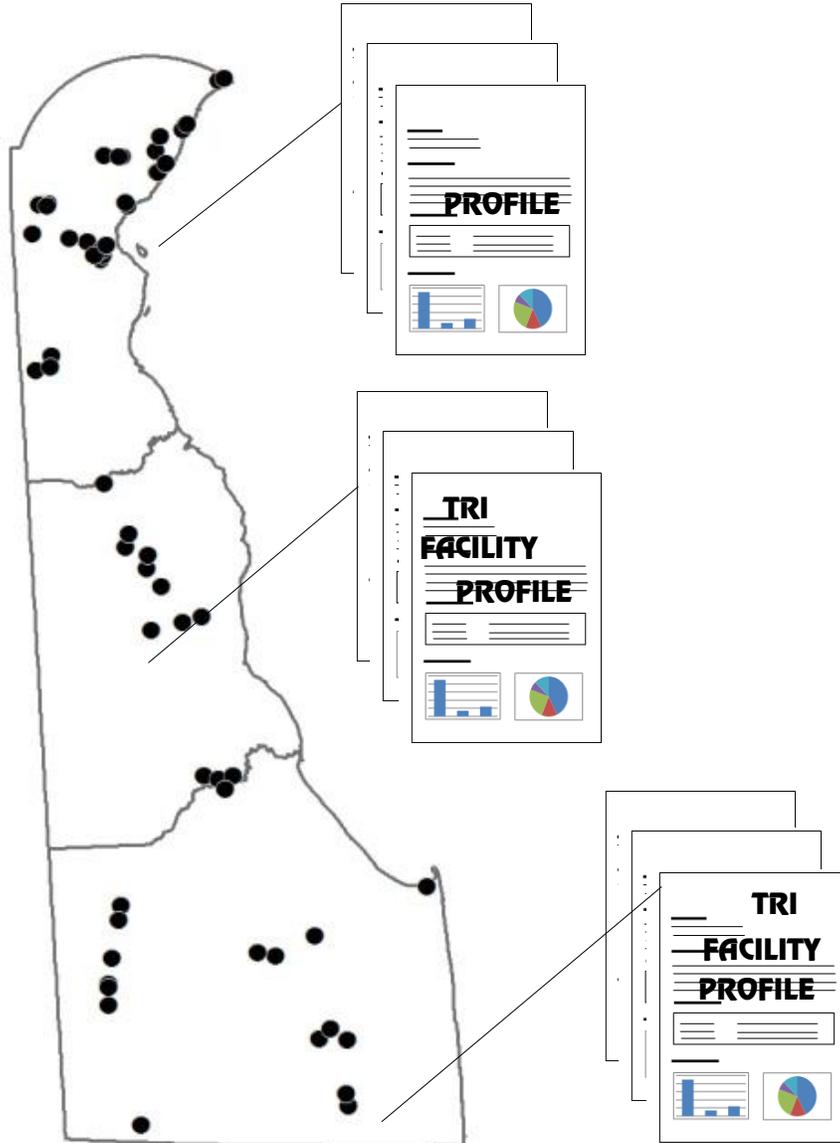




# 2018 DELAWARE TRI FACILITY PROFILES



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

December 2019

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*Governor*

**Shawn M. Garvin**

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**Timothy Ratsep**

*Director, Division of Waste and Hazardous Substances*

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This report was prepared with the assistance of numerous individuals in the Department of Natural Resources and Environmental Control. Any questions or comments regarding this report should be directed to the principal author:

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**DNREC MISSION STATEMENT**

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

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The Facility Profiles provide TRI information specific to each reporting facility in Delaware for 2018. The facility profiles can be accessed through the links that are provided on the **TRI Facility Maps** on pages 3 and 4 of this document. The following topics/categories are covered in the facility profiles:

#### **Location/Contact:**

The address, phone number, and public contact are provided to encourage the public to contact the facility if they have any additional questions in regards to the facility operations and their TRI numbers. A map showing the approximate location of the site is also included.

#### **Facility Overview:**

This section includes a description of the services and products the facility provides, as well as a description of how the predominant TRI chemicals reported are being used. Activities occurring at the facility that impact their TRI numbers are also discussed.

#### **2018 TRI Data:**

A table is provided listing the TRI information for each chemical reported at the facility. Chemical information provided includes pounds released on-site to air, water, and land, total pounds transferred off-site, and total pounds of the managed on-site for 2018. It is also noted if the chemical is a known **Persistent Bioaccumulative Toxic (PBT) Chemical** or if is listed as a **carcinogen**. PBTs are discussed in more detail on page 21 and **Appendix I** in the **2018 Delaware TRI Report** and carcinogens are discussed in detail on page 27 and **Appendix J**.

#### **Graphical Information:**

Six graphs are provided in this section for visual comparisons, if applicable for the facility.

- **On-site Releases by Media:** Bar chart comparing on-site releases for 2018 among air, water, and land categories.
- **On-site Releases by Chemical:** Bar chart comparing total on-site releases for 2018 for the primary chemicals reported by the facility.
- **Total On-site Releases per Year:** Provides a trend graph over the last ten years for total on-site releases to air, water, land reported by the facility.
- **2018 Distribution of Total TRI Waste:** Pie chart showing the percent distribution of how the total TRI waste reported is managed (On-site Releases, Off-site Transfers, and On-site Management).
- **2018 Distribution of Total Off-site Transfers by Category:** Pie chart showing the percent distribution of the total pounds transferred off-site. Off-site transfers include off-site disposal, energy recovery, recycling, public owned treatment works (POTW), and non POTW treatment.
- **2018 Distribution of Total On-site Waste Management by Category:** Pie chart showing the percent distribution of the total pounds managed on-site. On-site management includes on-site treatment, recycling, and energy recovery.

