113	3	124	231	199,374	37,037	236,642	
BENZO(G,H,I)PERYLENE	0	0	0	0	0	0	0	0	471	471	
CARBON DISULFIDE	0	0	0	0	0	0	0	140,204	4,329,846	4,470,050	
CARBONYL SULFIDE	0	0	0	0	0	0	0	5,337,512	10,133,370	15,470,882	
CHROMIUM COMPOUNDS	0	3,727	0	0	1,773	5,500	0	0	0	0	
COBALT COMPOUNDS	0	17,609	0	0	0	17,609	0	0	0	0	
CRESOL (MIXED ISOMERS)	0	11	0	23	0	34	16,417	13,021	309,121	338,559	
CUMENE	0	0	0	0	0	0	0	0	747	747	
CYANIDE COMPOUNDS	0	0	0	0	0	0	0	0	53,867	53,867	
CYCLOHEXANE	0	0	0	0	0	0	0	0	862	862	

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY		DISPOSAL	TOTAL	RECYCLE ON SITE	ENERGY		TOTAL	
			RECOVERY	TREATMENT				RECOVERY	TREATMENT		
DIETHANOLAMINE	0	0	0	0	0	0	178,121	0	0	178,121	
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
ETHYLBENZENE	0	0	3	105	2	110	0	0	7,884	7,884	
ETHYLENE	0	0	0	0	0	0	0	0	8,328	8,328	
ETHYLENE GLYCOL	0	0	0	0	0	0	0	0	32,236	32,236	
FORMIC ACID	0	0	0	0	0	0	0	0	421,394	421,394	
HYDROCHLORIC ACID	0	0	0	0	0	0	0	0	294,331	294,331	
HYDROGEN CYANIDE	0	0	0	0	0	0	0	326,792	75,083	401,875	
LEAD COMPOUNDS	0	105	0	0	56	161	0	0	0	0	
MANGANESE COMPOUNDS	0	1,887	0	0	896	2,783	0	0	0	0	
MERCURY COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
METHANOL	0	0	0	0	0	0	0	0	0	0	
MOLYBDENUM TRIOXIDE	0	0	0	0	0	0	0	0	0	0	
NAPHTHALENE	0	0	0	0	0	0	0	0	2,199	2,199	
N-HEXANE	0	0	0	0	0	0	0	0	27,425	27,425	
NICKEL COMPOUNDS	0	110,247	0	0	47,763	158,010	0	0	0	0	
NITRATE COMPOUNDS	0	0	0	0	0	0	0	0	0	0	
PHENANTHRENE	0	0	0	0	0	0	0	0	41	41	
PHENOL	0	12	0	24	0	36	0	20,454	246,408	266,862	
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	387	387	
PROPYLENE	0	0	0	0	0	0	0	0	10,918	10,918	
STYRENE	0	0	0	0	0	0	0	0	12	12	
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	0	17	209	5	231	0	0	74,909	74,909	
VANADIUM COMPOUNDS	0	162,638	0	0	77,189	239,827	0	0	0	0	
XYLENE (MIXED ISOMERS)	0	0	11	298	10	319	0	0	38,198	38,198	
ZINC COMPOUNDS	0	1,105	0	0	1,293	2,398	0	0	0	0	
<b>PREMCO REFINING GROUP Total</b>	<b>0</b>	<b>297,341</b>	<b>40</b>	<b>772</b>	<b>128,989</b>	<b>427,142</b>	<b>194,769</b>	<b>20,387,061</b>	<b>16,161,785</b>	<b>36,743,615</b>	
<b>PRINCE MINERALS</b>											
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	
<b>PRINCE MINERALS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT			
	ENERGY						RECYCLE	ENERGY		
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	ON SITE	RECOVERY	TREATMENT	TOTAL
<b>ROHM AND HAAS B2 B3 B8</b>										
DIISOCYANATES	0	0	0	0	1,218	1,218	0	0	0	0
N,N-DIMETHYLFORMAMIDE	224,614	0	570,403	79	0	795,096	5,117,211	0	1,347	5,118,558
PHTHALIC ANHYDRIDE	0	0	0	0	0	0	0	0	0	0
<b>ROHM AND HAAS B2 B3 B8 Total</b>	<b>224,614</b>	<b>0</b>	<b>570,403</b>	<b>79</b>	<b>1,218</b>	<b>796,314</b>	<b>5,117,211</b>	<b>0</b>	<b>1,347</b>	<b>5,118,558</b>
<b>ROHM AND HAAS B5 B6</b>										
4,4'-METHYLENEBIS(2-CHLOROANILINE)	0	0	0	0	0	0	0	0	0	0
DIISOCYANATES	0	0	0	5,771	0	5,771	0	0	0	0
N-METHYL-2-PYRROLIDONE	0	0	130,818	2,385	0	133,203	0	0	0	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0
<b>ROHM AND HAAS B5 B6 Total</b>	<b>0</b>	<b>0</b>	<b>130,818</b>	<b>8,156</b>	<b>0</b>	<b>138,974</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ROHM AND HAAS B7 B15</b>										
4,4'-METHYLENEBIS(2-CHLOROANILINE)	0	0	0	0	0	0	0	0	0	0
N-METHYL-2-PYRROLIDONE	0	0	10,911	34	0	10,945	0	0	0	0
<b>ROHM AND HAAS B7 B15 Total</b>	<b>0</b>	<b>0</b>	<b>10,911</b>	<b>34</b>	<b>0</b>	<b>10,945</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SERVICE ENERGY DOVER</b>										
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
<b>SERVICE ENERGY DOVER Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SPI PHARMA</b>										
CHLORINE	0	0	0	0	0	0	0	0	0	0
NITRIC ACID	0	0	0	0	0	0	0	0	0	0
<b>SPI PHARMA Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SPI POLYOLS</b>										
NICKEL COMPOUNDS	0	5,534	0	0	3,704	9,238	0	0	0	0
NITRIC ACID	0	0	0	28,360	0	28,360	0	0	0	0
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	0	0	0	0
<b>SPI POLYOLS Total</b>	<b>0</b>	<b>5,534</b>	<b>0</b>	<b>28,360</b>	<b>3,704</b>	<b>37,598</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

APPENDIX D

# APPENDIX D

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY FACILITY

FACILITY/CHEMICAL	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	POTW	RECYCLE	ENERGY		DISPOSAL	TOTAL	RECYCLE ON SITE	ENERGY		TOTAL	
			RECOVERY	TREATMENT				RECOVERY	TREATMENT		
<b>SUNOCO MARCUS HOOK REFINERY</b>											
BENZENE	0	0	0	0	0	0	0	0	0	0	0
ETHYLENE	0	0	0	0	0	0	0	0	0	0	0
ETHYLENE OXIDE	0	0	0	0	0	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0	0
<b>SUNOCO MARCUS HOOK REFINERY Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>THE MARBLE WORKS</b>											
STYRENE	0	0	0	0	0	0	0	0	0	0	0
<b>THE MARBLE WORKS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>VP RACING FUELS</b>											
BENZENE	0	0	0	0	0	0	0	0	0	0	0
LEAD COMPOUNDS	0	7	0	0	1	8	0	0	0	0	0
METHANOL	0	0	0	0	0	0	0	0	0	0	0
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0	0	0	0	0	0
TOLUENE	0	0	0	0	0	0	0	0	0	0	0
XYLENE (MIXED ISOMERS)	0	0	0	0	0	0	0	0	0	0	0
<b>VP RACING FUELS Total</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>STATE TOTALS</b>	<b>1,243,120</b>	<b>8,179,183</b>	<b>4,910,600</b>	<b>171,044</b>	<b>7,144,231</b>	<b>21,648,179</b>	<b>10,945,896</b>	<b>20,387,061</b>	<b>39,879,302</b>	<b>71,212,259</b>	

APPENDIX D

# APPENDIX E

## 2007 ON-SITE RELEASE SUMMARY BY FACILITY

FACILITY	TO AIR	TO WATER	TO LAND	TOTAL ON- SITE RELEASES	TOTAL OFF- SITE TRANSFERS	TOTAL ON- SITE WASTE MGMT.
INDIAN RIVER POWER PLANT	3,271,238	4,715	388,202	3,664,155	421,420	1,125,000
PREMCO REFINING GROUP	551,985	2,350,514	0	2,902,499	427,142	36,743,615
EDGE MOOR/HAY ROAD POWER PLANTS	1,792,016	8,226	0	1,800,241	357,012	164,374
INVISTA S.À R.L. SEAFORD	295,011	460,267	8,816	764,094	6,487	383,000
PERDUE GEORGETOWN	2,500	487,400	16	489,916	0	50,000
DUPONT EDGE MOOR	217,854	16,039	8,213	242,106	6,182,898	18,796,429
CHRYSLER	178,136	0	0	178,136	174,447	79,800
GENERAL MOTORS WILMINGTON	160,023	0	0	160,023	439,486	93,200
NRG DOVER	153,012	0	0	153,012	450	41,000
FORMOSA PLASTICS	79,629	3	0	79,632	0	266,498
CIBA	29,119	0	0	29,119	2,436,689	878,480
SUNOCO MARCUS HOOK REFINERY	26,156	0	0	26,156	0	0
JUSTIN TANKS	18,400	0	0	18,400	470	0
AIR LIQUIDE INDUSTRIAL	15,731	0	0	15,731	0	0
DOW REICHHOLD	13,355	0	0	13,355	290	2,026,729
HIRSH INDUSTRIES	12,481	0	0	12,481	0	0
MOUNTAIRE FARMS OF DELMARVA	11,676	4	0	11,680	5,017	0
HANOVER FOODS	10,110	0	0	10,110	0	0
CAMDEL METALS	9,844	0	0	9,844	101,877	0
DUPONT RED LION	9,658	0	0	9,658	0	0
MICROPOR	7,800	0	0	7,800	0	110
CRODA	6,995	0	0	6,995	114,927	0
DENTSPLY WEST PLANT	6,858	0	0	6,858	27,499	0
EVRAZ CLAYMONT STEEL	4,711	382	941	6,034	2,652,282	0
BASF	5,368	0	0	5,368	3,744	4,596
NORAMCO	5,243	0	0	5,243	3,468,881	876,883
ROHM AND HAAS B2 B3 B8	4,187	0	0	4,187	796,314	5,118,558
ARLON	3,640	0	0	3,640	13,420	154,000
HONEYWELL	3,399	0	0	3,399	44,210	300,729
ORIENT	2,902	0	0	2,902	15,010	10,424
MEDAL	2,640	0	0	2,640	193,840	4,083,024
THE MARBLE WORKS	1,873	0	0	1,873	0	0
ROHM AND HAAS B5 B6	1,809	0	0	1,809	138,974	0
PRINCE MINERALS	1,352	96	0	1,448	0	0
ROHM AND HAAS B7 B15	1,371	0	0	1,371	10,945	0
KUEHNE COMPANY	752	0	0	752	0	0
AGILENT TECHNOLOGIES NEWPORT	600	0	0	600	120,748	0
JOHNSON CONTROLS	456	24	0	480	2,928,068	0
PPG DOVER	275	0	0	275	17,252	0
DOVER AFB	41	0	0	41	0	0
OCCIDENTAL CHEMICAL	11	5	0	17	50,159	0
MACDERMID AUTOTYPE	13	0	0	13	0	607
METAL MASTERS	6	0	0	5.5	350,844	0
E-A-R SPECIALTY COMPOSITES	3	0	0	3.4	2,955	0

# APPENDIX E

## 2007 ON-SITE RELEASE SUMMARY BY FACILITY

FACILITY	TO AIR	TO WATER	TO LAND	TOTAL ON- SITE RELEASES	TOTAL OFF- SITE TRANSFERS	TOTAL ON- SITE WASTE MGMT.
MOUNTAIRE FARMS OF DELAWARE	2	0	0	2.3	0	0
PINNACLE FOODS	2	0	0	2.0	0	0
MCKEE RUN POWER PLANT	2	0	0	1.6	742	0
MOUNTAIRE FARMS FRANKFORD	1	0	0	1.5	0	0
GE ENERGY USA	1	0	0	0.6	398	0
VP RACING FUELS	0	0	0	0.30	8	0
HANESBRANDS	0	0	0	0.11	80,055	0
SPI POLYOLS	0	0	0	0.040	37,598	0
DENTSPLY MAIN PLANT	0	0	0	0.020	2,458	0
INSTEEL WIRE	0	0	0	0.0024	459	0
INTERVET	0	0	0	0	0	0
GAC SEAFORD	0	0	0	0	0	0
CUSTOM DECORATIVE MOULDINGS	0	0	0	0	0	0
PERDUE MILFORD	0	0	0	0	0	14,000
CLARIANT	0	0	0	0	0	0
FUJIFILM IMAGING COLORANTS	0	0	0	0	3,826	0
CARL KING	0	0	0	0	0	0
IKO WILMINGTON	0	0	0	0	77	3
SPI PHARMA	0	0	0	0	0	0
BUCK ALGONQUIN	0	0	0	0	8,000	0
PICTSWEET	0	0	0	0	0	0
CHROME DEPOSIT	0	0	0	0	10,800	1,200
PERDUE BRIDGEVILLE	0	0	0	0	0	0
ALLEN'S HATCHERY	0	0	0	0	0	0
SERVICE ENERGY DOVER	0	0	0	0	0	0
<b>Facility Totals</b>	<b>6,920,246</b>	<b>3,327,675</b>	<b>406,188</b>	<b>10,654,109</b>	<b>21,648,179</b>	<b>71,212,259</b>

# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE	ON SITE WASTE	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL	TRANSFERS	MANAGEMENT	
<b>1,2,4-TRIMETHYLBENZENE</b>							
CARL KING	0	0	0	0	0	0	1
CHRYSLER	13,300	0	0	13,300	2,168	12,000	
GAC SEAFORD	0	0	0	0	0	0	1
GENERAL MOTORS WILMINGTON	33,890	0	0	33,890	56,610	5,600	
PREMCOR REFINING GROUP	1,565	0	0	1,565	0	7,680	
SERVICE ENERGY DOVER	0	0	0	0	0	0	1
<b>1,2,4-TRIMETHYLBENZENE Total</b>	<b>48,755</b>	<b>0</b>	<b>0</b>	<b>48,755</b>	<b>58,778</b>	<b>25,280</b>	<b>3</b>
<b>1,3-BUTADIENE</b>							
DOW REICHHOLD	4,609	0	0	4,609	0	1,306,955	
PREMCOR REFINING GROUP	775	0	0	775	0	84	
<b>1,3-BUTADIENE Total</b>	<b>5,384</b>	<b>0</b>	<b>0</b>	<b>5,384</b>	<b>0</b>	<b>1,307,039</b>	
<b>2,4-DIMETHYLPHENOL</b>							
PREMCOR REFINING GROUP	0	172	0	172	0	34,151	
<b>2,4-DIMETHYLPHENOL Total</b>	<b>0</b>	<b>172</b>	<b>0</b>	<b>172</b>	<b>0</b>	<b>34,151</b>	
<b>4,4'-ISOPROPYLIDENEDIPHENOL</b>							
CRODA	10	0	0	10	0	0	
<b>4,4'-ISOPROPYLIDENEDIPHENOL Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	
<b>4,4'-METHYLENEBIS(2-CHLOROANILINE)</b>							
ROHM AND HAAS B5 B6	0	0	0	0	0	0	1
ROHM AND HAAS B7 B15	0	0	0	0	0	0	1
<b>4,4'-METHYLENEBIS(2-CHLOROANILINE) Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>ACETONITRILE</b>							
AGILENT TECHNOLOGIES NEWPORT	22	0	0	22	10,048	0	
<b>ACETONITRILE Total</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>10,048</b>	<b>0</b>	
<b>ACRYLAMIDE</b>							
DOW REICHHOLD	0	0	0	0	0	0	1
<b>ACRYLAMIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

APPENDIX F

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# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				TOTAL	OFF SITE	ON SITE WASTE	FORM A
	TO AIR	TO WATER	TO LAND	TRANSFERS		MANAGEMENT		
<b>ACRYLIC ACID</b>								
CRODA	250	0	0	250	0		0	
DOW REICHHOLD	1,120	0	0	1,120	0		0	
<b>ACRYLIC ACID Total</b>	<b>1,370</b>	<b>0</b>	<b>0</b>	<b>1,370</b>	<b>0</b>		<b>0</b>	
<b>ACRYLONITRILE</b>								
DOW REICHHOLD	2,279	0	0	2,279	1		538,500	
<b>ACRYLONITRILE Total</b>	<b>2,279</b>	<b>0</b>	<b>0</b>	<b>2,279</b>	<b>1</b>		<b>538,500</b>	
<b>AMMONIA</b>								
AIR LIQUIDE INDUSTRIAL	15,731	0	0	15,731	0		0	
BASF	3,886	0	0	3,886	649		0	
EDGE MOOR/HAY ROAD POWER PLANTS	22,387	1	0	22,388	1,205		0	
FORMOSA PLASTICS	14,182	0	0	14,182	0		0	
HANOVER FOODS	10,110	0	0	10,110	0		0	
INDIAN RIVER POWER PLANT	21,000	0	0	21,000	0		660,000	
MOUNTAIRE FARMS OF DELMARVA	11,653	4	0	11,657	5,017		0	
PERDUE GEORGETOWN	2,500	100	16	2,616	0		39,000	
PICTSWEET	0	0	0	0	0		0	
PREMCOR REFINING GROUP	34,832	3,739	0	38,571	0		14,364,500	
<b>AMMONIA Total</b>	<b>136,281</b>	<b>3,844</b>	<b>16</b>	<b>140,141</b>	<b>6,871</b>		<b>15,063,500</b>	
<b>ANILINE</b>								
CIBA	33	0	0	33	171,649		1,220	
ORIENT	2,682	0	0	2,682	6,965		10,424	
<b>ANILINE Total</b>	<b>2,715</b>	<b>0</b>	<b>0</b>	<b>2,715</b>	<b>178,614</b>		<b>11,644</b>	
<b>ANTHRACENE</b>								
PREMCOR REFINING GROUP	1	0	0	1	0		0	
<b>ANTHRACENE Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>		<b>0</b>	
<b>ANTIMONY COMPOUNDS</b>								
INVISTA S.À R.L. SEAFORD	16	0	16	32	0		0	
JOHNSON CONTROLS	0	0	0	0	85,316		0	
<b>ANTIMONY COMPOUNDS Total</b>	<b>16</b>	<b>0</b>	<b>16</b>	<b>32</b>	<b>85,316</b>		<b>0</b>	