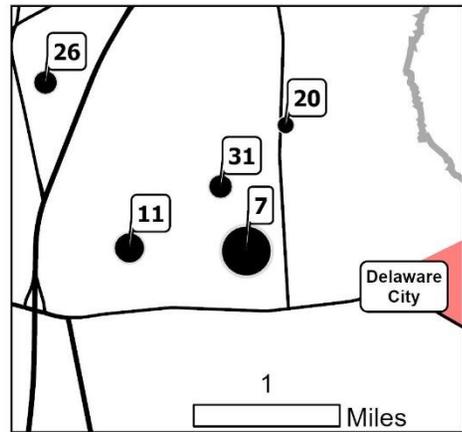
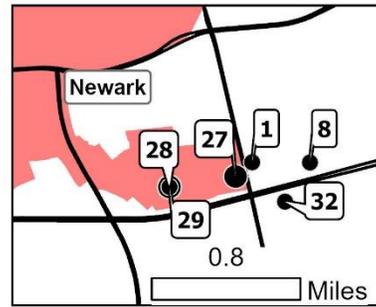
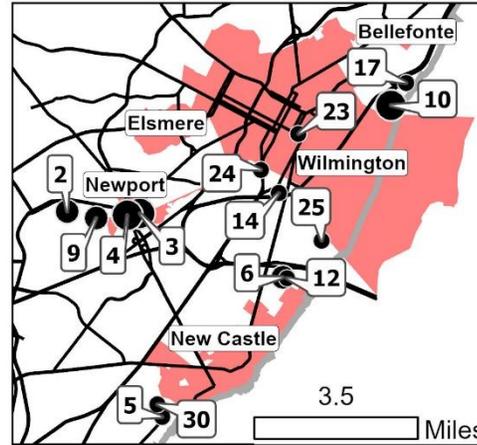
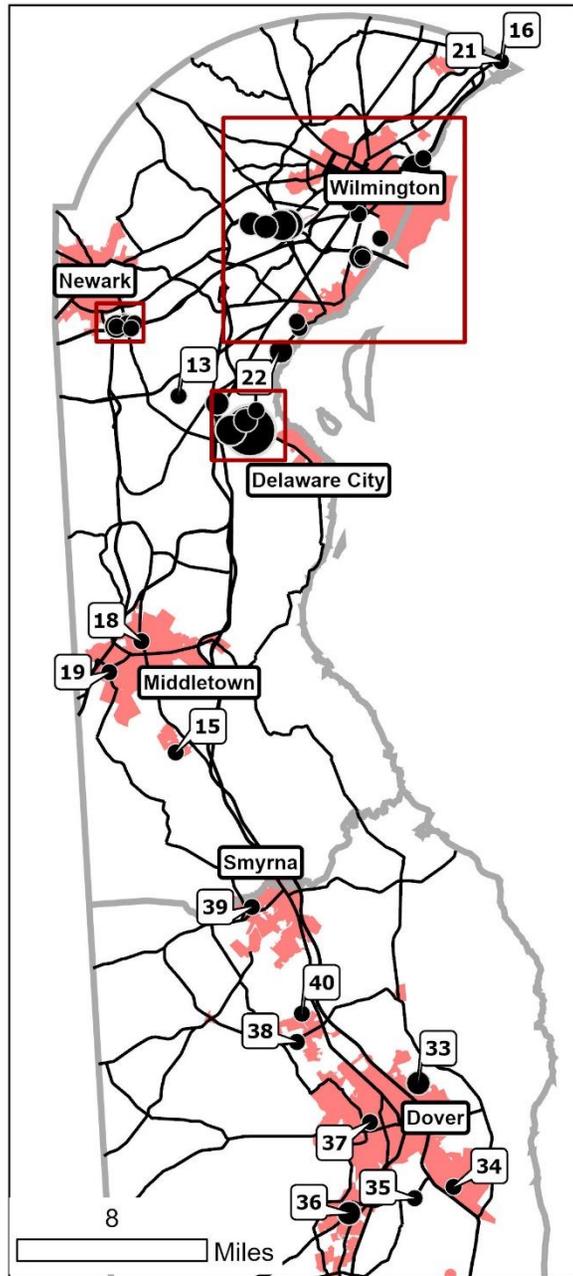
### **Comparison to Other Delaware TRI Facilities:**

This section provides two graphical comparisons for Delaware TRI facilities.

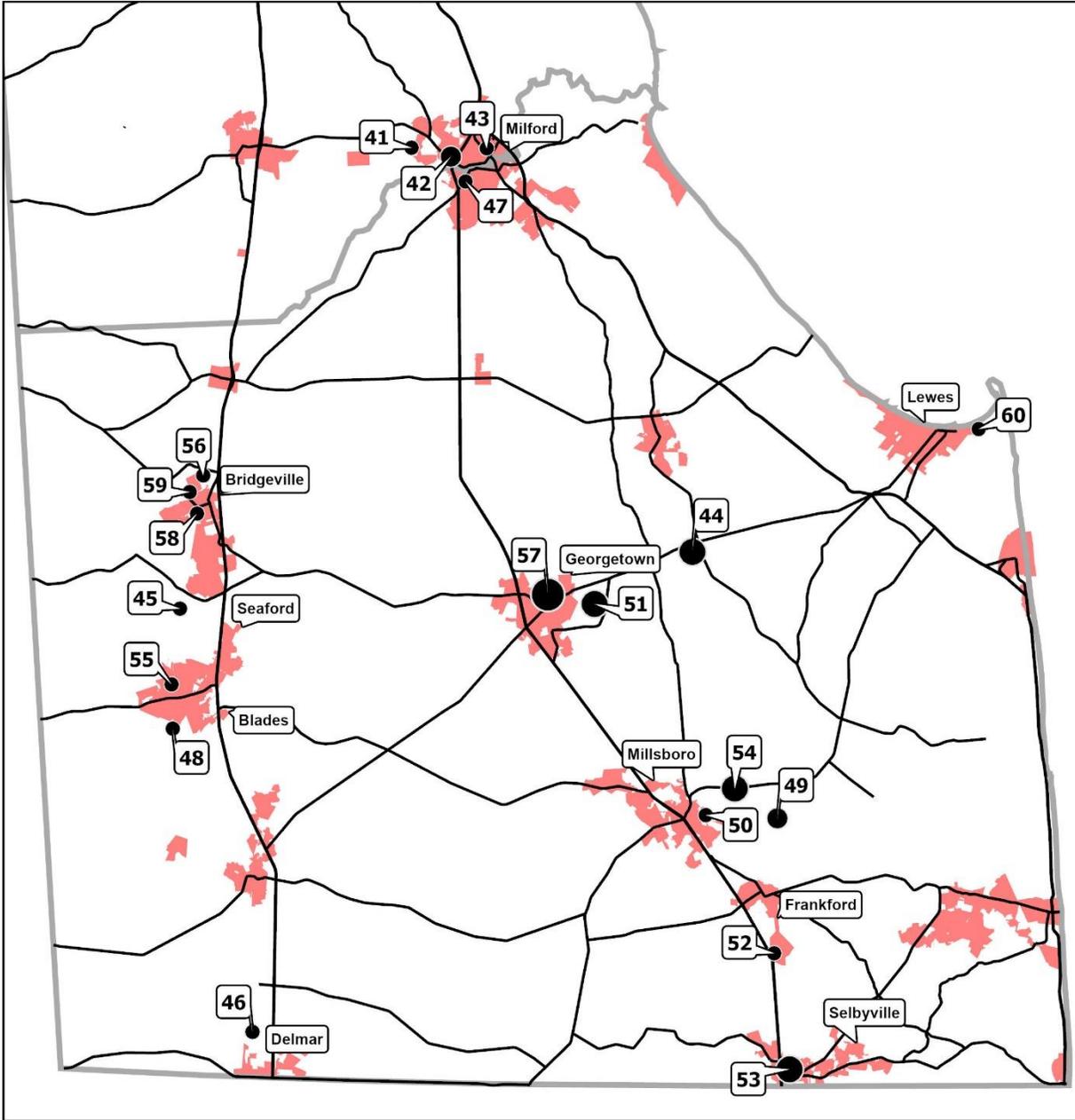
- **2018 On-site Releases: Top 15 Facilities:** Bar chart showing the total on-site releases for the top 15 facilities and a group for all other facilities. The facility is highlighted in red and underlined on the graph. If the facility falls into the bottom third of all facilities for on-site releases in Delaware it is noted. See **Appendices C, E, F** in the **2018 Delaware TRI Report** for further detail for on-site releases.
- **2018 Total TRI Waste Reported: Top 15 Facilities:** Bar chart showing the total waste reported for the top 15 facilities and a grouping for all other facilities. Total waste reported includes waste released on-site, managed on-site, or transferred off-site. The facility is highlighted in red and underlined on the graph. If a facility falls into the bottom third in total waste reported by facilities in Delaware for 2018, it is noted. See **Appendices D and G** in the **2018 Delaware TRI Report** for further detail on off-site transfers and on-site management.

### **Notable National Rankings:**

Notable national rankings for the facility are listed based on a search of the preliminary EPA 2018 data set as of October 2019 using [EPA's TRI Explorer](#). For applicable rankings, the North American Classification Industrial Classification System (NAICS) code for the facility is listed.