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# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>ARSENIC</b>							
ALLEN'S HATCHERY	0	0	0	0	0	0	1
<b>ARSENIC Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>ARSENIC COMPOUNDS</b>							
MOUNTAIRE FARMS FRANKFORD	0	0	0	0	0	0	1
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	1
<b>ARSENIC COMPOUNDS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>BARIUM</b>							
PRINCE MINERALS	33	11	0	44	0	0	
<b>BARIUM Total</b>	<b>33</b>	<b>11</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>0</b>	
<b>BARIUM COMPOUNDS</b>							
DUPONT EDGE MOOR	1	4,174	0	4,175	64,249	0	
EDGE MOOR/HAY ROAD POWER PLANTS	6,817	1,031	0	7,848	136,087	0	
INDIAN RIVER POWER PLANT	4,805	750	220,000	225,555	240,000	0	
<b>BARIUM COMPOUNDS Total</b>	<b>11,623</b>	<b>5,955</b>	<b>220,000</b>	<b>237,578</b>	<b>440,336</b>	<b>0</b>	
<b>BENZENE</b>							
CHRYSLER	117	0	0	117	0	0	
GENERAL MOTORS WILMINGTON	223	0	0	223	12	0	
PREMCOR REFINING GROUP	5,126	0	0	5,126	124	236,642	
SUNOCO MARCUS HOOK REFINERY	4,360	0	0	4,360	0	0	
VP RACING FUELS	0	0	0	0	0	0	1
<b>BENZENE Total</b>	<b>9,826</b>	<b>0</b>	<b>0</b>	<b>9,826</b>	<b>136</b>	<b>236,642</b>	<b>1</b>
<b>BENZO(G,H,I)PERYLENE</b>							
DUPONT EDGE MOOR	0	0	1	1	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	
GENERAL MOTORS WILMINGTON	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	
INVISTA S.À R.L. SEAFORD	0	0	0	0	0	0	
MCKEE RUN POWER PLANT	0	0	0	0	0	0	
MOUNTAIRE FARMS OF DELMARVA	1	0	0	1	0	0	
PERDUE BRIDGEVILLE	0	0	0	0	0	0	1
PERDUE GEORGETOWN	0	0	0	0	0	0	1

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# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE	
	TO AIR	TO WATER	TO LAND	TOTAL		MANAGEMENT	FORM A
PINNACLE FOODS	0	0	0	0	0	0	
PREMCOR REFINING GROUP	1	5	0	6	0	471	
<b>BENZO(G,H,I)PERYLENE Total</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>471</b>	<b>2</b>
<b>BIPHENYL</b>							
CIBA	124	0	0	124	277,029	8,760	
INVISTA S.À R.L. SEAFORD	7,780	0	0	7,780	1,000	0	
<b>BIPHENYL Total</b>	<b>7,904</b>	<b>0</b>	<b>0</b>	<b>7,904</b>	<b>278,029</b>	<b>8,760</b>	
<b>BIS(2-CHLOROETHYL) ETHER</b>							
CRODA	10	0	0	10	35,212	0	
<b>BIS(2-CHLOROETHYL) ETHER Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>35,212</b>	<b>0</b>	
<b>BORON TRIFLUORIDE</b>							
HONEYWELL	500	0	0	500	6,118	144,803	
<b>BORON TRIFLUORIDE Total</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>500</b>	<b>6,118</b>	<b>144,803</b>	
<b>BUTYL ACRYLATE</b>							
BASF	192	0	0	192	5	66	
DOW REICHHOLD	139	0	0	139	0	162	
<b>BUTYL ACRYLATE Total</b>	<b>331</b>	<b>0</b>	<b>0</b>	<b>331</b>	<b>5</b>	<b>228</b>	
<b>CARBON DISULFIDE</b>							
PREMCOR REFINING GROUP	1,422	0	0	1,422	0	4,470,050	
<b>CARBON DISULFIDE Total</b>	<b>1,422</b>	<b>0</b>	<b>0</b>	<b>1,422</b>	<b>0</b>	<b>4,470,050</b>	
<b>CARBONYL SULFIDE</b>							
DUPONT EDGE MOOR	208,265	0	0	208,265	0	0	
PREMCOR REFINING GROUP	32,811	0	0	32,811	0	15,470,882	
<b>CARBONYL SULFIDE Total</b>	<b>241,076</b>	<b>0</b>	<b>0</b>	<b>241,076</b>	<b>0</b>	<b>15,470,882</b>	
<b>CERTAIN GLYCOL ETHERS</b>							
BASF	10	0	0	10	1,854	0	
CHRYSLER	83,000	0	0	83,000	95,780	30,000	
CRODA	500	0	0	500	2,670	0	
GENERAL MOTORS WILMINGTON	4,200	0	0	4,200	20,790	10,000	

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# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
HIRSH INDUSTRIES	12,481	0	0	12,481	0	0	
PPG DOVER	10	0	0	10	14,943	0	
<b>CERTAIN GLYCOL ETHERS Total</b>	<b>100,201</b>	<b>0</b>	<b>0</b>	<b>100,201</b>	<b>136,037</b>	<b>40,000</b>	
<b>CHLORINE</b>							
DUPONT EDGE MOOR	2,982	0	0	2,982	0	2,270,817	
KUEHNE COMPANY	752	0	0	752	0	0	
SPI PHARMA	0	0	0	0	0	0	1
<b>CHLORINE Total</b>	<b>3,734</b>	<b>0</b>	<b>0</b>	<b>3,734</b>	<b>0</b>	<b>2,270,817</b>	<b>1</b>
<b>CHLOROACETIC ACID</b>							
CRODA	0	0	0	0	0	0	
<b>CHLOROACETIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>CHROMIUM</b>							
CAMDEL METALS	0	0	0	0	45,892	0	
METAL MASTERS	5	0	0	5	262,290	0	
<b>CHROMIUM Total</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>308,182</b>	<b>0</b>	
<b>CHROMIUM COMPOUNDS</b>							
CHROME DEPOSIT	0	0	0	0	2,300	1,200	
CLARIANT	0	0	0	0	0	0	1
CLAYMONT STEEL	138	3	87	228	33,637	0	
DUPONT EDGE MOOR	1	35	0	36	312,656	0	
EDGE MOOR/HAY ROAD POWER PLANTS	947	514	0	1,461	33,730	0	
INDIAN RIVER POWER PLANT	755	250	27,000	28,005	25,000	0	
INVISTA S.Å R.L. SEAFORD	29	0	2,900	2,929	1,607	0	
ORIENT	0	0	0	0	0	0	
PREMCOR REFINING GROUP	115	58	0	173	5,500	0	
<b>CHROMIUM COMPOUNDS Total</b>	<b>1,985</b>	<b>860</b>	<b>29,987</b>	<b>32,832</b>	<b>414,430</b>	<b>1,200</b>	<b>1</b>
<b>COBALT COMPOUNDS</b>							
DUPONT EDGE MOOR	0	33	0	33	16,680	0	
EDGE MOOR/HAY ROAD POWER PLANTS	658	0	0	658	27,911	0	
INDIAN RIVER POWER PLANT	255	5	9,400	9,660	11,000	0	
PREMCOR REFINING GROUP	52	64	0	116	17,609	0	
<b>COBALT COMPOUNDS Total</b>	<b>965</b>	<b>102</b>	<b>9,400</b>	<b>10,467</b>	<b>73,200</b>	<b>0</b>	

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CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>COPPER</b>							
ARLON	0	0	0	0	3,900	0	
BUCK ALGONQUIN	0	0	0	0	8,000	0	
<b>COPPER Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,900</b>	<b>0</b>	
<b>COPPER COMPOUNDS</b>							
ALLEN'S HATCHERY	0	0	0	0	0	0	1
CLAYMONT STEEL	142	52	28	222	38,601	0	
EDGE MOOR/HAY ROAD POWER PLANTS	649	3,762	0	4,411	26,794	0	
FUJIFILM IMAGING COLORANTS	0	0	0	0	555	0	
INDIAN RIVER POWER PLANT	255	2,700	22,000	24,955	24,000	0	
MOUNTAIRE FARMS FRANKFORD	0	0	0	0	0	0	1
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	1
PERDUE BRIDGEVILLE	0	0	0	0	0	0	1
<b>COPPER COMPOUNDS Total</b>	<b>1,046</b>	<b>6,514</b>	<b>22,028</b>	<b>29,588</b>	<b>89,950</b>	<b>0</b>	<b>4</b>
<b>CREOSOTE</b>							
DUPONT EDGE MOOR	908	0	7,594	8,502	0	0	
<b>CREOSOTE Total</b>	<b>908</b>	<b>0</b>	<b>7,594</b>	<b>8,502</b>	<b>0</b>	<b>0</b>	
<b>CRESOL (MIXED ISOMERS)</b>							
PREMCOR REFINING GROUP	0	343	0	343	34	338,559	
<b>CRESOL (MIXED ISOMERS) Total</b>	<b>0</b>	<b>343</b>	<b>0</b>	<b>343</b>	<b>34</b>	<b>338,559</b>	
<b>CUMENE</b>							
PREMCOR REFINING GROUP	455	0	0	455	0	747	
<b>CUMENE Total</b>	<b>455</b>	<b>0</b>	<b>0</b>	<b>455</b>	<b>0</b>	<b>747</b>	
<b>CYANIDE COMPOUNDS</b>							
PREMCOR REFINING GROUP	1,446	544	0	1,990	0	53,867	
<b>CYANIDE COMPOUNDS Total</b>	<b>1,446</b>	<b>544</b>	<b>0</b>	<b>1,990</b>	<b>0</b>	<b>53,867</b>	
<b>CYCLOHEXANE</b>							
CIBA	50	0	0	50	22,600	5,090	
PREMCOR REFINING GROUP	1,361	0	0	1,361	0	862	
<b>CYCLOHEXANE Total</b>	<b>1,411</b>	<b>0</b>	<b>0</b>	<b>1,411</b>	<b>22,600</b>	<b>5,952</b>	

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CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>DIBUTYL PHTHALATE</b>							
PPG DOVER	0	0	0	0	1,300	0	
<b>DIBUTYL PHTHALATE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,300</b>	<b>0</b>	
<b>DICHLOROMETHANE</b>							
NORAMCO	2,209	0	0	2,209	81,279	876,883	
<b>DICHLOROMETHANE Total</b>	<b>2,209</b>	<b>0</b>	<b>0</b>	<b>2,209</b>	<b>81,279</b>	<b>876,883</b>	
<b>DIETHANOLAMINE</b>							
CRODA	500	0	0	500	8,360	0	
PREMCOR REFINING GROUP	0	0	0	0	0	178,121	
<b>DIETHANOLAMINE Total</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>500</b>	<b>8,360</b>	<b>178,121</b>	
<b>DIISOCYANATES</b>							
CUSTOM DECORATIVE MOULDINGS	0	0	0	0	0	0	1
E-A-R SPECIALTY COMPOSITES	2	0	0	2	1,355	0	
ROHM AND HAAS B2 B3 B8	0	0	0	0	1,218	0	
ROHM AND HAAS B5 B6	2	0	0	2	5,771	0	
<b>DIISOCYANATES Total</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>8,344</b>	<b>0</b>	<b>1</b>
<b>DIOXIN AND DIOXIN-LIKE COMPOUNDS</b>							
CLAYMONT STEEL	0	0	0	0.0157	0.0000	0.0000	
DUPONT EDGE MOOR	0	0	0	0.0113	48.7883	0.0000	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0.0048	0.0000	0.0000	
INDIAN RIVER POWER PLANT	0	0	0	0.0007	0.0000	0.0000	
INVISTA S.À R.L. SEAFORD	0	0	0	0.0012	0.0000	0.0000	
PREMCOR REFINING GROUP	0	0	0	0.0012	0.0000	0.0000	
<b>DIOXIN AND DIOXIN-LIKE COMPOUNDS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0348</b>	<b>48.7883</b>	<b>0.0000</b>	
<b>ETHYL ACRYLATE</b>							
BASF	317	0	0	317	0	1,057	
DOW REICHHOLD	81	0	0	81	0	181	
<b>ETHYL ACRYLATE Total</b>	<b>398</b>	<b>0</b>	<b>0</b>	<b>398</b>	<b>0</b>	<b>1,238</b>	

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# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>ETHYLBENZENE</b>							
ARLON	540	0	0	540	1,420	24,000	
CHRYSLER	3,330	0	0	3,330	3,500	0	
DOVER AFB	33	0	0	33	0	0	
PREMCOR REFINING GROUP	2,618	0	0	2,618	110	7,884	
<b>ETHYLBENZENE Total</b>	<b>6,521</b>	<b>0</b>	<b>0</b>	<b>6,521</b>	<b>5,030</b>	<b>31,884</b>	
<b>ETHYLENE</b>							
PREMCOR REFINING GROUP	10,230	0	0	10,230	0	8,328	
SUNOCO MARCUS HOOK REFINERY	20,427	0	0	20,427	0	0	
<b>ETHYLENE Total</b>	<b>30,657</b>	<b>0</b>	<b>0</b>	<b>30,657</b>	<b>0</b>	<b>8,328</b>	
<b>ETHYLENE GLYCOL</b>							
CHRYSLER	8	0	0	8	52	0	
GENERAL MOTORS WILMINGTON	41	0	0	41	430	0	
PPG DOVER	10	0	0	10	500	0	
PREMCOR REFINING GROUP	0	322	0	322	0	32,236	
<b>ETHYLENE GLYCOL Total</b>	<b>59</b>	<b>322</b>	<b>0</b>	<b>381</b>	<b>982</b>	<b>32,236</b>	
<b>ETHYLENE OXIDE</b>							
CRODA	2,300	0	0	2,300	0	0	
SUNOCO MARCUS HOOK REFINERY	1,313	0	0	1,313	0	0	
<b>ETHYLENE OXIDE Total</b>	<b>3,613</b>	<b>0</b>	<b>0</b>	<b>3,613</b>	<b>0</b>	<b>0</b>	
<b>FORMALDEHYDE</b>							
DOW REICHHOLD	1,965	0	0	1,965	0	0	
<b>FORMALDEHYDE Total</b>	<b>1,965</b>	<b>0</b>	<b>0</b>	<b>1,965</b>	<b>0</b>	<b>0</b>	
<b>FORMIC ACID</b>							
NORAMCO	8	0	0	8	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	421,394	
<b>FORMIC ACID Total</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>421,394</b>	
<b>HEXACHLOROBENZENE</b>							
DUPONT EDGE MOOR	0	1	0	1	1,326	0	
<b>HEXACHLOROBENZENE Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1,326</b>	<b>0</b>	

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## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE	ON SITE WASTE	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL	TRANSFERS	MANAGEMENT	
<b>HYDROCHLORIC ACID</b>							
DUPONT EDGE MOOR	3,771	0	0	3,771	6,350	14,481,740	
EDGE MOOR/HAY ROAD POWER PLANTS	1,584,375	0	0	1,584,375	0	0	
INDIAN RIVER POWER PLANT	2,900,000	0	0	2,900,000	0	0	
INVISTA S.Å R.L. SEAFORD	210,000	0	0	210,000	0	13,000	
NRG DOVER	140,000	0	0	140,000	0	0	
PREMCO REFINING GROUP	287	0	0	287	0	294,331	
<b>HYDROCHLORIC ACID Total</b>	<b>4,838,433</b>	<b>0</b>	<b>0</b>	<b>4,838,433</b>	<b>6,350</b>	<b>14,789,071</b>	
<b>HYDROGEN CYANIDE</b>							
PREMCO REFINING GROUP	2,405	758	0	3,163	0	401,875	
<b>HYDROGEN CYANIDE Total</b>	<b>2,405</b>	<b>758</b>	<b>0</b>	<b>3,163</b>	<b>0</b>	<b>401,875</b>	
<b>HYDROGEN FLUORIDE</b>							
EDGE MOOR/HAY ROAD POWER PLANTS	97,197	0	0	97,197	0	10,949	
HONEYWELL	476	0	0	476	58	58	
INDIAN RIVER POWER PLANT	230,000	0	0	230,000	0	25,000	
<b>HYDROGEN FLUORIDE Total</b>	<b>327,673</b>	<b>0</b>	<b>0</b>	<b>327,673</b>	<b>58</b>	<b>36,007</b>	
<b>LEAD</b>							
PRINCE MINERALS	3	6	0	9	0	0	
<b>LEAD Total</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	
<b>LEAD COMPOUNDS</b>							
CHROME DEPOSIT	0	0	0	0	8,500	0	
CHRYSLER	0	0	0	0	66	0	
CLAYMONT STEEL	585	75	49	709	258,052	0	
DUPONT EDGE MOOR	0	57	0	57	75,466	0	
EDGE MOOR/HAY ROAD POWER PLANTS	1,031	1,344	0	2,375	11,872	0	
GE ENERGY USA	1	0	0	1	398	0	
HONEYWELL	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	679	0	12,756	13,435	14,367	0	
INSTEEL WIRE	0	0	0	0	459	0	
INVISTA S.Å R.L. SEAFORD	47	0	1,800	1,847	6	0	
JOHNSON CONTROLS	456	24	0	480	2,842,752	0	
NRG DOVER	3	0	0	3	443	0	

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## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE	ON SITE WASTE	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL	TRANSFERS	MANAGEMENT	
PPG DOVER	0	0	0	0	2	0	
PREMCOR REFINING GROUP	182	42	0	224	161	0	
VP RACING FUELS	0	0	0	0	8	0	
<b>LEAD COMPOUNDS Total</b>	<b>2,985</b>	<b>1,542</b>	<b>14,605</b>	<b>19,131</b>	<b>3,212,552</b>	<b>0</b>	
<b>MALEIC ANHYDRIDE</b>							
CRODA	10	0	0	10	0	0	
<b>MALEIC ANHYDRIDE Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	
<b>MANGANESE</b>							
CAMDEL METALS	0	0	0	0	4,924	0	
<b>MANGANESE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,924</b>	<b>0</b>	
<b>MANGANESE COMPOUNDS</b>							
ALLEN'S HATCHERY	0	0	0	0	0	0	1
CLAYMONT STEEL	456	32	558	1,046	225,570	0	
DUPONT EDGE MOOR	1	10,304	0	10,305	5,196,925	0	
EDGE MOOR/HAY ROAD POWER PLANTS	1,117	534	0	1,651	30,827	0	
HONEYWELL	0	0	0	0	0	0	1
INDIAN RIVER POWER PLANT	755	5	31,000	31,760	34,000	0	
MOUNTAIRE FARMS FRANKFORD	0	0	0	0	0	0	1
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	1
PERDUE BRIDGEVILLE	0	0	0	0	0	0	1
PREMCOR REFINING GROUP	1,087	1,941	0	3,028	2,783	0	
PRINCE MINERALS	1,309	74	0	1,383	0	0	
<b>MANGANESE COMPOUNDS Total</b>	<b>4,725</b>	<b>12,890</b>	<b>31,558</b>	<b>49,173</b>	<b>5,490,105</b>	<b>0</b>	<b>5</b>
<b>MERCURY</b>							
DENTSPLY MAIN PLANT	0	0	0	0	2,458	0	
OCCIDENTAL CHEMICAL	11	5	0	17	23,924	0	
<b>MERCURY Total</b>	<b>11</b>	<b>5</b>	<b>0</b>	<b>17</b>	<b>26,382</b>	<b>0</b>	
<b>MERCURY COMPOUNDS</b>							
CLAYMONT STEEL	270	0	0	270	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	174	0	0	174	67	0	
INDIAN RIVER POWER PLANT	117	0	46	163	53	0	
INTERVET	0	0	0	0	0	0	