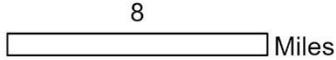


MAP ID	FACILITY
<b>New Castle County</b>	
1	AEARO TECHNOLOGIES
2	AGILENT TECHNOLOGIES
3	AIR LIQUIDE ADVANCED SEPARATIONS
4	BASF COLORS AND EFFECTS USA LLC
5	COLOR WORKS PAINTING
6	CRODA
7	DELAWARE CITY REFINERY
8	DUHADAWAY TOOL & DIE SHOP INC
9	DYK AUTOMOTIVE LLC
10	EDGE MOOR/HAY ROAD ENERGY CENTERS
11	FORMOSA PLASTICS
12	FUJIFILM
13	HMA-HERITAGE CONCRETE-BEAR
14	HMA-HERITAGE CONCRETE-HEALD STREET
15	HMA-HERITAGE CONCRETE-MIDDLETOWN
16	HONEYWELL
17	IKO
18	JOHNSON CONTROLS BATTERY PLANT
19	JOHNSON CONTROLS DISTRIBUTION
20	KUEHNE
21	MESSER LLC
22	NATIONAL GUARD TRAINING SITE RANGE
23	NORAMCO INC
24	OWEN STEEL COMPANY
25	PRINCE MINERALS LLC
26	ROGERS CORP
27	ROHM & HAAS B2 B3 B8
28	ROHM & HAAS B5 B6
29	ROHM & HAAS B7 B15
30	V&S DELAWARE GALVANIZING
31	VEOLIA - RED LION PLANT
32	VP RACING FUELS
<b>Kent County</b>	
33	CALPINE CORP - GARRISON ENERGY CENTER
34	DOVER AFB
35	GRIFFITH ENERGY - CARL KING
36	HANDYTUBE
37	HANESBRANDS
38	HMA-HERITAGE CONCRETE-CHESWOLD
39	METAL MASTERS
40	PPG INDUSTRIES



MAP ID	FACILITY
<b>Kent County</b>	
41	BALTIMORE AIRCOIL COMPANY
42	DENTSPLY SIRONA WEST PLANT
43	PERDUE MILFORD
<b>Sussex County</b>	
44	ALLEN HARIM FOODS HARBESON
45	ALLEN HARIM FARMS SEAFORD MILL
46	AMICK FARMS
47	DENTSPLY SIRONA MAIN PLANT
48	GAC SEAFORD
49	INDIAN RIVER GENERATING STATION
50	INTERVET
51	JUSTIN TANKS
52	MOUNTAIRE FARMS - FRANKFORD MILL
53	MOUNTAIRE FARMS - SELBYVILLE
54	MOUNTAIRE FARMS OF DELAWARE
55	ORIENT CORP
56	PERDUE BRIDGEVILLE
57	PERDUE GEORGETOWN
58	PICTSWEET BRIDGEVILLE
59	SIMMONS BRIDGEVILLE
60	SPI PHARMA

The size of the facility marker indicates the relative amount of on-site release.



**AERO TECHNOLOGIES LLC**

**LOCATION/CONTACT:**

Address: 650 Dawson Drive  
Newark, DE 19713

Phone: (302) 286-2415

Contact: Tom Flaherty



**FACILITY OVERVIEW:**

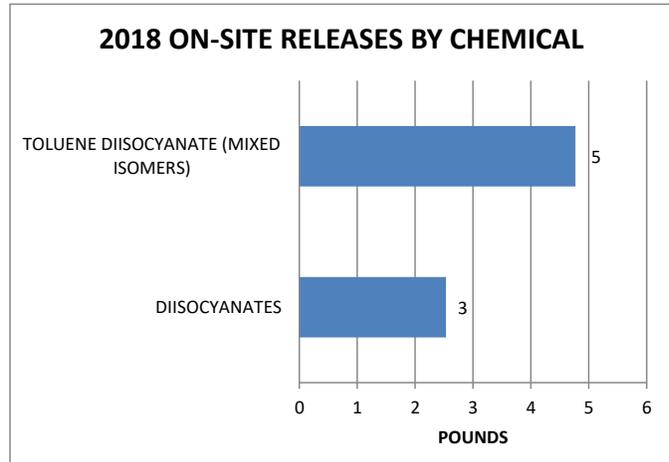
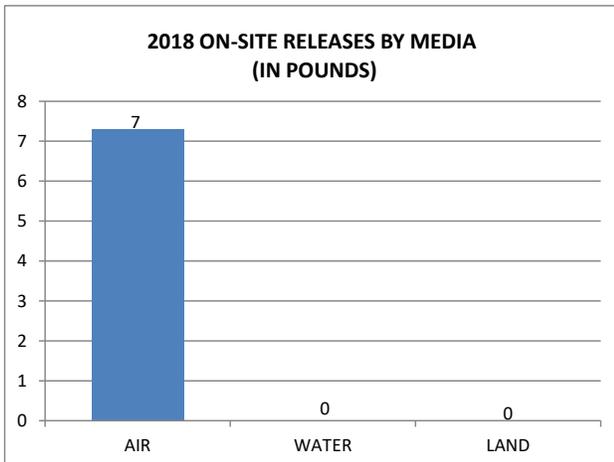
Aero Technologies LLC manufactures and converts urethane foams and foam composites with a variety of facings for many industries and uses.

Aero Technologies LLC has reported since 1987, previously as E.A.R. and Cabot Safety. The facility reported on two chemicals in 2018 (diisocyanates and toluene diisocyanates), with on-site releases only to air. These chemicals are utilized in the process of making of the urethane foam and foam composites. The converting operations do not utilize these chemicals. Virtually all of the waste is shipped off site, with less than 0.1% being released on-site to air.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
DIISOCYANATES	3	0	0	3	10,025	0	NO	NO
TOLUENE DIISOCYANATE (MIXED ISOMERS)	5	0	0	5	1,418	0	NO	YES
<b>TOTAL</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>11,443</b>	<b>0</b>		

**GRAPHICAL INFORMATION:**

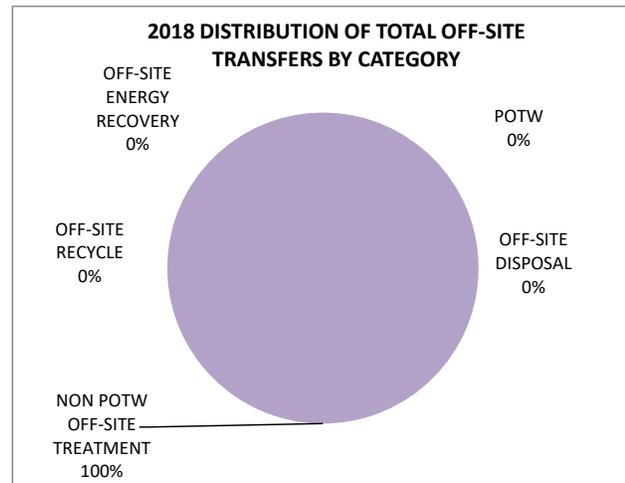
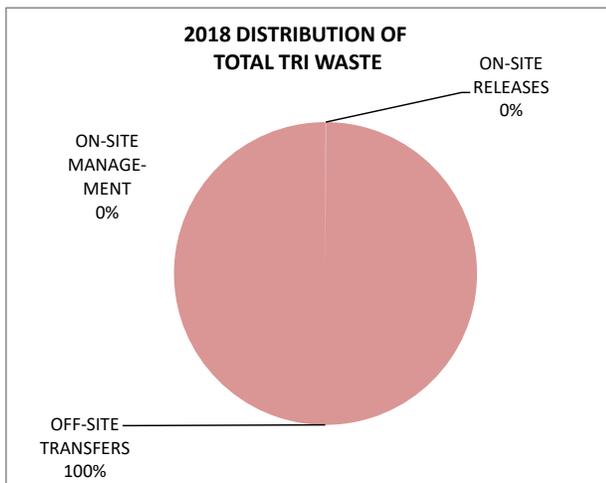
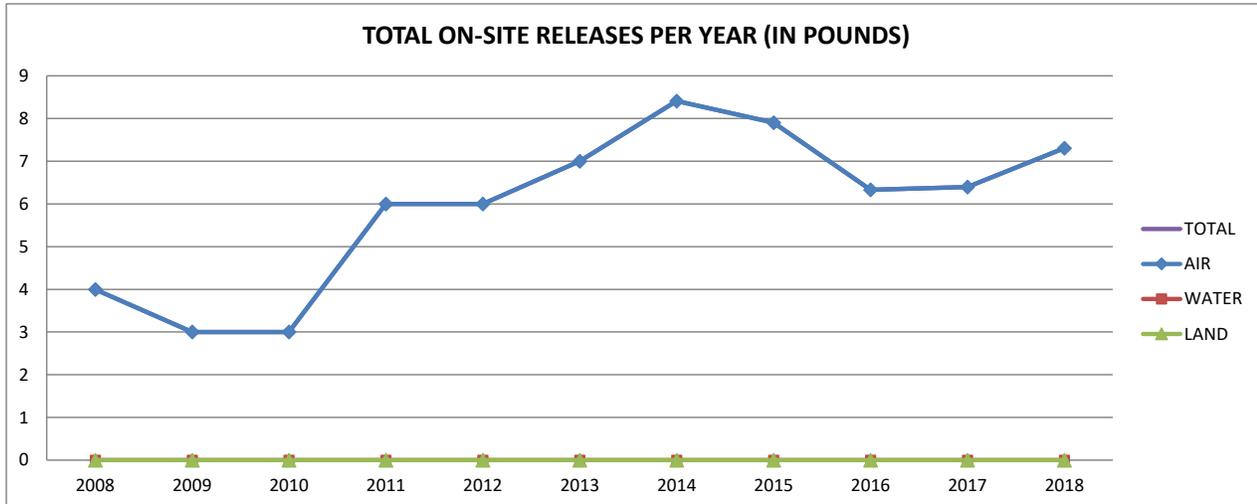


# TRI FACILITY PROFILES



## AEARO TECHNOLOGIES LLC, CONT.

### GRAPHICAL INFORMATION CONT.:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:

Aearo Technologies ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pound released on-site.

### NOTABLE 2018 NATIONAL RANKINGS:

Aearo Technologies ranks 98th in the nation for off-site transfers of diisocyanates (out of 1,367 facilities).

Aearo Technologies ranks 27th in the nation for off-site transfers of toluene diisocyanate (mixed isomers) (out of 136 facilities).



## TRI FACILITY PROFILES

### AGILENT TECHNOLOGIES

#### LOCATION/CONTACT:

Address: 538 First State Blvd.  
Newport, DE 19804

Phone: (302) 636-3668

Contact: Renee Lewandowski



#### FACILITY OVERVIEW:

Agilent Technologies has two main production processes. The primary production process is the manufacturing of various columns (consumables) for liquid chromatography equipment. This process is further broken down into packing production and column production, in which the material within the column is produced and this material is then packed into the column. The second process is identified as Substrate Manufacturing. This operation is comprised of a highly specialized glass cleaning and coating operation that produces glass slides that are shipped to an Agilent facility in Santa Clara, CA where they become microarray scanner slides used for DNA testing. Both processes are complete independent of one another.