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## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE	
	TO AIR	TO WATER	TO LAND	TOTAL		MANAGEMENT	FORM A
INVISTA S.À R.L. SEAFORD	43	0	0	43	0	0	
NRG DOVER	9	0	0	9	7	0	
PREMCOR REFINING GROUP	13	2	0	15	0	0	
<b>MERCURY COMPOUNDS Total</b>	<b>626</b>	<b>2</b>	<b>46</b>	<b>674</b>	<b>127</b>	<b>0</b>	
<b>METHANOL</b>							
AGILENT TECHNOLOGIES NEWPORT	456	0	0	456	21,659	0	
CHRYSLER	280	0	0	280	8	0	
CIBA	27,163	0	0	27,163	1,837,008	822,703	
CRODA	2,150	0	0	2,150	57,075	0	
DENTSPLY WEST PLANT	1,000	0	0	1,000	14,219	0	
GENERAL MOTORS WILMINGTON	5,590	0	0	5,590	16,145	3,200	
HONEYWELL	10	0	0	10	1,148	7	
MEDAL	600	0	0	600	47,141	2,227,104	
NORAMCO	1,628	0	0	1,628	876,040	0	
PREMCOR REFINING GROUP	3,953	0	0	3,953	0	0	
VP RACING FUELS	0	0	0	0	0	0	1
<b>METHANOL Total</b>	<b>42,830</b>	<b>0</b>	<b>0</b>	<b>42,830</b>	<b>2,870,443</b>	<b>3,053,014</b>	<b>1</b>
<b>METHYL ISOBUTYL KETONE</b>							
CHRYSLER	16,500	0	0	16,500	19,000	0	
<b>METHYL ISOBUTYL KETONE Total</b>	<b>16,500</b>	<b>0</b>	<b>0</b>	<b>16,500</b>	<b>19,000</b>	<b>0</b>	
<b>METHYL METHACRYLATE</b>							
BASF	480	0	0	480	0	1,979	
DENTSPLY WEST PLANT	2,608	0	0	2,608	1,396	0	
DOW REICHHOLD	760	0	0	760	0	419	
<b>METHYL METHACRYLATE Total</b>	<b>3,848</b>	<b>0</b>	<b>0</b>	<b>3,848</b>	<b>1,396</b>	<b>2,398</b>	
<b>METHYL TERT-BUTYL ETHER</b>							
VP RACING FUELS	0	0	0	0	0	0	1
<b>METHYL TERT-BUTYL ETHER Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>MOLYBDENUM TRIOXIDE</b>							
PREMCOR REFINING GROUP	0	0	0	0	0	0	
<b>MOLYBDENUM TRIOXIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

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CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>N,N-DIMETHYLANILINE</b>							
NORAMCO	0	0	0	0	28,719	0	
<b>N,N-DIMETHYLANILINE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28,719</b>	<b>0</b>	
<b>N,N-DIMETHYLFORMAMIDE</b>							
ROHM AND HAAS B2 B3 B8	4,187	0	0	4,187	795,096	5,118,558	
<b>N,N-DIMETHYLFORMAMIDE Total</b>	<b>4,187</b>	<b>0</b>	<b>0</b>	<b>4,187</b>	<b>795,096</b>	<b>5,118,558</b>	
<b>NAPHTHALENE</b>							
CARL KING	0	0	0	0	0	0	1
CRODA	10	0	0	10	9,520	0	
DOVER AFB	8	0	0	8	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	1
INVISTA S.À R.L. SEAFORD	8	0	0	8	1	0	
MCKEE RUN POWER PLANT	2	0	0	2	580	0	
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	1
PREMCO REFINING GROUP	2,504	0	0	2,504	0	2,199	
<b>NAPHTHALENE Total</b>	<b>2,531</b>	<b>0</b>	<b>0</b>	<b>2,531</b>	<b>10,101</b>	<b>2,199</b>	<b>3</b>
<b>N-BUTYL ALCOHOL</b>							
CHRYSLER	23,200	0	0	23,200	2,782	22,000	
GENERAL MOTORS WILMINGTON	16,290	0	0	16,290	590	11,000	
NORAMCO	19	0	0	19	87,466	0	
<b>N-BUTYL ALCOHOL Total</b>	<b>39,509</b>	<b>0</b>	<b>0</b>	<b>39,509</b>	<b>90,838</b>	<b>33,000</b>	
<b>N-HEXANE</b>							
CHRYSLER	703	0	0	703	0	0	
HONEYWELL	2,413	0	0	2,413	36,886	155,861	
MEDAL	1,200	0	0	1,200	0	1,855,920	
MICROPORE	7,800	0	0	7,800	0	110	
PREMCO REFINING GROUP	8,794	0	0	8,794	0	27,425	
<b>N-HEXANE Total</b>	<b>20,910</b>	<b>0</b>	<b>0</b>	<b>20,910</b>	<b>36,886</b>	<b>2,039,316</b>	

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## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE	ON SITE WASTE	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL	TRANSFERS	MANAGEMENT	
<b>NICKEL</b>							
CAMDEL METALS	0	0	0	0	38,808	0	
METAL MASTERS	1	0	0	1	88,554	0	
PRINCE MINERALS	7	5	0	12	0	0	
<b>NICKEL Total</b>	<b>7</b>	<b>5</b>	<b>0</b>	<b>12</b>	<b>127,362</b>	<b>0</b>	
<b>NICKEL COMPOUNDS</b>							
CLAYMONT STEEL	32	12	34	78	5,436	0	
DUPONT EDGE MOOR	2	592	0	594	40,281	0	
EDGE MOOR/HAY ROAD POWER PLANTS	2,351	1,028	0	3,379	27,272	0	
INDIAN RIVER POWER PLANT	755	250	16,000	17,005	18,000	0	
PREMCOR REFINING GROUP	263	3,690	0	3,953	158,010	0	
SPI POLYOLS	0	0	0	0	9,238	0	
<b>NICKEL COMPOUNDS Total</b>	<b>3,403</b>	<b>5,572</b>	<b>16,034</b>	<b>25,009</b>	<b>258,237</b>	<b>0</b>	
<b>NITRATE COMPOUNDS</b>							
CHRYSLER	0	0	0	0	26,022	0	
CIBA	0	0	0	0	27,232	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	12	0	12	0	0	
FUJIFILM IMAGING COLORANTS	0	0	0	0	3,271	0	
GENERAL MOTORS WILMINGTON	0	0	0	0	43,000	0	
HANESBRANDS	0	0	0	0	80,055	0	
INVISTA S.À R.L. SEAFORD	0	460,000	0	460,000	1,900	0	
PERDUE GEORGETOWN	0	487,300	0	487,300	0	0	
PREMCOR REFINING GROUP	0	2,320,881	0	2,320,881	0	0	
<b>NITRATE COMPOUNDS Total</b>	<b>0</b>	<b>3,268,193</b>	<b>0</b>	<b>3,268,193</b>	<b>181,480</b>	<b>0</b>	
<b>NITRIC ACID</b>							
CHRYSLER	27	0	0	27	0	2,700	
CIBA	0	0	0	0	0	27,671	
GENERAL MOTORS WILMINGTON	0	0	0	0	0	38,000	
SPI PHARMA	0	0	0	0	0	0	1
SPI POLYOLS	0	0	0	0	28,360	0	
<b>NITRIC ACID Total</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>28,360</b>	<b>68,371</b>	<b>1</b>

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	TO AIR	TO WATER	TO LAND	TOTAL	TRANSFERS	MANAGEMENT	
<b>NITROBENZENE</b>							
ORIENT	220	0	0	220	8,045		0
<b>NITROBENZENE Total</b>	<b>220</b>	<b>0</b>	<b>0</b>	<b>220</b>	<b>8,045</b>		<b>0</b>
<b>N-METHYL-2-PYRROLIDONE</b>							
CHRYSLER	15,900	0	0	15,900	467		11,000
MEDAL	840	0	0	840	146,699		0
ROHM AND HAAS B5 B6	1,807	0	0	1,807	133,203		0
ROHM AND HAAS B7 B15	1,371	0	0	1,371	10,945		0
<b>N-METHYL-2-PYRROLIDONE Total</b>	<b>19,918</b>	<b>0</b>	<b>0</b>	<b>19,918</b>	<b>291,314</b>		<b>11,000</b>
<b>OCTACHLOROSTYRENE</b>							
DUPONT EDGE MOOR	0	0	0	0	173		0
<b>OCTACHLOROSTYRENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>173</b>		<b>0</b>
<b>P-CHLOROANILINE</b>							
CIBA	11	0	0	11	99,902		4,947
<b>P-CHLOROANILINE Total</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>99,902</b>		<b>4,947</b>
<b>PENTACHLOROBENZENE</b>							
DUPONT EDGE MOOR	0	0	0	0	23		0
EDGE MOOR/HAY ROAD POWER PLANTS	18	0	0	18	0		0
<b>PENTACHLOROBENZENE Total</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>23</b>		<b>0</b>
<b>PERACETIC ACID</b>							
PERDUE GEORGETOWN	0	0	0	0	0		11,000
PERDUE MILFORD	0	0	0	0	0		14,000
<b>PERACETIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>25,000</b>
<b>PHENANTHRENE</b>							
PREMCOB REFINING GROUP	2	0	0	2	0		41
<b>PHENANTHRENE Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>		<b>41</b>

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	TO AIR	TO WATER	TO LAND	TOTAL	TRANSFERS	MANAGEMENT	
<b>PHENOL</b>							
CRODA	255	0	0	255	2,090	0	
PREMCOR REFINING GROUP	148	172	0	320	36	266,862	
<b>PHENOL Total</b>	<b>403</b>	<b>172</b>	<b>0</b>	<b>575</b>	<b>2,126</b>	<b>266,862</b>	
<b>PHOSGENE</b>							
DUPONT EDGE MOOR	358	0	0	358	0	168,690	
<b>PHOSGENE Total</b>	<b>358</b>	<b>0</b>	<b>0</b>	<b>358</b>	<b>0</b>	<b>168,690</b>	
<b>PHTHALIC ANHYDRIDE</b>							
ROHM AND HAAS B2 B3 B8	0	0	0	0	0	0	1
<b>PHTHALIC ANHYDRIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>POLYCHLORINATED BIPHENYLS</b>							
DUPONT EDGE MOOR	0	0	0	0	34	0	
<b>POLYCHLORINATED BIPHENYLS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>0</b>	
<b>POLYCYCLIC AROMATIC COMPOUNDS</b>							
DUPONT EDGE MOOR	74	0	618	692	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	113	0	0	113	0	0	
GENERAL MOTORS WILMINGTON	0	0	0	0	0	0	
HANESBRANDS	0	0	0	0	0	0	
IKO WILMINGTON	0	0	0	0	77	3	
INDIAN RIVER POWER PLANT	2	0	0	2	0	0	
INVISTA S.À R.L. SEAFORD	0	0	0	0	0	0	
MCKEE RUN POWER PLANT	0	0	0	0	162	0	
MOUNTAIRE FARMS FRANKFORD	1	0	0	1	0	0	
MOUNTAIRE FARMS OF DELAWARE	2	0	0	2	0	0	
MOUNTAIRE FARMS OF DELMARVA	23	0	0	23	0	0	
PERDUE BRIDGEVILLE	0	0	0	0	0	0	1
PERDUE GEORGETOWN	0	0	0	0	0	0	1
PINNACLE FOODS	2	0	0	2	0	0	
PREMCOR REFINING GROUP	310	4	0	314	0	387	
SPI POLYOLS	0	0	0	0	0	0	
<b>POLYCYCLIC AROMATIC COMPOUNDS Total</b>	<b>527</b>	<b>4</b>	<b>618</b>	<b>1,150</b>	<b>239</b>	<b>390</b>	<b>2</b>

APPENDIX F

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# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE TRANSFERS	ON SITE WASTE MANAGEMENT	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL			
<b>PROPYLENE</b>							
PREMCOR REFINING GROUP	142,676	0	0	142,676	0	10,918	
<b>PROPYLENE Total</b>	<b>142,676</b>	<b>0</b>	<b>0</b>	<b>142,676</b>	<b>0</b>	<b>10,918</b>	
<b>PROPYLENE OXIDE</b>							
CRODA	1,000	0	0	1,000	0	0	
<b>PROPYLENE OXIDE Total</b>	<b>1,000</b>	<b>0</b>	<b>0</b>	<b>1,000</b>	<b>0</b>	<b>0</b>	
<b>SODIUM NITRITE</b>							
CHRYSLER	1,200	0	0	1,200	2	2,100	
GENERAL MOTORS WILMINGTON	0	0	0	0	0	16,000	
INVISTA S.Å R.L. SEAFORD	0	260	0	260	1,900	370,000	
OCCIDENTAL CHEMICAL	0	0	0	0	26,235	0	
<b>SODIUM NITRITE Total</b>	<b>1,200</b>	<b>260</b>	<b>0</b>	<b>1,460</b>	<b>28,137</b>	<b>388,100</b>	
<b>STYRENE</b>							
BASF	483	0	0	483	1,236	1,494	
DOW REICHHOLD	1,492	0	0	1,492	289	158,263	
JUSTIN TANKS	18,400	0	0	18,400	470	0	
PREMCOR REFINING GROUP	369	0	0	369	0	12	
THE MARBLE WORKS	1,873	0	0	1,873	0	0	
<b>STYRENE Total</b>	<b>22,617</b>	<b>0</b>	<b>0</b>	<b>22,617</b>	<b>1,995</b>	<b>159,769</b>	
<b>SULFURIC ACID</b>							
DUPONT RED LION	9,658	0	0	9,658	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	73,464	0	0	73,464	0	153,425	
INDIAN RIVER POWER PLANT	110,000	0	0	110,000	0	440,000	
INVISTA S.Å R.L. SEAFORD	77,000	0	0	77,000	0	0	
NRG DOVER	13,000	0	0	13,000	0	41,000	
PREMCOR REFINING GROUP	273,615	0	0	273,615	0	0	
<b>SULFURIC ACID Total</b>	<b>556,737</b>	<b>0</b>	<b>0</b>	<b>556,737</b>	<b>0</b>	<b>634,425</b>	
<b>TETRACHLOROETHYLENE</b>							
PREMCOR REFINING GROUP	66	0	0	66	0	0	
<b>TETRACHLOROETHYLENE Total</b>	<b>66</b>	<b>0</b>	<b>0</b>	<b>66</b>	<b>0</b>	<b>0</b>	

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# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE	ON SITE WASTE	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL	TRANSFERS	MANAGEMENT	
<b>TITANIUM TETRACHLORIDE</b>							
DUPONT EDGE MOOR	106	0	0	106	0	1,875,182	
<b>TITANIUM TETRACHLORIDE Total</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>0</b>	<b>1,875,182</b>	
<b>TOLUENE</b>							
AGILENT TECHNOLOGIES NEWPORT	122	0	0	122	89,041	0	
CHRYSLER	1,670	0	0	1,670	45	0	
DENTSPLY WEST PLANT	3,250	0	0	3,250	11,884	0	
DUPONT EDGE MOOR	1,374	0	0	1,374	15	0	
GENERAL MOTORS WILMINGTON	1,837	0	0	1,837	285	2,200	
NORAMCO	1,379	0	0	1,379	2,395,377	0	
PREMCO REFINING GROUP	13,480	0	0	13,480	231	74,909	
SERVICE ENERGY DOVER	0	0	0	0	0	0	1
VP RACING FUELS	0	0	0	0	0	0	1
<b>TOLUENE Total</b>	<b>23,112</b>	<b>0</b>	<b>0</b>	<b>23,112</b>	<b>2,496,878</b>	<b>77,109</b>	<b>2</b>
<b>TOLUENE DIISOCYANATE (MIXED ISOMERS)</b>							
E-A-R SPECIALTY COMPOSITES	1	0	0	1	1,600	0	
MACDERMID AUTOTYPE	13	0	0	13	0	607	
ROHM AND HAAS B5 B6	0	0	0	0	0	0	1
<b>TOLUENE DIISOCYANATE (MIXED ISOMERS) Total</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>1,600</b>	<b>607</b>	<b>1</b>
<b>TRICHLOROETHYLENE</b>							
CAMDEL METALS	9,844	0	0	9,844	12,253	0	
<b>TRICHLOROETHYLENE Total</b>	<b>9,844</b>	<b>0</b>	<b>0</b>	<b>9,844</b>	<b>12,253</b>	<b>0</b>	
<b>VANADIUM COMPOUNDS</b>							
DUPONT EDGE MOOR	1	793	0	794	391,513	0	
EDGE MOOR/HAY ROAD POWER PLANTS	717	0	0	717	61,247	0	
INDIAN RIVER POWER PLANT	755	5	37,000	37,760	41,000	0	
PREMCO REFINING GROUP	270	16,703	0	16,973	239,827	0	
<b>VANADIUM COMPOUNDS Total</b>	<b>1,743</b>	<b>17,501</b>	<b>37,000</b>	<b>56,244</b>	<b>733,587</b>	<b>0</b>	
<b>VINYL ACETATE</b>							
DOW REICHHOLD	910	0	0	910	0	22,249	
FORMOSA PLASTICS	27,987	0	0	27,987	0	0	
<b>VINYL ACETATE Total</b>	<b>28,897</b>	<b>0</b>	<b>0</b>	<b>28,897</b>	<b>0</b>	<b>22,249</b>	

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# APPENDIX F

## 2007 ON-SITE RELEASES BY CHEMICAL AND FACILITY

CHEMICAL / FACILITY	ON-SITE RELEASES				OFF SITE	ON SITE WASTE	FORM A
	TO AIR	TO WATER	TO LAND	TOTAL	TRANSFERS	MANAGEMENT	
<b>VINYL CHLORIDE</b>							
FORMOSA PLASTICS	37,460	3	0	37,463	0	266,498	
<b>VINYL CHLORIDE Total</b>	<b>37,460</b>	<b>3</b>	<b>0</b>	<b>37,463</b>	<b>0</b>	<b>266,498</b>	
<b>XYLENE (MIXED ISOMERS)</b>							
ARLON	3,100	0	0	3,100	8,100	130,000	
CARL KING	0	0	0	0	0	0	1
CHRYSLER	18,900	0	0	18,900	20,000	0	
CIBA	1,738	0	0	1,738	1,269	8,089	
GENERAL MOTORS WILMINGTON	97,900	0	0	97,900	300,710	7,200	
PREMCO REFINING GROUP	7,873	0	0	7,873	319	38,198	
SUNOCO MARCUS HOOK REFINERY	56	0	0	56	0	0	
VP RACING FUELS	0	0	0	0	0	0	1
<b>XYLENE (MIXED ISOMERS) Total</b>	<b>129,567</b>	<b>0</b>	<b>0</b>	<b>129,567</b>	<b>330,398</b>	<b>183,487</b>	<b>2</b>
<b>ZINC COMPOUNDS</b>							
ALLEN'S HATCHERY	0	0	0	0	0	0	1
CHRYSLER	1	0	0	1	4,555	0	
CLARIANT	0	0	0	0	0	0	1
CLAYMONT STEEL	3,088	208	185	3,481	2,090,986	0	
DUPONT EDGE MOOR	10	50	0	60	77,158	0	
GENERAL MOTORS WILMINGTON	52	0	0	52	914	0	
HONEYWELL	0	0	0	0	0	0	1
INDIAN RIVER POWER PLANT	1,105	750	13,000	14,855	14,000	0	
INVISTA S.Å R.L. SEAFORD	87	7	4,100	4,194	73	0	
MOUNTAIRE FARMS FRANKFORD	0	0	0	0	0	0	1
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	1
ORIENT	0	0	0	0	0	0	
PERDUE BRIDGEVILLE	0	0	0	0	0	0	1
PPG DOVER	255	0	0	255	507	0	
PREMCO REFINING GROUP	878	1,074	0	1,952	2,398	0	
<b>ZINC COMPOUNDS Total</b>	<b>5,476</b>	<b>2,089</b>	<b>17,285</b>	<b>24,850</b>	<b>2,190,591</b>	<b>0</b>	<b>6</b>
<b>STATE TOTAL</b>	<b>6,920,246</b>	<b>3,327,675</b>	<b>406,188</b>	<b>10,654,109</b>	<b>21,648,179</b>	<b>71,212,259</b>	<b>44</b>