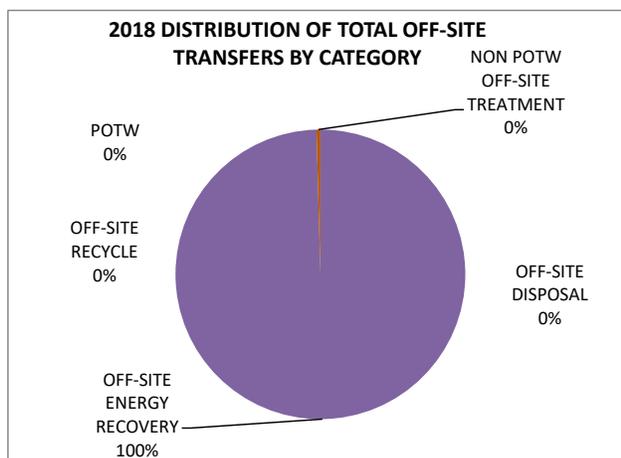
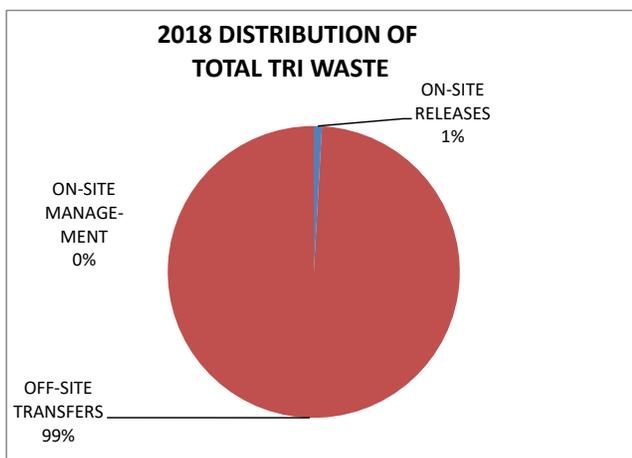
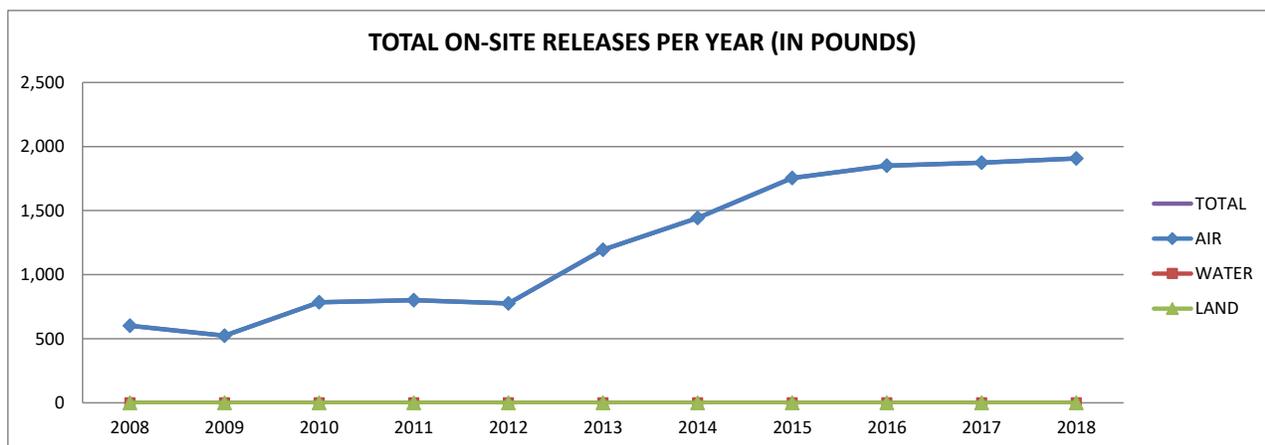
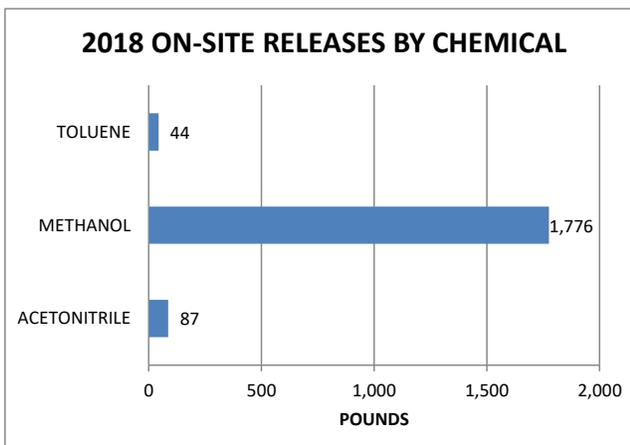
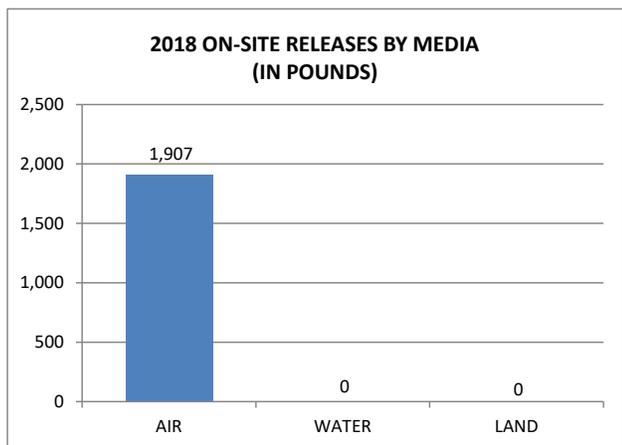
Facilities at the Newport site have reported since in 1990, previously as Rockland Technologies and Hewlett-Packard Company. Agilent Technologies has reported for the site since 2001. Agilent Technologies reported on three chemicals in 2018, toluene, methanol and acetonitrile. All three chemicals (solvents) are utilized as chemical processing aids and do not remain in the product. All on-site releases of these chemicals are to the air. The majority of waste is transferred offsite for treatment or energy recovery. Out of the three chemicals, methanol consists of approximately 93% of all onsite releases, while toluene consists of approximately 62% of all offsite transfers. Fluctuations in onsite releases and offsite transfers are directly related to production.

#### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ACETONITRILE	87	0	0	87	22,157	0	NO	NO
METHANOL	1,776	0	0	1,776	57,420	0	NO	NO
TOLUENE	44	0	0	44	130,918	0	NO	NO
TOTAL	1,907	0	0	1,907	210,495	0		

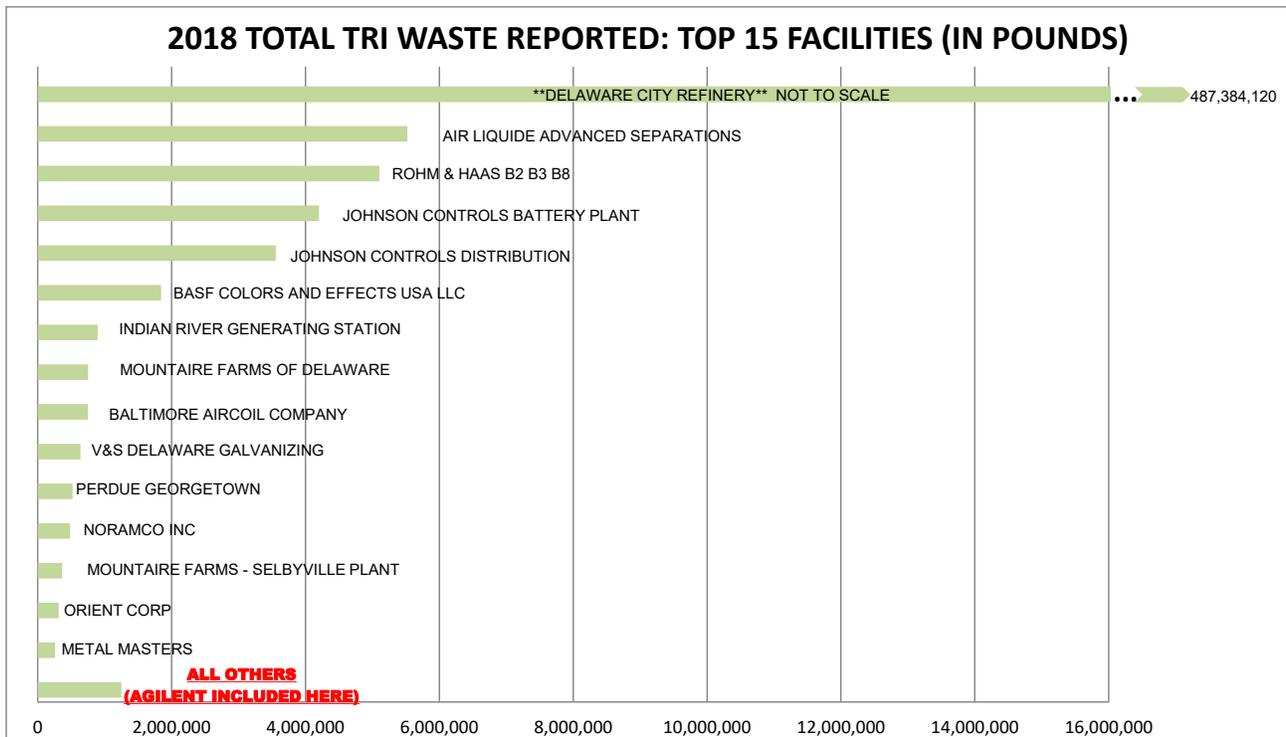
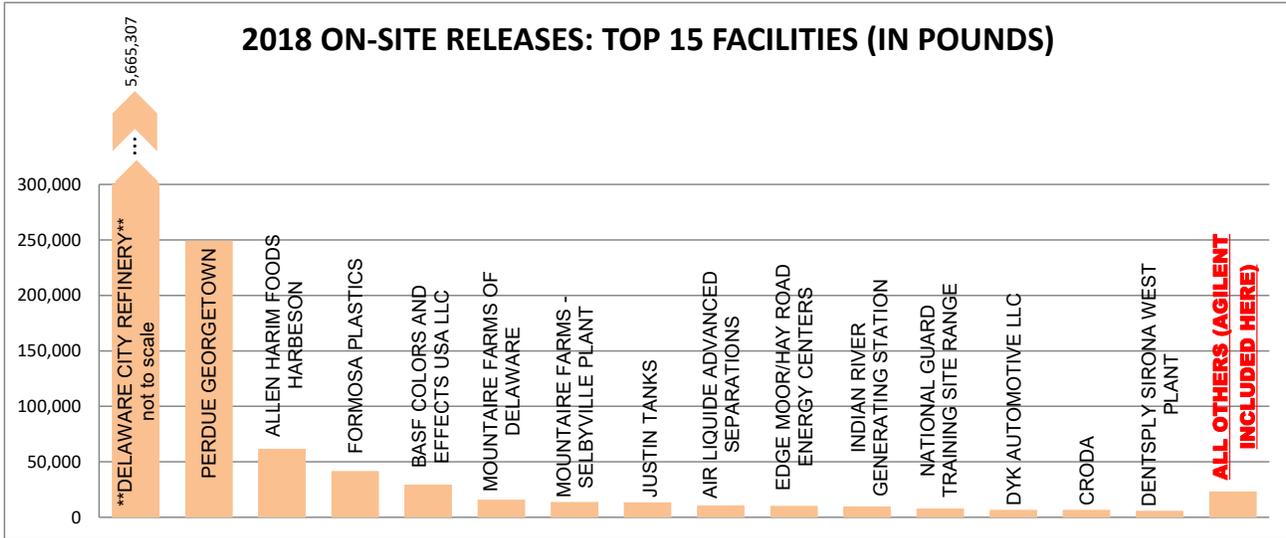
## AGILENT TECHNOLOGIES, CONT.