APPENDIX F

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# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>1,2,4-TRIMETHYLBENZENE</b>											
CARL KING	0	0	0	0	0	0	0	0	0	0	
CHRYSLER	0	28	1,800	340	0	2,168	0	0	12,000	12,000	
GAC SEAFORD	0	0	0	0	0	0	0	0	0	0	
GENERAL MOTORS WILMINGTON	0	56,000	310	0	300	56,610	0	0	5,600	5,600	
PREMCO REFINING GROUP	0	0	0	0	0	0	0	0	7,680	7,680	
SERVICE ENERGY DOVER	0	0	0	0	0	0	0	0	0	0	
<b>1,2,4-TRIMETHYLBENZENE Total</b>	<b>0</b>	<b>56,028</b>	<b>2,110</b>	<b>340</b>	<b>300</b>	<b>58,778</b>	<b>0</b>	<b>0</b>	<b>25,280</b>	<b>25,280</b>	
<b>1,3-BUTADIENE</b>											
DOW REICHHOLD	0	0	0	0	0	0	0	0	1,306,955	1,306,955	
PREMCO REFINING GROUP	0	0	0	0	0	0	0	0	84	84	
<b>1,3-BUTADIENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,307,039</b>	<b>1,307,039</b>	
<b>2,4-DIMETHYLPHENOL</b>											
PREMCO REFINING GROUP	0	0	0	0	0	0	0	0	34,151	34,151	
<b>2,4-DIMETHYLPHENOL Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34,151</b>	<b>34,151</b>	
<b>4,4'-ISOPROPYLIDENEDIPHENOL</b>											
CRODA	0	0	0	0	0	0	0	0	0	0	
<b>4,4'-ISOPROPYLIDENEDIPHENOL Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>4,4'-METHYLENEBIS(2-CHLOROANILINE)</b>											
ROHM AND HAAS B5 B6	0	0	0	0	0	0	0	0	0	0	
ROHM AND HAAS B7 B15	0	0	0	0	0	0	0	0	0	0	
<b>4,4'-METHYLENEBIS(2-CHLOROANILINE) Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>ACETONITRILE</b>											
AGILENT TECHNOLOGIES NEWPORT	0	0	10,048	0	0	10,048	0	0	0	0	
<b>ACETONITRILE Total</b>	<b>0</b>	<b>0</b>	<b>10,048</b>	<b>0</b>	<b>0</b>	<b>10,048</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>ACRYLAMIDE</b>											
DOW REICHHOLD	0	0	0	0	0	0	0	0	0	0	
<b>ACRYLAMIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>ACRYLIC ACID</b>											
CRODA	0	0	0	0	0	0	0	0	0	0	
DOW REICHHOLD	0	0	0	0	0	0	0	0	0	0	
<b>ACRYLIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>ACRYLONITRILE</b>											
DOW REICHHOLD	0	0	0	0	1	1	0	0	538,500	538,500	
<b>ACRYLONITRILE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>538,500</b>	<b>538,500</b>	
<b>AMMONIA</b>											
AIR LIQUIDE INDUSTRIAL	0	0	0	0	0	0	0	0	0	0	
BASF	459	0	0	190	0	649	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	1,205	0	0	0	0	1,205	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	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	660,000	660,000	
MOUNTAIRE FARMS OF DELMARVA	5,017	0	0	0	0	5,017	0	0	0	0	
PERDUE GEORGETOWN	0	0	0	0	0	0	0	0	39,000	39,000	
PICTSWEET	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	14,349,704	14,796	14,364,500	
<b>AMMONIA Total</b>	<b>6,681</b>	<b>0</b>	<b>0</b>	<b>190</b>	<b>0</b>	<b>6,871</b>	<b>0</b>	<b>14,349,704</b>	<b>713,796</b>	<b>15,063,500</b>	
<b>ANILINE</b>											
CIBA	21,139	129	150,283	98	0	171,649	0	0	1,220	1,220	
ORIENT	5	0	6,960	0	0	6,965	0	0	10,424	10,424	
<b>ANILINE Total</b>	<b>21,144</b>	<b>129</b>	<b>157,243</b>	<b>98</b>	<b>0</b>	<b>178,614</b>	<b>0</b>	<b>0</b>	<b>11,644</b>	<b>11,644</b>	
<b>ANTHRACENE</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	0	0	
<b>ANTHRACENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>ANTIMONY COMPOUNDS</b>											
INVISTA S.À R.L. SEAFORD	0	0	0	0	0	0	0	0	0	0	
JOHNSON CONTROLS	0	85,316	0	0	0	85,316	0	0	0	0	
<b>ANTIMONY COMPOUNDS Total</b>	<b>0</b>	<b>85,316</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>85,316</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>ARSENIC</b>											
ALLEN'S HATCHERY	0	0	0	0	0	0	0	0	0	0	
<b>ARSENIC Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>ARSENIC COMPOUNDS</b>											
MOUNTAIRE FARMS FRANKFORD	0	0	0	0	0	0	0	0	0	0	
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0	
<b>ARSENIC COMPOUNDS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>BARIUM</b>											
PRINCE MINERALS	0	0	0	0	0	0	0	0	0	0	
<b>BARIUM Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>BARIUM COMPOUNDS</b>											
DUPONT EDGE MOOR	0	0	0	0	64,249	64,249	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	136,087	136,087	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	240,000	240,000	0	0	0	0	
<b>BARIUM COMPOUNDS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>440,336</b>	<b>440,336</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>BENZENE</b>											
CHRYSLER	0	0	0	0	0	0	0	0	0	0	
GENERAL MOTORS WILMINGTON	0	0	12	0	0	12	0	0	0	0	
PREMCOR REFINING GROUP	0	0	8	113	3	124	231	199,374	37,037	236,642	
SUNOCO MARCUS HOOK REFINERY	0	0	0	0	0	0	0	0	0	0	
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	
<b>BENZENE Total</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>113</b>	<b>3</b>	<b>136</b>	<b>231</b>	<b>199,374</b>	<b>37,037</b>	<b>236,642</b>	
<b>BENZO(G,H,I)PERYLENE</b>											
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 WILMINGTON	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 S.À R.L. SEAFORD	0	0	0	0	0	0	0	0	0	0	
MCKEE RUN POWER PLANT	0	0	0	0	0	0	0	0	0	0	
MOUNTAIRE FARMS OF DELMARVA	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	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
PINNACLE FOODS	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	471	471	
<b>BENZO(G,H,I)PERYLENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>471</b>	<b>471</b>	
<b>BIPHENYL</b>											
CIBA	61,104	259	215,508	126	32	277,029	0	0	8,760	8,760	
INVISTA S.À R.L. SEAFORD	0	0	0	1,000	0	1,000	0	0	0	0	
<b>BIPHENYL Total</b>	<b>61,104</b>	<b>259</b>	<b>215,508</b>	<b>1,126</b>	<b>32</b>	<b>278,029</b>	<b>0</b>	<b>0</b>	<b>8,760</b>	<b>8,760</b>	
<b>BIS(2-CHLOROETHYL) ETHER</b>											
CRODA	17,602	0	17,610	0	0	35,212	0	0	0	0	
<b>BIS(2-CHLOROETHYL) ETHER Total</b>	<b>17,602</b>	<b>0</b>	<b>17,610</b>	<b>0</b>	<b>0</b>	<b>35,212</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>BORON TRIFLUORIDE</b>											
HONEYWELL	0	255	0	2,093	3,770	6,118	0	0	144,803	144,803	
<b>BORON TRIFLUORIDE Total</b>	<b>0</b>	<b>255</b>	<b>0</b>	<b>2,093</b>	<b>3,770</b>	<b>6,118</b>	<b>0</b>	<b>0</b>	<b>144,803</b>	<b>144,803</b>	
<b>BUTYL ACRYLATE</b>											
BASF	0	0	0	5	0	5	0	0	66	66	
DOW REICHHOLD	0	0	0	0	0	0	0	0	162	162	
<b>BUTYL ACRYLATE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>228</b>	<b>228</b>	
<b>CARBON DISULFIDE</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	140,204	4,329,846	4,470,050	
<b>CARBON DISULFIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>140,204</b>	<b>4,329,846</b>	<b>4,470,050</b>	
<b>CARBONYL SULFIDE</b>											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	5,337,512	10,133,370	15,470,882	
<b>CARBONYL SULFIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,337,512</b>	<b>10,133,370</b>	<b>15,470,882</b>	
<b>CERTAIN GLYCOL ETHERS</b>											
BASF	1,173	0	0	681	0	1,854	0	0	0	0	
CHRYSLER	95,000	110	280	390	0	95,780	0	0	30,000	30,000	
CRODA	2,670	0	0	0	0	2,670	0	0	0	0	
GENERAL MOTORS WILMINGTON	13,000	0	7,600	0	190	20,790	0	0	10,000	10,000	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
HIRSH INDUSTRIES	0	0	0	0	0	0	0	0	0	0	
PPG DOVER	13,943	0	0	750	250	14,943	0	0	0	0	
<b>CERTAIN GLYCOL ETHERS Total</b>	<b>125,786</b>	<b>110</b>	<b>7,880</b>	<b>1,821</b>	<b>440</b>	<b>136,037</b>	<b>0</b>	<b>0</b>	<b>40,000</b>	<b>40,000</b>	
<b>CHLORINE</b>											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	2,270,817	2,270,817	
KUEHNE COMPANY	0	0	0	0	0	0	0	0	0	0	
SPI PHARMA	0	0	0	0	0	0	0	0	0	0	
<b>CHLORINE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,270,817</b>	<b>2,270,817</b>	
<b>CHLOROACETIC ACID</b>											
CRODA	0	0	0	0	0	0	0	0	0	0	
<b>CHLOROACETIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>CHROMIUM</b>											
CAMDEL METALS	0	45,728	0	0	164	45,892	0	0	0	0	
METAL MASTERS	0	261,330	0	0	960	262,290	0	0	0	0	
<b>CHROMIUM Total</b>	<b>0</b>	<b>307,058</b>	<b>0</b>	<b>0</b>	<b>1,124</b>	<b>308,182</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>CHROMIUM COMPOUNDS</b>											
CHROME DEPOSIT	0	0	0	0	2,300	2,300	1,200	0	0	1,200	
CLARIANT	0	0	0	0	0	0	0	0	0	0	
CLAYMONT STEEL	0	31,769	0	0	1,868	33,637	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	312,656	312,656	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	2	0	0	0	33,728	33,730	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	25,000	25,000	0	0	0	0	
INVISTA S.À R.L. SEAFORD	0	0	0	0	1,607	1,607	0	0	0	0	
ORIENT	0	0	0	0	0	0	0	0	0	0	
PREMCO REFINING GROUP	0	3,727	0	0	1,773	5,500	0	0	0	0	
<b>CHROMIUM COMPOUNDS Total</b>	<b>2</b>	<b>35,496</b>	<b>0</b>	<b>0</b>	<b>378,932</b>	<b>414,430</b>	<b>1,200</b>	<b>0</b>	<b>0</b>	<b>1,200</b>	
<b>COBALT COMPOUNDS</b>											
DUPONT EDGE MOOR	0	0	0	0	16,680	16,680	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	27,911	27,911	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	11,000	11,000	0	0	0	0	
PREMCO REFINING GROUP	0	17,609	0	0	0	17,609	0	0	0	0	
<b>COBALT COMPOUNDS Total</b>	<b>0</b>	<b>17,609</b>	<b>0</b>	<b>0</b>	<b>55,591</b>	<b>73,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>COPPER</b>											
ARLON	0	3,700	0	0	200	3,900	0	0	0	0	
BUCK ALGONQUIN	0	8,000	0	0	0	8,000	0	0	0	0	
<b>COPPER Total</b>	<b>0</b>	<b>11,700</b>	<b>0</b>	<b>0</b>	<b>200</b>	<b>11,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>COPPER COMPOUNDS</b>											
ALLEN'S HATCHERY	0	0	0	0	0	0	0	0	0	0	
CLAYMONT STEEL	0	34,620	0	0	3,981	38,601	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	87	0	0	0	26,707	26,794	0	0	0	0	
FUJIFILM IMAGING COLORANTS	178	0	0	0	377	555	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	24,000	24,000	0	0	0	0	
MOUNTAIRE FARMS FRANKFORD	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	
<b>COPPER COMPOUNDS Total</b>	<b>265</b>	<b>34,620</b>	<b>0</b>	<b>0</b>	<b>55,065</b>	<b>89,950</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>CREOSOTE</b>											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	0	0	
<b>CREOSOTE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>CRESOL (MIXED ISOMERS)</b>											
PREMCOR REFINING GROUP	0	11	0	23	0	34	16,417	13,021	309,121	338,559	
<b>CRESOL (MIXED ISOMERS) Total</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>34</b>	<b>16,417</b>	<b>13,021</b>	<b>309,121</b>	<b>338,559</b>	
<b>CUMENE</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	747	747	
<b>CUMENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>747</b>	<b>747</b>	
<b>CYANIDE COMPOUNDS</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	53,867	53,867	
<b>CYANIDE COMPOUNDS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53,867</b>	<b>53,867</b>	
<b>CYCLOHEXANE</b>											
CIBA	0	22,600	0	0	0	22,600	0	0	5,090	5,090	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	862	862	
<b>CYCLOHEXANE Total</b>	<b>0</b>	<b>22,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22,600</b>	<b>0</b>	<b>0</b>	<b>5,952</b>	<b>5,952</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>DIBUTYL PHTHALATE</b>											
PPG DOVER	0	0	0	0	1,300	1,300	0	0	0	0	
<b>DIBUTYL PHTHALATE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,300</b>	<b>1,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>DICHLOROMETHANE</b>											
NORAMCO	8	0	81,271	0	0	81,279	876,883	0	0	876,883	
<b>DICHLOROMETHANE Total</b>	<b>8</b>	<b>0</b>	<b>81,271</b>	<b>0</b>	<b>0</b>	<b>81,279</b>	<b>876,883</b>	<b>0</b>	<b>0</b>	<b>876,883</b>	
<b>DIETHANOLAMINE</b>											
CRODA	8,360	0	0	0	0	8,360	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	178,121	0	0	178,121	
<b>DIETHANOLAMINE Total</b>	<b>8,360</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,360</b>	<b>178,121</b>	<b>0</b>	<b>0</b>	<b>178,121</b>	
<b>DIISOCYANATES</b>											
CUSTOM DECORATIVE MOULDINGS	0	0	0	0	0	0	0	0	0	0	
E-A-R SPECIALTY COMPOSITES	0	0	0	1,355	0	1,355	0	0	0	0	
ROHM AND HAAS B2 B3 B8	0	0	0	0	1,218	1,218	0	0	0	0	
ROHM AND HAAS B5 B6	0	0	0	5,771	0	5,771	0	0	0	0	
<b>DIISOCYANATES Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,126</b>	<b>1,218</b>	<b>8,344</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>DIOXIN AND DIOXIN-LIKE COMPOUNDS</b>											
CLAYMONT STEEL	0	0	0	0	0	0	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	49	49	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 S.À R.L. SEAFORD	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	0	0	
<b>DIOXIN AND DIOXIN-LIKE COMPOUNDS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>ETHYL ACRYLATE</b>											
BASF	0	0	0	0	0	0	0	0	1,057	1,057	
DOW REICHHOLD	0	0	0	0	0	0	0	0	181	181	
<b>ETHYL ACRYLATE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,238</b>	<b>1,238</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>ETHYLBENZENE</b>											
ARLON	0	0	0	1,420	0	1,420	0	0	24,000	24,000	
CHRYSLER	0	0	3,500	0	0	3,500	0	0	0	0	
DOVER AFB	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	3	105	2	110	0	0	7,884	7,884	
<b>ETHYLBENZENE Total</b>	<b>0</b>	<b>0</b>	<b>3,503</b>	<b>1,525</b>	<b>2</b>	<b>5,030</b>	<b>0</b>	<b>0</b>	<b>31,884</b>	<b>31,884</b>	
<b>ETHYLENE</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	8,328	8,328	
SUNOCO MARCUS HOOK REFINERY	0	0	0	0	0	0	0	0	0	0	
<b>ETHYLENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,328</b>	<b>8,328</b>	
<b>ETHYLENE GLYCOL</b>											
CHRYSLER	52	0	0	0	0	52	0	0	0	0	
GENERAL MOTORS WILMINGTON	430	0	0	0	0	430	0	0	0	0	
PPG DOVER	0	0	0	250	250	500	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	32,236	32,236	
<b>ETHYLENE GLYCOL Total</b>	<b>482</b>	<b>0</b>	<b>0</b>	<b>250</b>	<b>250</b>	<b>982</b>	<b>0</b>	<b>0</b>	<b>32,236</b>	<b>32,236</b>	
<b>ETHYLENE OXIDE</b>											
CRODA	0	0	0	0	0	0	0	0	0	0	
SUNOCO MARCUS HOOK REFINERY	0	0	0	0	0	0	0	0	0	0	
<b>ETHYLENE OXIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>FORMALDEHYDE</b>											
DOW REICHHOLD	0	0	0	0	0	0	0	0	0	0	
<b>FORMALDEHYDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>FORMIC ACID</b>											
NORAMCO	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	421,394	421,394	
<b>FORMIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>421,394</b>	<b>421,394</b>	
<b>HEXACHLORO BENZENE</b>											
DUPONT EDGE MOOR	0	0	0	0	1,326	1,326	0	0	0	0	
<b>HEXACHLORO BENZENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,326</b>	<b>1,326</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>HYDROCHLORIC ACID</b>											
DUPONT EDGE MOOR	0	0	0	6,350	0	6,350	0	0	14,481,740	14,481,740	
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 S.Å R.L. SEAFORD	0	0	0	0	0	0	0	0	13,000	13,000	
NRG DOVER	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	294,331	294,331	
<b>HYDROCHLORIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,350</b>	<b>0</b>	<b>6,350</b>	<b>0</b>	<b>0</b>	<b>14,789,071</b>	<b>14,789,071</b>	
<b>HYDROGEN CYANIDE</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	326,792	75,083	401,875	
<b>HYDROGEN CYANIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>326,792</b>	<b>75,083</b>	<b>401,875</b>	
<b>HYDROGEN FLUORIDE</b>											
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	10,949	10,949	
HONEYWELL	58	0	0	0	0	58	0	0	58	58	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	25,000	25,000	
<b>HYDROGEN FLUORIDE Total</b>	<b>58</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>0</b>	<b>0</b>	<b>36,007</b>	<b>36,007</b>	
<b>LEAD</b>											
PRINCE MINERALS	0	0	0	0	0	0	0	0	0	0	
<b>LEAD Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>LEAD COMPOUNDS</b>											
CHROME DEPOSIT	0	3,100	0	0	5,400	8,500	0	0	0	0	
CHRYSLER	0	13	0	0	53	66	0	0	0	0	
CLAYMONT STEEL	0	257,950	0	0	102	258,052	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	75,466	75,466	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	2	0	0	0	11,870	11,872	0	0	0	0	
GE ENERGY USA	0	282	0	0	116	398	0	0	0	0	
HONEYWELL	0	0	0	0	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	14,367	14,367	0	0	0	0	
INSTEEL WIRE	0	459	0	0	0	459	0	0	0	0	
INVISTA S.Å R.L. SEAFORD	0	0	0	0	6	6	0	0	0	0	
JOHNSON CONTROLS	3	2,842,616	0	0	133	2,842,752	0	0	0	0	
NRG DOVER	0	0	0	0	443	443	0	0	0	0	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
PPG DOVER	0	0	0	0	2	2	0	0	0	0	
PREMCOR REFINING GROUP	0	105	0	0	56	161	0	0	0	0	
VP RACING FUELS	0	7	0	0	1	8	0	0	0	0	
<b>LEAD COMPOUNDS Total</b>	<b>5</b>	<b>3,104,532</b>	<b>0</b>	<b>0</b>	<b>108,015</b>	<b>3,212,552</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>MALEIC ANHYDRIDE</b>											
CRODA	0	0	0	0	0	0	0	0	0	0	
<b>MALEIC ANHYDRIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>MANGANESE</b>											
CAMDEL METALS	0	4,909	0	0	15	4,924	0	0	0	0	
<b>MANGANESE Total</b>	<b>0</b>	<b>4,909</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>4,924</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>MANGANESE COMPOUNDS</b>											
ALLEN'S HATCHERY	0	0	0	0	0	0	0	0	0	0	
CLAYMONT STEEL	0	215,863	0	0	9,707	225,570	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	5,196,925	5,196,925	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	30,827	30,827	0	0	0	0	
HONEYWELL	0	0	0	0	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	34,000	34,000	0	0	0	0	
MOUNTAIRE FARMS FRANKFORD	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 REFINING GROUP	0	1,887	0	0	896	2,783	0	0	0	0	
PRINCE MINERALS	0	0	0	0	0	0	0	0	0	0	
<b>MANGANESE COMPOUNDS Total</b>	<b>0</b>	<b>217,750</b>	<b>0</b>	<b>0</b>	<b>5,272,355</b>	<b>5,490,105</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>MERCURY</b>											
DENTSPLY MAIN PLANT	0	2,458	0	0	0	2,458	0	0	0	0	
OCCIDENTAL CHEMICAL	0	20,100	0	0	3,824	23,924	0	0	0	0	
<b>MERCURY Total</b>	<b>0</b>	<b>22,558</b>	<b>0</b>	<b>0</b>	<b>3,824</b>	<b>26,382</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>MERCURY COMPOUNDS</b>											
CLAYMONT STEEL	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	67	67	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	53	53	0	0	0	0	
INTERVET	0	0	0	0	0	0	0	0	0	0	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
INVISTA S.Å R.L. SEAFORD	0	0	0	0	0	0	0	0	0	0	0
NRG DOVER	0	0	0	0	7	7	0	0	0	0	0
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	0	0	0
<b>MERCURY COMPOUNDS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>127</b>	<b>127</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>METHANOL</b>											
AGILENT TECHNOLOGIES NEWPORT	0	0	21,659	0	0	21,659	0	0	0	0	0
CHRYSLER	0	0	8	0	0	8	0	0	0	0	0
CIBA	430,317	1,402,684	3,679	328	0	1,837,008	517,137	0	305,566	822,703	0
CRODA	1,900	0	55,175	0	0	57,075	0	0	0	0	0
DENTSPLY WEST PLANT	129	0	14,090	0	0	14,219	0	0	0	0	0
GENERAL MOTORS WILMINGTON	0	16,000	88	0	57	16,145	0	0	3,200	3,200	0
HONEYWELL	0	0	0	881	267	1,148	0	0	7	7	0
MEDAL	0	0	0	47,141	0	47,141	2,227,104	0	0	2,227,104	0
NORAMCO	988	0	875,052	0	0	876,040	0	0	0	0	0
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	0	0	0
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	0
<b>METHANOL Total</b>	<b>433,334</b>	<b>1,418,684</b>	<b>969,751</b>	<b>48,350</b>	<b>324</b>	<b>2,870,443</b>	<b>2,744,241</b>	<b>0</b>	<b>308,773</b>	<b>3,053,014</b>	<b>0</b>
<b>METHYL ISOBUTYL KETONE</b>											
CHRYSLER	0	0	19,000	0	0	19,000	0	0	0	0	0
<b>METHYL ISOBUTYL KETONE Total</b>	<b>0</b>	<b>0</b>	<b>19,000</b>	<b>0</b>	<b>0</b>	<b>19,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>METHYL METHACRYLATE</b>											
BASF	0	0	0	0	0	0	0	0	1,979	1,979	0
DENTSPLY WEST PLANT	197	0	1,199	0	0	1,396	0	0	0	0	0
DOW REICHHOLD	0	0	0	0	0	0	0	0	419	419	0
<b>METHYL METHACRYLATE Total</b>	<b>197</b>	<b>0</b>	<b>1,199</b>	<b>0</b>	<b>0</b>	<b>1,396</b>	<b>0</b>	<b>0</b>	<b>2,398</b>	<b>2,398</b>	<b>0</b>
<b>METHYL TERT-BUTYL ETHER</b>											
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	0
<b>METHYL TERT-BUTYL ETHER Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>MOLYBDENUM TRIOXIDE</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	0	0	0
<b>MOLYBDENUM TRIOXIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>N,N-DIMETHYLANILINE</b>											
NORAMCO	28,719	0	0	0	0	28,719	0	0	0	0	
<b>N,N-DIMETHYLANILINE Total</b>	<b>28,719</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28,719</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>N,N-DIMETHYLFORMAMIDE</b>											
ROHM AND HAAS B2 B3 B8	224,614	0	570,403	79	0	795,096	5,117,211	0	1,347	5,118,558	
<b>N,N-DIMETHYLFORMAMIDE Total</b>	<b>224,614</b>	<b>0</b>	<b>570,403</b>	<b>79</b>	<b>0</b>	<b>795,096</b>	<b>5,117,211</b>	<b>0</b>	<b>1,347</b>	<b>5,118,558</b>	
<b>NAPHTHALENE</b>											
CARL KING	0	0	0	0	0	0	0	0	0	0	
CRODA	0	0	0	0	9,520	9,520	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 S.À R.L. SEAFORD	0	0	0	1	0	1	0	0	0	0	
MCKEE RUN POWER PLANT	0	109	0	31	441	580	0	0	0	0	
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	2,199	2,199	
<b>NAPHTHALENE Total</b>	<b>0</b>	<b>109</b>	<b>0</b>	<b>32</b>	<b>9,961</b>	<b>10,101</b>	<b>0</b>	<b>0</b>	<b>2,199</b>	<b>2,199</b>	
<b>N-BUTYL ALCOHOL</b>											
CHRYSLER	0	52	2,100	630	0	2,782	0	0	22,000	22,000	
GENERAL MOTORS WILMINGTON	0	0	330	0	260	590	0	0	11,000	11,000	
NORAMCO	15	0	87,451	0	0	87,466	0	0	0	0	
<b>N-BUTYL ALCOHOL Total</b>	<b>15</b>	<b>52</b>	<b>89,881</b>	<b>630</b>	<b>260</b>	<b>90,838</b>	<b>0</b>	<b>0</b>	<b>33,000</b>	<b>33,000</b>	
<b>N-HEXANE</b>											
CHRYSLER	0	0	0	0	0	0	0	0	0	0	
HONEYWELL	0	17,778	0	16,998	2,110	36,886	155,559	0	302	155,861	
MEDAL	0	0	0	0	0	0	1,855,920	0	0	1,855,920	
MICROPOR	0	0	0	0	0	0	110	0	0	110	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	27,425	27,425	
<b>N-HEXANE Total</b>	<b>0</b>	<b>17,778</b>	<b>0</b>	<b>16,998</b>	<b>2,110</b>	<b>36,886</b>	<b>2,011,589</b>	<b>0</b>	<b>27,727</b>	<b>2,039,316</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>NICKEL</b>											
CAMDEL METALS	0	38,554	0	0	254	38,808	0	0	0	0	
METAL MASTERS	0	88,204	0	0	350	88,554	0	0	0	0	
PRINCE MINERALS	0	0	0	0	0	0	0	0	0	0	
<b>NICKEL Total</b>	<b>0</b>	<b>126,758</b>	<b>0</b>	<b>0</b>	<b>604</b>	<b>127,362</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>NICKEL COMPOUNDS</b>											
CLAYMONT STEEL	0	3,788	0	0	1,648	5,436	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	40,281	40,281	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	7	0	0	0	27,265	27,272	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	18,000	18,000	0	0	0	0	
PREMCOR REFINING GROUP	0	110,247	0	0	47,763	158,010	0	0	0	0	
SPI POLYOLS	0	5,534	0	0	3,704	9,238	0	0	0	0	
<b>NICKEL COMPOUNDS Total</b>	<b>7</b>	<b>119,569</b>	<b>0</b>	<b>0</b>	<b>138,661</b>	<b>258,237</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>NITRATE COMPOUNDS</b>											
CHRYSLER	26,000	22	0	0	0	26,022	0	0	0	0	
CIBA	27,232	0	0	0	0	27,232	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0	
FUJIFILM IMAGING COLORANTS	2,367	0	904	0	0	3,271	0	0	0	0	
GENERAL MOTORS WILMINGTON	43,000	0	0	0	0	43,000	0	0	0	0	
HANESBRANDS	80,055	0	0	0	0	80,055	0	0	0	0	
INVISTA S.À R.L. SEAFORD	0	0	0	1,900	0	1,900	0	0	0	0	
PERDUE GEORGETOWN	0	0	0	0	0	0	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	0	0	
<b>NITRATE COMPOUNDS Total</b>	<b>178,654</b>	<b>22</b>	<b>904</b>	<b>1,900</b>	<b>0</b>	<b>181,480</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>NITRIC ACID</b>											
CHRYSLER	0	0	0	0	0	0	0	0	2,700	2,700	
CIBA	0	0	0	0	0	0	0	0	27,671	27,671	
GENERAL MOTORS WILMINGTON	0	0	0	0	0	0	0	0	38,000	38,000	
SPI PHARMA	0	0	0	0	0	0	0	0	0	0	
SPI POLYOLS	0	0	0	28,360	0	28,360	0	0	0	0	
<b>NITRIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28,360</b>	<b>0</b>	<b>28,360</b>	<b>0</b>	<b>0</b>	<b>68,371</b>	<b>68,371</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>NITROBENZENE</b>											
ORIENT	1	0	8,044	0	0	8,045	0	0	0	0	
<b>NITROBENZENE Total</b>	<b>1</b>	<b>0</b>	<b>8,044</b>	<b>0</b>	<b>0</b>	<b>8,045</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>N-METHYL-2-PYRROLIDONE</b>											
CHRYSLER	0	27	0	440	0	467	0	0	11,000	11,000	
MEDAL	129,524	17,175	0	0	0	146,699	0	0	0	0	
ROHM AND HAAS B5 B6	0	0	130,818	2,385	0	133,203	0	0	0	0	
ROHM AND HAAS B7 B15	0	0	10,911	34	0	10,945	0	0	0	0	
<b>N-METHYL-2-PYRROLIDONE Total</b>	<b>129,524</b>	<b>17,202</b>	<b>141,729</b>	<b>2,859</b>	<b>0</b>	<b>291,314</b>	<b>0</b>	<b>0</b>	<b>11,000</b>	<b>11,000</b>	
<b>OCTACHLOROSTYRENE</b>											
DUPONT EDGE MOOR	0	0	0	0	173	173	0	0	0	0	
<b>OCTACHLOROSTYRENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>173</b>	<b>173</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>P-CHLOROANILINE</b>											
CIBA	3,205	129	96,448	120	0	99,902	0	0	4,947	4,947	
<b>P-CHLOROANILINE Total</b>	<b>3,205</b>	<b>129</b>	<b>96,448</b>	<b>120</b>	<b>0</b>	<b>99,902</b>	<b>0</b>	<b>0</b>	<b>4,947</b>	<b>4,947</b>	
<b>PENTACHLOROBENZENE</b>											
DUPONT EDGE MOOR	0	0	0	0	23	23	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	0	0	
<b>PENTACHLOROBENZENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>PERACETIC ACID</b>											
PERDUE GEORGETOWN	0	0	0	0	0	0	0	0	11,000	11,000	
PERDUE MILFORD	0	0	0	0	0	0	0	0	14,000	14,000	
<b>PERACETIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25,000</b>	<b>25,000</b>	
<b>PHENANTHRENE</b>											
PREMCOB REFINING GROUP	0	0	0	0	0	0	0	0	41	41	
<b>PHENANTHRENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>41</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>PHENOL</b>											
CRODA	2,090	0	0	0	0	2,090	0	0	0	0	
PREMCOR REFINING GROUP	0	12	0	24	0	36	0	20,454	246,408	266,862	
<b>PHENOL Total</b>	<b>2,090</b>	<b>12</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>2,126</b>	<b>0</b>	<b>20,454</b>	<b>246,408</b>	<b>266,862</b>	
<b>PHOSGENE</b>											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	168,690	168,690	
<b>PHOSGENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>168,690</b>	<b>168,690</b>	
<b>PHTHALIC ANHYDRIDE</b>											
ROHM AND HAAS B2 B3 B8	0	0	0	0	0	0	0	0	0	0	
<b>PHTHALIC ANHYDRIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>POLYCHLORINATED BIPHENYLS</b>											
DUPONT EDGE MOOR	0	0	0	0	34	34	0	0	0	0	
<b>POLYCHLORINATED BIPHENYLS Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>POLYCYCLIC AROMATIC COMPOUNDS</b>											
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 WILMINGTON	0	0	0	0	0	0	0	0	0	0	
HANESBRANDS	0	0	0	0	0	0	0	0	0	0	
IKO WILMINGTON	0	0	0	0	77	77	3	0	0	3	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	0	0	
INVISTA S.À R.L. SEAFORD	0	0	0	0	0	0	0	0	0	0	
MCKEE RUN POWER PLANT	0	30	0	9	123	162	0	0	0	0	
MOUNTAIRE FARMS FRANKFORD	0	0	0	0	0	0	0	0	0	0	
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0	
MOUNTAIRE FARMS OF DELMARVA	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 REFINING GROUP	0	0	0	0	0	0	0	0	387	387	
SPI POLYOLS	0	0	0	0	0	0	0	0	0	0	
<b>POLYCYCLIC AROMATIC COMPOUNDS Total</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>9</b>	<b>200</b>	<b>239</b>	<b>3</b>	<b>0</b>	<b>387</b>	<b>390</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>PROPYLENE</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	10,918	10,918	
<b>PROPYLENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,918</b>	<b>10,918</b>	
<b>PROPYLENE OXIDE</b>											
CRODA	0	0	0	0	0	0	0	0	0	0	
<b>PROPYLENE OXIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>SODIUM NITRITE</b>											
CHRYSLER	0	2	0	0	0	2	0	0	2,100	2,100	
GENERAL MOTORS WILMINGTON	0	0	0	0	0	0	0	0	16,000	16,000	
INVISTA S.À R.L. SEAFORD	0	0	0	1,900	0	1,900	0	0	370,000	370,000	
OCCIDENTAL CHEMICAL	0	0	0	26,235	0	26,235	0	0	0	0	
<b>SODIUM NITRITE Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>28,135</b>	<b>0</b>	<b>28,137</b>	<b>0</b>	<b>0</b>	<b>388,100</b>	<b>388,100</b>	
<b>STYRENE</b>											
BASF	13	0	0	0	1,223	1,236	0	0	1,494	1,494	
DOW REICHOLD	4	0	285	0	0	289	0	0	158,263	158,263	
JUSTIN TANKS	0	0	0	0	470	470	0	0	0	0	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	12	12	
THE MARBLE WORKS	0	0	0	0	0	0	0	0	0	0	
<b>STYRENE Total</b>	<b>17</b>	<b>0</b>	<b>285</b>	<b>0</b>	<b>1,693</b>	<b>1,995</b>	<b>0</b>	<b>0</b>	<b>159,769</b>	<b>159,769</b>	
<b>SULFURIC ACID</b>											
DUPONT RED LION	0	0	0	0	0	0	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	0	0	0	0	153,425	153,425	
INDIAN RIVER POWER PLANT	0	0	0	0	0	0	0	0	440,000	440,000	
INVISTA S.À R.L. SEAFORD	0	0	0	0	0	0	0	0	0	0	
NRG DOVER	0	0	0	0	0	0	0	0	41,000	41,000	
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	0	0	
<b>SULFURIC ACID Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>634,425</b>	<b>634,425</b>	
<b>TETRACHLOROETHYLENE</b>											
PREMCOR REFINING GROUP	0	0	0	0	0	0	0	0	0	0	
<b>TETRACHLOROETHYLENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>TITANIUM TETRACHLORIDE</b>											
DUPONT EDGE MOOR	0	0	0	0	0	0	0	0	1,875,182	1,875,182	
<b>TITANIUM TETRACHLORIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,875,182</b>	<b>1,875,182</b>	
<b>TOLUENE</b>											
AGILENT TECHNOLOGIES NEWPORT	0	0	89,041	0	0	89,041	0	0	0	0	
CHRYSLER	0	0	45	0	0	45	0	0	0	0	
DENTSPLY WEST PLANT	0	0	11,884	0	0	11,884	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	6	9	15	0	0	0	0	
GENERAL MOTORS WILMINGTON	0	0	260	0	25	285	0	0	2,200	2,200	
NORAMCO	0	0	2,395,377	0	0	2,395,377	0	0	0	0	
PREMCO REFINING GROUP	0	0	17	209	5	231	0	0	74,909	74,909	
SERVICE ENERGY DOVER	0	0	0	0	0	0	0	0	0	0	
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	
<b>TOLUENE Total</b>	<b>0</b>	<b>0</b>	<b>2,496,624</b>	<b>215</b>	<b>39</b>	<b>2,496,878</b>	<b>0</b>	<b>0</b>	<b>77,109</b>	<b>77,109</b>	
<b>TOLUENE DIISOCYANATE (MIXED ISOMERS)</b>											
E-A-R SPECIALTY COMPOSITES	0	0	0	1,600	0	1,600	0	0	0	0	
MACDERMID AUTOTYPE	0	0	0	0	0	0	0	0	607	607	
ROHM AND HAAS B5 B6	0	0	0	0	0	0	0	0	0	0	
<b>TOLUENE DIISOCYANATE (MIXED ISOMERS) Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,600</b>	<b>0</b>	<b>1,600</b>	<b>0</b>	<b>0</b>	<b>607</b>	<b>607</b>	
<b>TRICHLOROETHYLENE</b>											
CAMDEL METALS	0	0	0	12,253	0	12,253	0	0	0	0	
<b>TRICHLOROETHYLENE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,253</b>	<b>0</b>	<b>12,253</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>VANADIUM COMPOUNDS</b>											
DUPONT EDGE MOOR	0	0	0	0	391,513	391,513	0	0	0	0	
EDGE MOOR/HAY ROAD POWER PLANTS	0	0	0	0	61,247	61,247	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	41,000	41,000	0	0	0	0	
PREMCO REFINING GROUP	0	162,638	0	0	77,189	239,827	0	0	0	0	
<b>VANADIUM COMPOUNDS Total</b>	<b>0</b>	<b>162,638</b>	<b>0</b>	<b>0</b>	<b>570,949</b>	<b>733,587</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>VINYL ACETATE</b>											
DOW REICHHOLD	0	0	0	0	0	0	0	0	22,249	22,249	
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	0	0	
<b>VINYL ACETATE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22,249</b>	<b>22,249</b>	

APPENDIX G

# APPENDIX G

## 2007 OFF-SITE TRANSFERS AND WASTE MANAGED ON-SITE BY CHEMICAL

CHEMICAL/FACILITY	OFF SITE TRANSFERS						ON SITE WASTE MANAGEMENT				
	ENERGY						ENERGY				
	POTW	RECYCLE	RECOVERY	TREATMENT	DISPOSAL	TOTAL	RECYCLE	RECOVERY	TREATMENT	TOTAL	
<b>VINYL CHLORIDE</b>											
FORMOSA PLASTICS	0	0	0	0	0	0	0	0	266,498	266,498	
<b>VINYL CHLORIDE Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>266,498</b>	<b>266,498</b>	
<b>XYLENE (MIXED ISOMERS)</b>											
ARLON	0	0	0	8,100	0	8,100	0	0	130,000	130,000	
CARL KING	0	0	0	0	0	0	0	0	0	0	
CHRYSLER	0	0	20,000	0	0	20,000	0	0	0	0	
CIBA	350	0	887	22	10	1,269	0	0	8,089	8,089	
GENERAL MOTORS WILMINGTON	0	300,000	240	0	470	300,710	0	0	7,200	7,200	
PREMCOR REFINING GROUP	0	0	11	298	10	319	0	0	38,198	38,198	
SUNOCO MARCUS HOOK REFINERY	0	0	0	0	0	0	0	0	0	0	
VP RACING FUELS	0	0	0	0	0	0	0	0	0	0	
<b>XYLENE (MIXED ISOMERS) Total</b>	<b>350</b>	<b>300,000</b>	<b>21,138</b>	<b>8,420</b>	<b>490</b>	<b>330,398</b>	<b>0</b>	<b>0</b>	<b>183,487</b>	<b>183,487</b>	
<b>ZINC COMPOUNDS</b>											
ALLEN'S HATCHERY	0	0	0	0	0	0	0	0	0	0	
CHRYSLER	830	3,400	0	0	325	4,555	0	0	0	0	
CLARIANT	0	0	0	0	0	0	0	0	0	0	
CLAYMONT STEEL	0	2,090,753	0	0	233	2,090,986	0	0	0	0	
DUPONT EDGE MOOR	0	0	0	0	77,158	77,158	0	0	0	0	
GENERAL MOTORS WILMINGTON	64	0	0	0	850	914	0	0	0	0	
HONEYWELL	0	0	0	0	0	0	0	0	0	0	
INDIAN RIVER POWER PLANT	0	0	0	0	14,000	14,000	0	0	0	0	
INVISTA S.À R.L. SEAFORD	0	0	0	0	73	73	0	0	0	0	
MOUNTAIRE FARMS FRANKFORD	0	0	0	0	0	0	0	0	0	0	
MOUNTAIRE FARMS OF DELAWARE	0	0	0	0	0	0	0	0	0	0	
ORIENT	0	0	0	0	0	0	0	0	0	0	
PERDUE BRIDGEVILLE	0	0	0	0	0	0	0	0	0	0	
PPG DOVER	2	0	0	0	505	507	0	0	0	0	
PREMCOR REFINING GROUP	0	1,105	0	0	1,293	2,398	0	0	0	0	
<b>ZINC COMPOUNDS Total</b>	<b>896</b>	<b>2,095,258</b>	<b>0</b>	<b>0</b>	<b>94,437</b>	<b>2,190,591</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>STATE TOTALS</b>	<b>1,243,120</b>	<b>8,179,183</b>	<b>4,910,600</b>	<b>171,044</b>	<b>7,144,231</b>	<b>21,648,179</b>	<b>10,945,896</b>	<b>20,387,061</b>	<b>39,879,302</b>	<b>71,212,259</b>	

APPENDIX G

# APPENDIX H

## 2007 ON-SITE RELEASE SUMMARY BY CHEMICAL

CHEMICAL RANKED BY ON-SITE RELEASE	TO AIR	TO WATER	TO LAND	TOTAL ON-SITE RELEASES	TOTAL OFF SITE TRANSFERS	TOTAL ON SITE WASTE MGMT.
HYDROCHLORIC ACID	4,838,433	0	0	4,838,433	6,350	14,789,071
NITRATE COMPOUNDS	0	3,268,193	0	3,268,193	181,480	0
SULFURIC ACID	556,737	0	0	556,737	0	634,425
HYDROGEN FLUORIDE	327,673	0	0	327,673	58	36,007
CARBONYL SULFIDE	241,076	0	0	241,076	0	15,470,882
BARIUM COMPOUNDS	11,623	5,955	220,000	237,578	440,336	0
PROPYLENE	142,676	0	0	142,676	0	10,918
AMMONIA	136,281	3,844	16	140,141	6,871	15,063,500
XYLENE (MIXED ISOMERS)	129,567	0	0	129,567	330,398	183,487
CERTAIN GLYCOL ETHERS	100,201	0	0	100,201	136,037	40,000
VANADIUM COMPOUNDS	1,743	17,501	37,000	56,244	733,587	0
MANGANESE COMPOUNDS	4,725	12,890	31,558	49,173	5,490,105	0
1,2,4-TRIMETHYLBENZENE	48,755	0	0	48,755	58,778	25,280
METHANOL	42,830	0	0	42,830	2,870,443	3,053,014
N-BUTYL ALCOHOL	39,509	0	0	39,509	90,838	33,000
VINYL CHLORIDE	37,460	3	0	37,463	0	266,498
CHROMIUM COMPOUNDS	1,985	860	29,987	32,832	414,430	1,200
ETHYLENE	30,657	0	0	30,657	0	8,328
COPPER COMPOUNDS	1,046	6,514	22,028	29,588	89,950	0
VINYL ACETATE	28,897	0	0	28,897	0	22,249
NICKEL COMPOUNDS	3,403	5,572	16,034	25,009	258,237	0
ZINC COMPOUNDS	5,476	2,089	17,285	24,850	2,190,591	0
TOLUENE	23,112	0	0	23,112	2,496,878	77,109
STYRENE	22,617	0	0	22,617	1,995	159,769
N-HEXANE	20,910	0	0	20,910	36,886	2,039,316
N-METHYL-2-PYRROLIDONE	19,918	0	0	19,918	291,314	11,000
LEAD COMPOUNDS	2,985	1,542	14,605	19,131	3,212,552	0
METHYL ISOBUTYL KETONE	16,500	0	0	16,500	19,000	0
COBALT COMPOUNDS	965	102	9,400	10,467	73,200	0
TRICHLOROETHYLENE	9,844	0	0	9,844	12,253	0
BENZENE	9,826	0	0	9,826	136	236,642
CREOSOTE	908	0	7,594	8,502	0	0
BIPHENYL	7,904	0	0	7,904	278,029	8,760
ETHYLBENZENE	6,521	0	0	6,521	5,030	31,884
1,3-BUTADIENE	5,384	0	0	5,384	0	1,307,039
N,N-DIMETHYLFORMAMIDE	4,187	0	0	4,187	795,096	5,118,558
METHYL METHACRYLATE	3,848	0	0	3,848	1,396	2,398
CHLORINE	3,734	0	0	3,734	0	2,270,817
ETHYLENE OXIDE	3,613	0	0	3,613	0	0
HYDROGEN CYANIDE	2,405	758	0	3,163	0	401,875
ANILINE	2,715	0	0	2,715	178,614	11,644
NAPHTHALENE	2,531	0	0	2,531	10,101	2,199
ACRYLONITRILE	2,279	0	0	2,279	1	538,500
DICHLOROMETHANE	2,209	0	0	2,209	81,279	876,883
CYANIDE COMPOUNDS	1,446	544	0	1,990	0	53,867
FORMALDEHYDE	1,965	0	0	1,965	0	0
SODIUM NITRITE	1,200	260	0	1,460	28,137	388,100
CARBON DISULFIDE	1,422	0	0	1,422	0	4,470,050
CYCLOHEXANE	1,411	0	0	1,411	22,600	5,952
ACRYLIC ACID	1,370	0	0	1,370	0	0
POLYCYCLIC AROMATIC COMPOUNDS	527	4	618	1,150	239	390
PROPYLENE OXIDE	1,000	0	0	1,000	0	0
MERCURY COMPOUNDS	626	2	46	674	127	0

# APPENDIX H

## 2007 ON-SITE RELEASE SUMMARY BY CHEMICAL

CHEMICAL RANKED BY ON-SITE RELEASE	TO AIR	TO WATER	TO LAND	TOTAL ON-SITE RELEASES	TOTAL OFF SITE TRANSFERS	TOTAL ON SITE WASTE MGMT.
PHENOL	403	172	0	575	2,126	266,862
BORON TRIFLUORIDE	500	0	0	500	6,118	144,803
DIETHANOLAMINE	500	0	0	500	8,360	178,121
CUMENE	455	0	0	455	0	747
ETHYL ACRYLATE	398	0	0	398	0	1,238
ETHYLENE GLYCOL	59	322	0	381	982	32,236
PHOSGENE	358	0	0	358	0	168,690
CRESOL (MIXED ISOMERS)	0	343	0	343	34	338,559
BUTYL ACRYLATE	331	0	0	331	5	228
NITROBENZENE	220	0	0	220	8,045	0
2,4-DIMETHYLPHENOL	0	172	0	172	0	34,151
TITANIUM TETRACHLORIDE	106	0	0	106	0	1,875,182
TETRACHLOROETHYLENE	66	0	0	66	0	0
BARIUM	33	11	0	44	0	0
ANTIMONY COMPOUNDS	16	0	16	32	85,316	0
NITRIC ACID	27	0	0	27	28,360	68,371
ACETONITRILE	22	0	0	22	10,048	0
PENTACHLOROBENZENE	18	0	0	18	23	0
MERCURY	11	5	0	17	26,382	0
TOLUENE DIISOCYANATE (MIXED ISOMERS)	14	0	0	14	1,600	607
NICKEL	7	5	0	12	127,362	0
P-CHLOROANILINE	11	0	0	11	99,902	4,947
MALEIC ANHYDRIDE	10	0	0	10	0	0
BIS(2-CHLOROETHYL) ETHER	10	0	0	10	35,212	0
4,4'-ISOPROPYLIDENEDIPHENOL	10	0	0	10	0	0
LEAD	3	6	0	9.3	0	0
FORMIC ACID	8	0	0	8.0	0	421,394
BENZO(G,H,I)PERYLENE	2	5	1	7.6	0	471
CHROMIUM	5	0	0	5.0	308,182	0
DIISOCYANATES	5	0	0	4.6	8,344	0
PHENANTHRENE	2	0	0	2.0	0	41
HEXACHLOROBENZENE	0	1	0	0.70	1,326	0
ANTHRACENE	1	0	0	0.50	0	0
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	0	0.0348	49	0
OCTACHLOROSTYRENE	0	0	0	0.0041	173	0
POLYCHLORINATED BIPHENYLS	0	0	0	0.0034	34	0
ARSENIC	0	0	0	0	0	0
DIBUTYL PHTHALATE	0	0	0	0	1,300	0
PHTHALIC ANHYDRIDE	0	0	0	0	0	0
ACRYLAMIDE	0	0	0	0	0	0
MANGANESE	0	0	0	0	4,924	0
CHLOROACETIC ACID	0	0	0	0	0	0
N,N-DIMETHYLANILINE	0	0	0	0	28,719	0
PERACETIC ACID	0	0	0	0	0	25,000
4,4'-METHYLENEBIS(2-CHLOROANILINE)	0	0	0	0	0	0
ARSENIC COMPOUNDS	0	0	0	0	0	0
COPPER	0	0	0	0	11,900	0
MOLYBDENUM TRIOXIDE	0	0	0	0	0	0
METHYL TERT-BUTYL ETHER	0	0	0	0	0	0
<b>Chemical Totals</b>	<b>6,920,246</b>	<b>3,327,675</b>	<b>406,188</b>	<b>10,654,109</b>	<b>21,648,179</b>	<b>71,212,259</b>

# APPENDIX I

## 2007 PBT RELEASE AND TRANSFER DETAIL

PBT CHEMICAL / FACILITY	TOTAL ON-SITE RELEASES				TRANSFERS	ON-SITE
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE MGMT.
<b>BENZO(G,H,I)PERYLENE</b>						
DUPONT EDGE MOOR	0.10	0.00	0.82	0.92	0.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	0.10	0.01	0.00	0.11	0.00	0.00
GENERAL MOTORS WILMINGTON	0.01	0.00	0.00	0.01	0.00	0.00
INDIAN RIVER POWER PLANT	0.08	0.00	0.00	0.08	0.00	0.00
INVISTA S.À R.L. SEAFORD	0.00	0.00	0.00	0.00	0.00	0.00
MCKEE RUN POWER PLANT	0.00	0.00	0.00	0.00	0.16	0.00
MOUNTAIRE FARMS OF DELMARVA	0.50	0.00	0.00	0.50	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 REFINING GROUP	1.00	5.00	0.00	6.00	0.00	471.00
<b>BENZO(G,H,I)PERYLENE Total</b>	<b>1.79</b>	<b>5.01</b>	<b>0.82</b>	<b>7.62</b>	<b>0.16</b>	<b>471.00</b>
<b>DIOXIN AND DIOXIN-LIKE COMPOUNDS</b>						
CLAYMONT STEEL	0.0157	0.0000	0.0000	0.0157	0.0000	0.0000
DUPONT EDGE MOOR	0.0005	0.0108	0.0000	0.0113	48.7883	0.0000
EDGE MOOR/HAY ROAD POWER PLANTS	0.0048	0.0000	0.0000	0.0048	0.0000	0.0000
INDIAN RIVER POWER PLANT	0.0007	0.0000	0.0000	0.0007	0.0000	0.0000
INVISTA S.À R.L. SEAFORD	0.0005	0.0000	0.0007	0.0012	0.0000	0.0000
PREMCOR REFINING GROUP	0.0012	0.0000	0.0000	0.0012	0.0000	0.0000
<b>DIOXIN AND DIOXIN-LIKE COMPOUNDS Total</b>	<b>0.0233</b>	<b>0.0108</b>	<b>0.0007</b>	<b>0.0348</b>	<b>48.7883</b>	<b>0.0000</b>
<b>HEXACHLOROBENZENE</b>						
DUPONT EDGE MOOR	0.00	0.70	0.00	0.70	1,325.60	0.00
<b>HEXACHLOROBENZENE Total</b>	<b>0.00</b>	<b>0.70</b>	<b>0.00</b>	<b>0.70</b>	<b>1,325.60</b>	<b>0.00</b>
<b>LEAD</b>						
PRINCE MINERALS	3.30	6.00	0.00	9.30	0.00	0.00
<b>LEAD Total</b>	<b>3.30</b>	<b>6.00</b>	<b>0.00</b>	<b>9.30</b>	<b>0.00</b>	<b>0.00</b>
<b>LEAD COMPOUNDS</b>						
CHROME DEPOSIT	0.00	0.00	0.00	0.00	8,500.00	0.00
CHRYSLER	0.00	0.00	0.00	0.00	66.00	0.00
CLAYMONT STEEL	585.00	75.02	49.00	709.02	258,052.00	0.00
DUPONT EDGE MOOR	0.02	57.10	0.00	57.12	75,466.40	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	1,031.30	1,343.60	0.00	2,374.90	11,871.70	0.00
GE ENERGY USA	0.62	0.00	0.00	0.62	398.27	0.00
HONEYWELL	0.00	0.00	0.00	0.00	0.00	0.00
INDIAN RIVER POWER PLANT	679.42	0.00	12,756.00	13,435.42	14,367.00	0.00
INSTEEL WIRE	0.00	0.00	0.00	0.00	459.00	0.00
INVISTA S.À R.L. SEAFORD	47.30	0.00	1,800.00	1,847.30	5.80	0.00
JOHNSON CONTROLS	456.00	24.00	0.00	480.00	2,842,751.76	0.00
NRG DOVER	2.80	0.00	0.00	2.80	443.30	0.00
PPG DOVER	0.00	0.00	0.00	0.00	2.00	0.00
PREMCOR REFINING GROUP	182.00	42.00	0.00	224.00	161.00	0.00
VP RACING FUELS	0.30	0.00	0.00	0.30	8.00	0.00
<b>LEAD COMPOUNDS Total</b>	<b>2,984.76</b>	<b>1,541.72</b>	<b>14,605.00</b>	<b>19,131.48</b>	<b>3,212,552.23</b>	<b>0.00</b>

Source: DNREC 2007 TRI Database, November 2008  
All amounts are in pounds

# APPENDIX I

## 2007 PBT RELEASE AND TRANSFER DETAIL

PBT CHEMICAL / FACILITY	TOTAL ON-SITE RELEASES				TRANSFERS	ON-SITE
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE MGMT.
<b>MERCURY</b>						
DENTSPLY MAIN PLANT	0.02	0.00	0.00	0.02	2,458.00	0.00
OCCIDENTAL CHEMICAL	11.30	5.43	0.00	16.73	23,924.00	0.00
<b>MERCURY Total</b>	<b>11.32</b>	<b>5.43</b>	<b>0.00</b>	<b>16.75</b>	<b>26,382.00</b>	<b>0.00</b>
<b>MERCURY COMPOUNDS</b>						
CLAYMONT STEEL	270.30	0.00	0.00	270.30	0.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	174.00	0.00	0.00	174.00	67.30	0.00
INDIAN RIVER POWER PLANT	117.00	0.00	46.00	163.00	53.00	0.00
INTERVET	0.00	0.00	0.00	0.00	0.26	0.00
INVISTA S.À R.L. SEAFORD	43.00	0.00	0.00	43.00	0.00	0.00
NRG DOVER	8.80	0.00	0.00	8.80	6.90	0.00
PREMCOR REFINING GROUP	13.00	2.00	0.00	15.00	0.00	0.00
<b>MERCURY COMPOUNDS Total</b>	<b>626.10</b>	<b>2.00</b>	<b>46.00</b>	<b>674.10</b>	<b>127.46</b>	<b>0.00</b>
<b>OCTACHLOROSTYRENE</b>						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	172.80	0.00
<b>OCTACHLOROSTYRENE Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>172.80</b>	<b>0.00</b>
<b>PENTACHLOROBENZENE</b>						
DUPONT EDGE MOOR	0.00	0.09	0.00	0.09	23.10	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	18.30	0.00	0.00	18.30	0.00	0.00
<b>PENTACHLOROBENZENE Total</b>	<b>18.30</b>	<b>0.09</b>	<b>0.00</b>	<b>18.39</b>	<b>23.10</b>	<b>0.00</b>
<b>POLYCHLORINATED BIPHENYLS</b>						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	34.20	0.00
<b>POLYCHLORINATED BIPHENYLS Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>34.20</b>	<b>0.00</b>
<b>POLYCYCLIC AROMATIC COMPOUNDS</b>						
DUPONT EDGE MOOR	73.91	0.00	618.43	692.34	0.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	112.90	0.06	0.00	112.96	0.00	0.00
GENERAL MOTORS WILMINGTON	0.07	0.00	0.00	0.07	0.01	0.00
HANESBRANDS	0.11	0.00	0.00	0.11	0.00	0.00
IKO WILMINGTON	0.00	0.00	0.00	0.00	76.98	3.14
INDIAN RIVER POWER PLANT	1.62	0.00	0.00	1.62	0.00	0.00
INVISTA S.À R.L. SEAFORD	0.30	0.00	0.00	0.30	0.10	0.00
MCKEE RUN POWER PLANT	0.03	0.00	0.00	0.03	161.80	0.00
MOUNTAIRE FARMS FRANKFORD	1.47	0.00	0.00	1.47	0.00	0.00
MOUNTAIRE FARMS OF DELAWARE	2.27	0.00	0.00	2.27	0.00	0.00
MOUNTAIRE FARMS OF DELMARVA	22.60	0.00	0.00	22.60	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	0.00	0.00
PREMCOR REFINING GROUP	310.00	4.00	0.00	314.00	0.00	387.00
SPI POLYOLS	0.04	0.00	0.00	0.04	0.00	0.00
<b>POLYCYCLIC AROMATIC COMPOUNDS Total</b>	<b>527.31</b>	<b>4.06</b>	<b>618.43</b>	<b>1,149.80</b>	<b>238.89</b>	<b>390.14</b>
<b>STATE TOTALS</b>	<b>4,173</b>	<b>1,565</b>	<b>15,270</b>	<b>21,008</b>	<b>3,240,905</b>	<b>861</b>

# APPENDIX J

## 2007 CARCINOGEN RELEASE AND TRANSFER DETAIL

CARCINOGEN / FACILITY	TOTAL ON-SITE RELEASES				TRANSFERS	ON-SITE
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE MGMT.
<b>1,3-BUTADIENE</b>						
DOW REICHHOLD	4,609.00	0.00	0.00	4,609.00	0.00	1,306,955.00
PREMCOR REFINING GROUP	775.00	0.00	0.00	775.00	0.00	84.00
<b>1,3-BUTADIENE Total</b>	<b>5,384.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5,384.00</b>	<b>0.00</b>	<b>1,307,039.00</b>
<b>4,4'-METHYLENEBIS(2-CHLOROANILINE)</b>						
ROHM AND HAAS B5 B6	0.00	0.00	0.00	0.00	0.00	0.00
ROHM AND HAAS B7 B15	0.00	0.00	0.00	0.00	0.00	0.00
<b>4,4'-METHYLENEBIS(2-CHLOROANILINE) Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>ACRYLAMIDE</b>						
DOW REICHHOLD	0.00	0.00	0.00	0.00	0.00	0.00
<b>ACRYLAMIDE Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>ACRYLONITRILE</b>						
DOW REICHHOLD	2,279.00	0.00	0.00	2,279.00	0.80	538,500.00
<b>ACRYLONITRILE Total</b>	<b>2,279.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2,279.00</b>	<b>0.80</b>	<b>538,500.00</b>
<b>ARSENIC</b>						
ALLEN'S HATCHERY	0.00	0.00	0.00	0.00	0.00	0.00
<b>ARSENIC Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>ARSENIC COMPOUNDS</b>						
MOUNTAIRE FARMS FRANKFORD	0.00	0.00	0.00	0.00	0.00	0.00
MOUNTAIRE FARMS OF DELAWARE	0.00	0.00	0.00	0.00	0.00	0.00
<b>ARSENIC COMPOUNDS Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>BENZENE</b>						
CHRYSLER	117.00	0.00	0.00	117.00	0.00	0.00
GENERAL MOTORS WILMINGTON	223.00	0.00	0.00	223.00	12.00	0.00
PREMCOR REFINING GROUP	5,126.00	0.00	0.00	5,126.00	123.70	236,642.00
SUNOCO MARCUS HOOK REFINERY	4,360.00	0.00	0.00	4,360.00	0.00	0.00
VP RACING FUELS	0.00	0.00	0.00	0.00	0.00	0.00
<b>BENZENE Total</b>	<b>9,826.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9,826.00</b>	<b>135.70</b>	<b>236,642.00</b>
<b>CHROMIUM COMPOUNDS</b>						
CHROME DEPOSIT	0.00	0.00	0.00	0.00	2,300.00	1,200.00
CLARIANT	0.00	0.00	0.00	0.00	0.00	0.00
CLAYMONT STEEL	138.00	3.00	87.00	228.00	33,637.00	0.00
DUPONT EDGE MOOR	1.00	35.00	0.00	36.00	312,656.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	947.00	514.00	0.00	1,461.00	33,730.00	0.00
INDIAN RIVER POWER PLANT	755.00	250.00	27,000.00	28,005.00	25,000.00	0.00
INVISTA S.À R.L. SEAFORD	29.00	0.00	2,900.00	2,929.00	1,607.00	0.00
ORIENT	0.00	0.00	0.00	0.00	0.00	0.00
PREMCOR REFINING GROUP	115.00	58.00	0.00	173.00	5,499.67	0.00
<b>CHROMIUM COMPOUNDS Total</b>	<b>1,985.00</b>	<b>860.00</b>	<b>29,987.00</b>	<b>32,832.00</b>	<b>414,429.67</b>	<b>1,200.00</b>
<b>COBALT COMPOUNDS</b>						
DUPONT EDGE MOOR	0.00	33.00	0.00	33.00	16,680.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	658.00	0.00	0.00	658.00	27,911.00	0.00
INDIAN RIVER POWER PLANT	255.00	5.00	9,400.00	9,660.00	11,000.00	0.00
PREMCOR REFINING GROUP	52.00	64.00	0.00	116.00	17,609.00	0.00
<b>COBALT COMPOUNDS Total</b>	<b>965.00</b>	<b>102.00</b>	<b>9,400.00</b>	<b>10,467.00</b>	<b>73,200.00</b>	<b>0.00</b>

# APPENDIX J

## 2007 CARCINOGEN RELEASE AND TRANSFER DETAIL

CARCINOGEN / FACILITY	TOTAL ON-SITE RELEASES				TRANSFERS	ON-SITE
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE MGMT.
<b>CREOSOTE</b>						
DUPONT EDGE MOOR	908.00	0.00	7,594.00	8,502.00	0.00	0.00
<b>CREOSOTE Total</b>	<b>908.00</b>	<b>0.00</b>	<b>7,594.00</b>	<b>8,502.00</b>	<b>0.00</b>	<b>0.00</b>
<b>DICHLOROMETHANE</b>						
NORAMCO	2,209.00	0.00	0.00	2,209.00	81,279.00	876,883.00
<b>DICHLOROMETHANE Total</b>	<b>2,209.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2,209.00</b>	<b>81,279.00</b>	<b>876,883.00</b>
<b>ETHYL ACRYLATE</b>						
BASF	317.00	0.00	0.00	317.00	0.00	1,057.00
DOW REICHHOLD	81.00	0.00	0.00	81.00	0.00	181.00
<b>ETHYL ACRYLATE Total</b>	<b>398.00</b>	<b>0.00</b>	<b>0.00</b>	<b>398.00</b>	<b>0.00</b>	<b>1,238.00</b>
<b>ETHYLBENZENE</b>						
ARLON	540.00	0.00	0.00	540.00	1,420.00	24,000.00
CHRYSLER	3,330.00	0.00	0.00	3,330.00	3,500.00	0.00
DOVER AFB	33.00	0.00	0.00	33.00	0.00	0.00
PREMCO REFINING GROUP	2,618.00	0.00	0.00	2,618.00	110.32	7,884.00
<b>ETHYLBENZENE Total</b>	<b>6,521.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6,521.00</b>	<b>5,030.32</b>	<b>31,884.00</b>
<b>ETHYLENE OXIDE</b>						
CRODA	2,300.00	0.00	0.00	2,300.00	0.00	0.00
SUNOCO MARCUS HOOK REFINERY	1,313.00	0.00	0.00	1,313.00	0.00	0.00
<b>ETHYLENE OXIDE Total</b>	<b>3,613.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3,613.00</b>	<b>0.00</b>	<b>0.00</b>
<b>FORMALDEHYDE</b>						
DOW REICHHOLD	1,965.00	0.00	0.00	1,965.00	0.00	0.00
<b>FORMALDEHYDE Total</b>	<b>1,965.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1,965.00</b>	<b>0.00</b>	<b>0.00</b>
<b>HEXACHLORO BENZENE</b>						
DUPONT EDGE MOOR	0.00	0.70	0.00	0.70	1,325.60	0.00
<b>HEXACHLORO BENZENE Total</b>	<b>0.00</b>	<b>0.70</b>	<b>0.00</b>	<b>0.70</b>	<b>1,325.60</b>	<b>0.00</b>
<b>LEAD</b>						
PRINCE MINERALS	3.30	6.00	0.00	9.30	0.00	0.00
<b>LEAD Total</b>	<b>3.30</b>	<b>6.00</b>	<b>0.00</b>	<b>9.30</b>	<b>0.00</b>	<b>0.00</b>
<b>LEAD COMPOUNDS</b>						
CHROME DEPOSIT	0.00	0.00	0.00	0.00	8,500.00	0.00
CHRYSLER	0.00	0.00	0.00	0.00	66.00	0.00
CLAYMONT STEEL	585.00	75.02	49.00	709.02	258,052.00	0.00
DUPONT EDGE MOOR	0.02	57.10	0.00	57.12	75,466.40	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	1,031.30	1,343.60	0.00	2,374.90	11,871.70	0.00
GE ENERGY USA	0.62	0.00	0.00	0.62	398.27	0.00
HONEYWELL	0.00	0.00	0.00	0.00	0.00	0.00
INDIAN RIVER POWER PLANT	679.42	0.00	12,756.00	13,435.42	14,367.00	0.00
INSTEEL WIRE	0.00	0.00	0.00	0.00	459.00	0.00
INVISTA S.À R.L. SEAFORD	47.30	0.00	1,800.00	1,847.30	5.80	0.00
JOHNSON CONTROLS	456.00	24.00	0.00	480.00	2,842,751.76	0.00
NRG DOVER	2.80	0.00	0.00	2.80	443.30	0.00
PPG DOVER	0.00	0.00	0.00	0.00	2.00	0.00
PREMCO REFINING GROUP	182.00	42.00	0.00	224.00	161.00	0.00
VP RACING FUELS	0.30	0.00	0.00	0.30	8.00	0.00
<b>LEAD COMPOUNDS Total</b>	<b>2,984.76</b>	<b>1,541.72</b>	<b>14,605.00</b>	<b>19,131.48</b>	<b>3,212,552.23</b>	<b>0.00</b>

# APPENDIX J

## 2007 CARCINOGEN RELEASE AND TRANSFER DETAIL

CARCINOGEN / FACILITY	TOTAL ON-SITE RELEASES				TRANSFERS	ON-SITE
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE MGMT.
<b>NAPHTHALENE</b>						
CARL KING	0.00	0.00	0.00	0.00	0.00	0.00
CRODA	10.00	0.00	0.00	10.00	9,520.00	0.00
DOVER AFB	7.50	0.00	0.00	7.50	0.00	0.00
INDIAN RIVER POWER PLANT	0.00	0.00	0.00	0.00	0.00	0.00
INVISTA S.À R.L. SEAFORD	8.00	0.00	0.00	8.00	1.00	0.00
MCKEE RUN POWER PLANT	1.55	0.00	0.00	1.55	580.48	0.00
MOUNTAIRE FARMS OF DELAWARE	0.00	0.00	0.00	0.00	0.00	0.00
PREMCOR REFINING GROUP	2,504.00	0.00	0.00	2,504.00	0.00	2,199.00
<b>NAPHTHALENE Total</b>	<b>2,531.05</b>	<b>0.00</b>	<b>0.00</b>	<b>2,531.05</b>	<b>10,101.48</b>	<b>2,199.00</b>
<b>NICKEL</b>						
CAMDEL METALS	0.00	0.00	0.00	0.00	38,808.00	0.00
METAL MASTERS	0.50	0.00	0.00	0.50	88,554.00	0.00
PRINCE MINERALS	6.52	5.00	0.00	11.52	0.00	0.00
<b>NICKEL Total</b>	<b>7.02</b>	<b>5.00</b>	<b>0.00</b>	<b>12.02</b>	<b>127,362.00</b>	<b>0.00</b>
<b>NICKEL COMPOUNDS</b>						
CLAYMONT STEEL	32.00	12.00	34.00	78.00	5,436.00	0.00
DUPONT EDGE MOOR	2.00	592.00	0.00	594.00	40,281.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	2,351.00	1,028.00	0.00	3,379.00	27,272.00	0.00
INDIAN RIVER POWER PLANT	755.00	250.00	16,000.00	17,005.00	18,000.00	0.00
PREMCOR REFINING GROUP	263.00	3,690.00	0.00	3,953.00	158,010.00	0.00
SPI POLYOLS	0.00	0.00	0.00	0.00	9,238.00	0.00
<b>NICKEL COMPOUNDS Total</b>	<b>3,403.00</b>	<b>5,572.00</b>	<b>16,034.00</b>	<b>25,009.00</b>	<b>258,237.00</b>	<b>0.00</b>
<b>NITROBENZENE</b>						
ORIENT	220.00	0.00	0.00	220.00	8,045.00	0.00
<b>NITROBENZENE Total</b>	<b>220.00</b>	<b>0.00</b>	<b>0.00</b>	<b>220.00</b>	<b>8,045.00</b>	<b>0.00</b>
<b>P-CHLOROANILINE</b>						
CIBA	11.00	0.00	0.00	11.00	99,902.00	4,947.00
<b>P-CHLOROANILINE Total</b>	<b>11.00</b>	<b>0.00</b>	<b>0.00</b>	<b>11.00</b>	<b>99,902.00</b>	<b>4,947.00</b>
<b>POLYCHLORINATED BIPHENYLS</b>						
DUPONT EDGE MOOR	0.00	0.00	0.00	0.00	34.20	0.00
<b>POLYCHLORINATED BIPHENYLS Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>34.20</b>	<b>0.00</b>
<b>POLYCYCLIC AROMATIC COMPOUNDS</b>						
DUPONT EDGE MOOR	73.91	0.00	618.43	692.34	0.00	0.00
EDGE MOOR/HAY ROAD POWER PLANTS	112.90	0.06	0.00	112.96	0.00	0.00
GENERAL MOTORS WILMINGTON	0.07	0.00	0.00	0.07	0.01	0.00
HANESBRANDS	0.11	0.00	0.00	0.11	0.00	0.00
IKO WILMINGTON	0.00	0.00	0.00	0.00	76.98	3.14
INDIAN RIVER POWER PLANT	1.62	0.00	0.00	1.62	0.00	0.00
INVISTA S.À R.L. SEAFORD	0.30	0.00	0.00	0.30	0.10	0.00
MCKEE RUN POWER PLANT	0.03	0.00	0.00	0.03	161.80	0.00
MOUNTAIRE FARMS FRANKFORD	1.47	0.00	0.00	1.47	0.00	0.00
MOUNTAIRE FARMS OF DELAWARE	2.27	0.00	0.00	2.27	0.00	0.00
MOUNTAIRE FARMS OF DELMARVA	22.60	0.00	0.00	22.60	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	0.00	0.00
PREMCOR REFINING GROUP	310.00	4.00	0.00	314.00	0.00	387.00
SPI POLYOLS	0.04	0.00	0.00	0.04	0.00	0.00
<b>POLYCYCLIC AROMATIC COMPOUNDS Total</b>	<b>527.31</b>	<b>4.06</b>	<b>618.43</b>	<b>1,149.80</b>	<b>238.89</b>	<b>390.14</b>

# APPENDIX J

## 2007 CARCINOGEN RELEASE AND TRANSFER DETAIL

CARCINOGEN / FACILITY	TOTAL ON-SITE RELEASES				TRANSFERS	ON-SITE
	AIR	WATER	LAND	TOTAL	OFF SITE	WASTE MGMT.
<b>PROPYLENE OXIDE</b>						
CRODA	1,000.00	0.00	0.00	1,000.00	0.00	0.00
<b>PROPYLENE OXIDE Total</b>	<b>1,000.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1,000.00</b>	<b>0.00</b>	<b>0.00</b>
<b>STYRENE</b>						
BASF	483.00	0.00	0.00	483.00	1,236.00	1,494.00
DOW REICHHOLD	1,492.00	0.00	0.00	1,492.00	289.00	158,263.00
JUSTIN TANKS	18,399.60	0.00	0.00	18,399.60	470.00	0.00
PREMCOR REFINING GROUP	369.00	0.00	0.00	369.00	0.00	12.00
THE MARBLE WORKS	1,873.00	0.00	0.00	1,873.00	0.00	0.00
<b>STYRENE Total</b>	<b>22,616.60</b>	<b>0.00</b>	<b>0.00</b>	<b>22,616.60</b>	<b>1,995.00</b>	<b>159,769.00</b>
<b>TETRACHLOROETHYLENE</b>						
PREMCOR REFINING GROUP	66.00	0.00	0.00	66.00	0.00	0.00
<b>TETRACHLOROETHYLENE Total</b>	<b>66.00</b>	<b>0.00</b>	<b>0.00</b>	<b>66.00</b>	<b>0.00</b>	<b>0.00</b>
<b>TOLUENE DIISOCYANATE (MIXED ISOMERS)</b>						
E-A-R SPECIALTY COMPOSITES	0.95	0.00	0.00	0.95	1,600.00	0.00
MACDERMID AUTOTYPE	12.65	0.00	0.00	12.65	0.00	606.60
ROHM AND HAAS B5 B6	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOLUENE DIISOCYANATE (MIXED ISOMERS) Total</b>	<b>13.60</b>	<b>0.00</b>	<b>0.00</b>	<b>13.60</b>	<b>1,600.00</b>	<b>606.60</b>
<b>TRICHLOROETHYLENE</b>						
CAMDEL METALS	9,844.00	0.00	0.00	9,844.00	12,253.00	0.00
<b>TRICHLOROETHYLENE Total</b>	<b>9,844.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9,844.00</b>	<b>12,253.00</b>	<b>0.00</b>
<b>VINYL ACETATE</b>						
DOW REICHHOLD	910.00	0.00	0.00	910.00	0.00	22,249.00
FORMOSA PLASTICS	27,987.00	0.00	0.00	27,987.00	0.00	0.00
<b>VINYL ACETATE Total</b>	<b>28,897.00</b>	<b>0.00</b>	<b>0.00</b>	<b>28,897.00</b>	<b>0.00</b>	<b>22,249.00</b>
<b>VINYL CHLORIDE</b>						
FORMOSA PLASTICS	37,460.00	3.00	0.00	37,463.00	0.00	266,498.00
<b>VINYL CHLORIDE Total</b>	<b>37,460.00</b>	<b>3.00</b>	<b>0.00</b>	<b>37,463.00</b>	<b>0.00</b>	<b>266,498.00</b>
<b>STATE TOTAL</b>	<b>145,638</b>	<b>8,094</b>	<b>78,238</b>	<b>231,971</b>	<b>4,307,722</b>	<b>3,450,045</b>

### **COMMON TOXIC CHEMICALS AND THEIR HAZARDS**

Presented here in descending order of the amount released to on-site to air, water, and/or land (see Figures 2-4 on pages 7-9) 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 61-62 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 7** **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. Liquid phase can cause skin and eye burns, aerosol phase can irritate the mouth, nose and throat. People working in occupations in which hydrochloric acid gas is being used or manufactured have the highest risk of being exposed. Most families will not be exposed to significant levels of hydrochloric acid gas.

#### **Sulfuric Acid**

(Aerosol portion only is reportable)

Used in: Fertilizers, chemicals, dyes, petroleum refining, etching, analytical chemistry, metal manufacturing and plating, and explosives. Also produced during coal and oil combustion at power generating facilities.

Hazard: Corrosive. Liquid phase can cause skin and eye burns, aerosol phase can irritate the mouth, nose and throat. People working in occupations in which sulfuric acid gas is being used or manufactured have the highest risk of being exposed.

#### **Hydrogen Fluoride**

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

Hazard: Corrosive. Liquid phase can cause skin and eye burns, aerosol phase can irritate the mouth, nose and throat. Exposures in the community, except possibly in cases of fires or spills, are usually much lower than those found in the workplace. Toxic by inhalation and ingestion or skin absorption.

#### **Carbonyl Sulfide**

Used in: Chemical manufacturing, also a by-product of petroleum refining.

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.

#### **Propylene**

Used in: Propylene is used in the production of many organic chemicals including resins, plastics, synthetic rubber and gasoline.

Hazard: Toxic by inhalation. Exposure to high levels can cause you to feel dizzy, lightheaded, and may cause unconsciousness. Boils at a low temperature (-47°C) and is a highly flammable gas. Contact with liquid may cause frostbite. Exposure may damage the liver, and affect the nervous system.

#### **Ammonia**

Used in: Refrigerant, in manufacturing fertilizer, plastics, dyes, and textiles. A product of human activity, including natural organic decomposition, run-off from fields and feedlots, waste treatment plant and refinery/chemical manufacturing effluents. Ammonia is applied directly into soil on farm fields, and is used to make fertilizers for farm crops, lawns, and plants. Many household and industrial cleaners contain ammonia.

Hazard: May irritate lungs, eyes, nose, throat, and mouth. Corrosive, can severely damage eyes and cause permanent damage. Not normally a liquid at room temperatures, workplace contact with liquid can freeze skin.

#### **Xylene – Mixed Isomers**

Used in: Xylene is used as a solvent and in the printing, rubber, and leather industries. It is also used as a cleaning agent, a thinner for paint, and in paints and varnishes. It is found in small amounts in airplane fuel and gasoline.

Hazard: Toxic by inhalation and ingestion. Exposure to high levels for short times can irritate the skin, eyes, nose, and throat. Exposure for long periods of time may cause headaches, lack of muscle coordination, dizziness, confusion, and changes in one's sense of balance. Repeated exposure may cause low blood cell count. No health effects have been noted at the background levels that people are exposed to on a daily basis.

#### **Certain Glycol Ethers**

Used in: Solvents, paint thinners.

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

#### **1,2,4-Trimethylbenzene**

Used in: Manufacture of dyes, pharmaceuticals, used as a solvent.

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, inhalation may cause bronchitis. Repeated exposure may damage the liver and kidneys.

#### **Methanol**

Used in: Solvents, cleaners, production of other chemicals.

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

# APPENDIX K

## COMMON TOXIC CHEMICALS AND THEIR HAZARDS



### **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.

### **Vinyl Chloride**

Used in: Plastics, adhesives and chemical manufacturing.

Hazard: Known carcinogen, mutagen. Toxic by inhalation and ingestion or skin absorption. May cause damage to developing fetus. May damage liver, kidneys, bones, blood vessels, and skin. Exposure may cause you to feel drowsy or lightheaded. Vinyl chloride is not normally found in urban, suburban, or rural air in amounts that are detectable by the usual methods of analysis. You can also be exposed to vinyl chloride in the air through tobacco smoke.

### **Ethylene**

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

Hazard: Exposure is primarily by inhalation in the workplace. Can cause headache, dizziness, and unconsciousness. Skin contact with liquid may cause frostbite. Is flammable, explosive, and reactive.

### **Vinyl Acetate**

Used for: Plastics and chemical manufacturing.

Hazard: Inhalation 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.

### **Toluene**

Used in: As a solvent, in making gasoline, chemicals, perfumes, medicines, dyes, explosives, and detergents.

Hazard: Toxic by inhalation and skin exposure. Exposure can irritate the skin nasal membranes, and eyes, and can cause birth defects. May cause headache, dizziness, and in high concentrations, cause you to pass out. Chronic or prolonged exposure may cause liver, kidney, and brain damage. Toluene is a flammable liquid.

## **WATER – From Figure 3 on page 8 - 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.



## APPENDIX K

### COMMON TOXIC CHEMICALS AND THEIR HAZARDS

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#### **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.

#### **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.

#### **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.

#### **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.

#### **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.

#### **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.

#### **Lead and Lead Compounds \***

Used in: Batteries, ammunition, cable covering, ceramic glazes, metal alloys, and solders.

Hazard: Toxic by ingestion. Can cause brain damage, particularly in children. Listed as a possible carcinogen.

#### **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.

\* 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



### 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.

### Cresol (Mixed Isomers)

Used in: Making synthetic resins, photographic developers, 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.

### Ethylene Glycol –

Used in: A component in anti-freeze in heating and cooling systems, to de-ice aircraft, as an industrial solvent, and in paint and plastics.

Hazard: Exposure may irritate nasal passages, cause nausea, vomiting, headache, or an intoxicated feeling. Prolonged exposure may affect the kidneys or brain.

### LAND – From Figure 4 on page 9 - Chemicals not reported in the Air and/or Water sections above

#### 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 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.

#### Creosote Compounds

Used in: Wood preservation and water protection for products like railroad ties and utility poles, and for roofing products.

Hazard: By inhalation and skin contact. Listed as a probable carcinogen. Skin contact may cause irritation, burning, and itching, made worse by exposure to sunlight. Contact with eyes will cause severe eye irritation with possible loss of vision.

#### Polycyclic Aromatic Compounds (PACs)

Used in: Limited use, but a few of these compounds are used in manufacture of dyes, plastics, and pesticides.

Hazard: By inhalation and eating foods containing PACs. Inhalation hazard is from breathing air in areas where substances like coal, oil, and garbage are not burned completely, and in vicinity of agricultural burns and coal-tar and asphalt production facilities. Ingestion hazard is from eating foods such as charred meats, or drinking contaminated water or milk, which may contain PACs. Listed as a probable carcinogen.

\* 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

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#### **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.

#### **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.

#### **Benzo(g,h,i)perylene**

Used in: Research; can also be used in manufacture of dyes, plastics pesticides, explosives, and drugs.

Hazard: By inhalation, skin contact, and ingestion. Created when substances like coal, oil, and garbage are not burned completely. Can spread to kidneys, fat tissues, and the liver. Naturally eliminated by the body within a few days. Not known to cause cancer in humans.

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

### 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 chemicals released through **stacks**, vents, or other confined spaces and are usually regulated by permit. Non-point, or **fugitive**, releases include chemical 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 **NAICS code** (see below), and meets the activity threshold for manufacturing, processing, or otherwise using an **EPCRA Section 313 chemical** (see below).

**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.



# APPENDIX L

## Glossary and Acronyms

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**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.

**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. EPA increased the thresholds for use of Form A starting in 2006, so that more facilities could report their chemicals without reporting any data on them.

**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:  $\text{Input} + \text{Generation} = \text{Output} + \text{Consumption}$ .

**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.



# APPENDIX L

## Glossary and Acronyms

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**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 **Standard Industrial Classification (SIC)** codes. It is used by government, industry, and sales organizations to reach targeted industries for data collection, enforcement, and sales. The TRI program converted to NAICS starting with the 2006 reporting year. For TRI prior to January 1, 1998, the covered SIC codes were 20 through 39 (manufacturing facilities). Beginning January 1, 1998, the covered SIC codes were 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). The NAICS codes are not directly translatable from the SIC codes, so a reference document is usually required to translate or compare the codes. The intent in converting to the NAICS codes was to more accurately define the TRI reporting universe without adding to or subtracting from it. 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  $1 \times 10^{-7}$  to  $1 \times 10^7$  (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

## Glossary and Acronyms

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**Selective Non-Catalytic Reduction (SNCR)** – Nitrogen oxides (NO<sub>x</sub>) 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. Facilities that engage in a variety of activities may possess multiple codes. Also see **North American Industrial Classification System – NAICS**. The TRI program converted 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); causing acute human health risks, cancer or chronic (non-cancer) human health effects, and/or environmental effects.

**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> .

# APPENDIX M

## TRI REPORTING FORMS - FORM R



TOXICS RELEASE INVENTORY

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

Form Approved OMB Number: 2070-0093  
Approval Expires: 01/31/2010

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<b>EPA</b> United States Environmental Protection Agency		<b>FORM R</b> 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 _____	
<b>WHERE TO SEND COMPLETED FORMS:</b> 1. TRI Data Processing Center P. O. Box 1513 Lanham, MD 20703-1513					
2. APPROPRIATE STATE OFFICE (See instructions in Appendix E)					
This section only applies if you are revising or withdrawing a previously submitted form, otherwise leave blank.		Revision (enter up to two code(s)) [ ] [ ]		Withdrawal (enter up to two code(s)) [ ] [ ]	
IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.					
<b>PART 1. FACILITY IDENTIFICATION INFORMATION</b>					
SECTION 1. REPORTING YEAR _____				Sample Form R For Reporting year 2007	
SECTION 2. TRADE SECRET INFORMATION					
2.1 Are you claiming the toxic chemical identified on page 2 trade secret? <input type="checkbox"/> Yes (Answer question 2.2; Attach substantiation forms)		<input type="checkbox"/> No (Do not answer 2.2; Go to Section 3)		2.2 Is this copy <input type="checkbox"/> Sanitized <input type="checkbox"/> Unsanitized (Answer only if "YES" in 2.1)	
<b>SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)</b> 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:
<b>SECTION 4. FACILITY IDENTIFICATION</b>					
4.1 Facility or Establishment Name				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)			
Email Address					
4.5 NAICS Code (s) (6 digits)		Primary			
		a.	b.	c.	d.
				e.	f.
4.6 Dun & Bradstreet Number (s) (9 digits)		a.			
		b.			
<b>SECTION 5. PARENT COMPANY INFORMATION</b>					
5.1 Name of Parent Company		NA <input type="checkbox"/>			
5.2 Parent Company's Dun & Bradstreet Number		NA <input type="checkbox"/>			

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TOXICS RELEASE INVENTORY

# APPENDIX M

## TRI REPORTING FORMS - FORM R

Form Approved OMB Number: 2070-0093

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

<b>FORM R</b> PART II. TOXIC CHEMICAL RELEASE		Sample Form R For Reporting year 2007	TRI Facility ID Number  Toxic Chemical, Category or Generic Name																																				
<b>SECTION 1. TOXIC CHEMICAL IDENTITY</b> (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.)																																							
<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 5%;">1</td> <td style="width: 5%;">2</td> <td style="width: 5%;">3</td> <td style="width: 5%;">4</td> <td style="width: 5%;">5</td> <td style="width: 5%;">6</td> <td style="width: 5%;">7</td> <td style="width: 5%;">8</td> <td style="width: 5%;">9</td> <td style="width: 5%;">10</td> <td style="width: 5%;">11</td> <td style="width: 5%;">12</td> <td style="width: 5%;">13</td> <td style="width: 5%;">14</td> <td style="width: 5%;">15</td> <td style="width: 5%;">16</td> <td style="width: 5%;">17</td> </tr> <tr> <td>NA</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	NA	<input type="checkbox"/>																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17																						
NA	<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"/>																						
<b>SECTION 2. MIXTURE COMPONENT IDENTITY</b> (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.)																																							
<b>SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY</b> (Important: Check all that apply.)																																							
3.1 Manufacture the toxic chemical:		3.2 Process the toxic chemical:																																					
a. <input type="checkbox"/> Produce    b. <input type="checkbox"/> Import If produce or import c. <input type="checkbox"/> For on-site use/processing d. <input type="checkbox"/> For sale/distribution e. <input type="checkbox"/> As a byproduct f. <input type="checkbox"/> As an impurity		a. <input type="checkbox"/> As a reactant b. <input type="checkbox"/> As a formulation component c. <input type="checkbox"/> As an article component d. <input type="checkbox"/> Repackaging e. <input type="checkbox"/> As an impurity																																					
3.3 Otherwise use the toxic chemical:																																							
a. <input type="checkbox"/> As a chemical processing aid b. <input type="checkbox"/> As a manufacturing aid c. <input type="checkbox"/> Ancillary or other use																																							
<b>SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON SITE AT ANY TIME DURING THE CALENDAR YEAR</b>																																							
4.1 <input type="text"/> (Enter two digit code from instruction package.)																																							
<b>SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE</b>																																							
		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 <input type="text"/> and indicate the Part II, Section 5.3 page number in this box. <input type="text"/> (example: 1,2,3, etc.)																																							

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\*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 M

## TRI REPORTING FORMS - FORM R



TOXICS RELEASE INVENTORY

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

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<h3>FORM R</h3> <p>PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)</p>		TRI Facility ID Number  Toxic Chemical, Category or Generic Name	
<b>SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ON SITE (continued)</b>			
	NA	A. Total Release (pounds/year*) (enter range code ** or estimate)	B. Basis of Estimate (enter code)
5.4.1	<input type="checkbox"/>	Underground Injection onsite to Class I Wells	Sample Form R For Reporting year 2007
5.4.2	<input type="checkbox"/>	Underground Injection onsite to Class II-V Wells	
5.5	<input type="checkbox"/>	Disposal to land onsite	
5.5.1A	<input type="checkbox"/>	RCRA Subtitle C landfills	
5.5.1B	<input type="checkbox"/>	Other landfills	
5.5.2	<input type="checkbox"/>	Land treatment/application farming	
5.5.3A	<input type="checkbox"/>	RCRA Subtitle C surface impoundments	
5.5.3B	<input type="checkbox"/>	Other surface impoundments	
5.5.4	<input type="checkbox"/>	Other disposal	
<b>SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS</b>			
<b>6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)</b>			
<b>6.1.A Total Quantity Transferred to POTWs and Basis of Estimate</b>			
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 <input type="text"/> and indicate the Part II, Section 6.1 page number in this box <input type="text"/> (example: 1,2,3, etc.)			
<b>SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS</b>			
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? <input type="checkbox"/> Yes <input type="checkbox"/> No			

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\* 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 M

## TRI REPORTING FORMS - FORM R

TOXICS RELEASE INVENTORY

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

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<b>FORM R</b> <b>PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)</b>	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.	

Sample Form R  
For Reporting year 2007

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

Off-Site Location Name \_\_\_\_\_

Off-Site Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Country \_\_\_\_\_ 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		7A.1d
	3	4	5		
	6	7	8		
7A.2a	7A.2b	1	2		7A.2d
	3	4	5		
	6	7	8		
7A.3a	7A.3b	1	2		7A.3d
	3	4	5		
	6	7	8		
7A.4a	7A.4b	1	2		7A.4d
	3	4	5		
	6	7	8		
7A.5a	7A.5b	1	2		7A.5d
	3	4	5		
	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.)

EPA Form 9350 -1 (Rev. 01/2008) - 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 M

## TRI REPORTING FORMS – FORM R



TOXICS RELEASE INVENTORY

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

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<b>FORM R</b>		TRI Facility ID Number			
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)		Toxic Chemical, Category or Generic Name			
<b>SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES</b>					
<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	<input style="width: 80%;" type="text"/>	2	<input style="width: 80%;" type="text"/>	3	<input style="width: 80%;" type="text"/>
<b>SECTION 7C. ON-SITE RECYCLING PROCESSES</b>					
<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	<input style="width: 80%;" type="text"/>	2	<input style="width: 80%;" type="text"/>	3	<input style="width: 80%;" type="text"/>
<b>SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES</b>					
		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.				
8.10.1	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)			
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"/>	

Sample Form R  
For Reporting year 2007

EPA Form 9350 -1 (Rev. 01/2008) - Previous editions are obsolete.

\*For Dioxin or Dioxin-like compounds, report in grams/year.



# APPENDIX N

## TRI REPORTING FORMS - FORM A

TOXICS RELEASE INVENTORY

Form Approved OMB Number: 2070-0143

Approval Expires: 01/31/2010

Page 1 of —

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

<b>EPA</b> United States Environmental Protection Agency		<b>TOXIC RELEASE INVENTORY</b> <b>FORM A</b>		TRI Facility ID Number  	
<b>WHERE TO SEND COMPLETED FORMS:</b> 1. TRI Data Processing Center P. O. Box 1513 Lanham, MD 20703-1513					
2. APPROPRIATE STATE OFFICE (See instruction in Appendix E)					
This section only applies if you are revising or withdrawing a previously submitted form, otherwise leave blank.		<b>Revision (enter up to two code(s))</b> <input type="text"/> <input type="text"/>		<b>Withdrawal (enter up to two code(s))</b> <input type="text"/> <input type="text"/>	
<b>IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.</b>					
<b>PART 1. FACILITY IDENTIFICATION I</b>					
<b>SECTION 1. REPORTING YEAR</b> _____				Sample Form A Page 1 For Reporting year 2007	
<b>SECTION 2. TRADE SECRET INFORMATION</b>					
<b>2.1</b> Are you claiming the toxic chemical identified on page 2 trade secret? <input type="checkbox"/> Yes (Answer question 2.2; Attach substantiation forms)		<input type="checkbox"/> No (Do not answer 2.2; Go to Section 3)		<b>2.2</b> Is this copy <input type="checkbox"/> Sanitized <input type="checkbox"/> Unsanitized (Answer only if "YES" in 2.1)	
<b>SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)</b>					
Pursuant to 40 CFR 372.27(a)(1), "I hereby certify that to the best of my knowledge and belief for the toxic chemical(s) listed in this statement, for this reporting year, the annual reportable amount for each chemical, as defined in 40 CFR 372.27(a)(1), did not exceed 5,000 pounds, which included no more than 2,000 pounds of total disposal or other releases to the environment, and that the chemical was manufactured, or processed, or otherwise used in an amount not exceeding 1 million pounds during this reporting year;" and/or					
Pursuant to 40 CFR 372.27(a)(2), "I hereby certify that to the best of my knowledge and belief for the toxic chemical(s) of special concern listed in this statement, there were zero disposals or other releases to the environment (including disposals or other releases that resulted from catastrophic events) for this reporting year, the "Annual Reportable Amount of a Chemical of Special Concern" for each such chemical, as defined in 40 CFR 372.27(a)(2), did not exceed 500 pounds for this reporting year, and that the chemical was manufactured, or 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:
<b>SECTION 4. FACILITY IDENTIFICATION</b>					
<b>4.1</b>		TRI Facility ID Number			
Facility or Establishment Name		Facility or Establishment Name or Mailing Address (if different from street address)			
Street		Mailing Address			
City/County/State/Zip Code		City/State/Zip Code			Country (Non-US)
<b>4.2</b> This report contains information for: (Important: Check c or d if applicable)					
				c. <input type="checkbox"/> A Federal facility	
				d. <input type="checkbox"/> GOCO	
<b>4.3</b> Technical Contact Name		Telephone Number (include area code)			
Email Address					
<b>4.4</b> Public Contact Name		Telephone Number (include area code)			
Email Address					
<b>4.5</b> NAICS Code (s) (6 digits)		Primary			
		a.                      b.                      c.                      d.                      e.                      f.			
<b>4.6</b> Dun & Bradstreet Number (s) (9 digits)		a.			
		b.			
<b>SECTION 5. COMPANY INFORMATION</b>					
<b>5.1</b> Name of Parent Company		NA <input type="checkbox"/>			
<b>5.2</b> Parent Company's Dun & Bradstreet Number		NA <input type="checkbox"/>			

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# APPENDIX N

## TRI REPORTING FORMS – FORM A



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

Page \_\_\_ of \_\_\_

EPA FORM A	
PART II. CHEMICAL IDENTIFICATION	
Do not use this form for reporting Dioxin and Dioxin-like Compounds*	
TRI Facility ID Number: _____	
<b>SECTION 1. TOXIC CHEMICAL IDENTITY</b> 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.)
<b>SECTION 2. MIXTURE COMPONENT IDENTITY</b> (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.)
<b>SECTION 1. TOXIC CHEMICAL IDENTITY</b> 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.)
<b>SECTION 2. MIXTURE COMPONENT IDENTITY</b> (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.)
<b>SECTION 1. TOXIC CHEMICAL IDENTITY</b> 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.)
<b>SECTION 2. MIXTURE COMPONENT IDENTITY</b> (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.)
<b>SECTION 1. TOXIC CHEMICAL IDENTITY</b> 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.)
<b>SECTION 2. MIXTURE COMPONENT IDENTITY</b> (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.)

Sample Form A Page 2  
For Reporting year 2007

\*See the TRI Reporting Forms and Instructions Manual for the TRI-listed Dioxin and Dioxin-like Compounds

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(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  
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and the diversity of its workforce.

Doc. No. 40-09-04/08/11/01