### GRAPHICAL INFORMATION:



## AGILENT TECHNOLOGIES, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Agilent Technologies ranks 71st in the nation for off-site transfers of acetonitrile (out of 143 facilities).



## TRI FACILITY PROFILES

### AIR LIQUIDE ADVANCED SEPARATIONS

**LOCATION/CONTACT:**

Address: 305 Water Street  
Newport, DE 19804

Phone: (302) 225-2137

Contact: Harrison Abinteh



**FACILITY OVERVIEW:**

Air Liquide Advanced Separations provides methods to purify and produce gases for a wide range of applications and manufactures hollow fiber membrane systems for air separation/nitrogen generation, carbon dioxide removal and hydrogen purification.

Air Liquide Advanced Separations has reported since 1992, previously as Air Liquide-Medal. The facility reported five TRI chemicals for 2018, cyclohexane, methanol, n,n-dimethylformamide, n-hexane, and n-methyl-2-pyrrolidone. These chemicals are used as solvents in the fiber production process. The majority of waste is managed on-site and off-site, with less than 0.2% being released on-site to air.

**2018 TRI DATA (REPORTED IN POUNDS):**

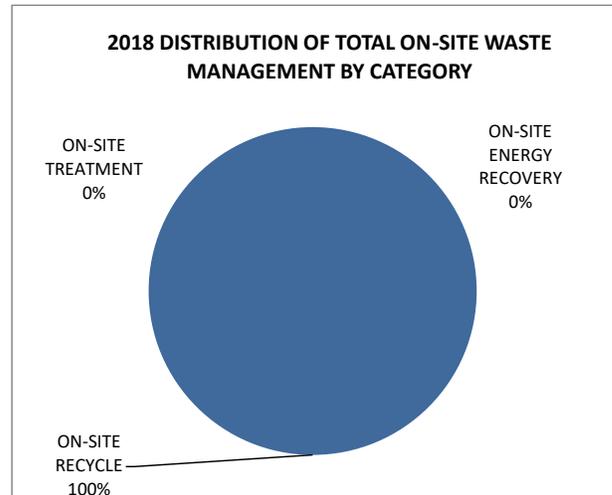
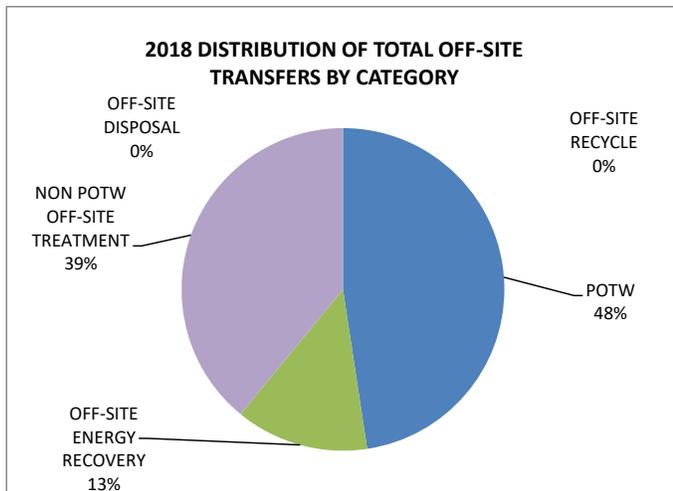
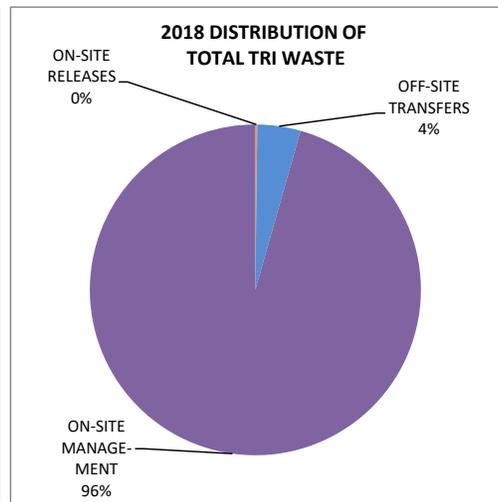
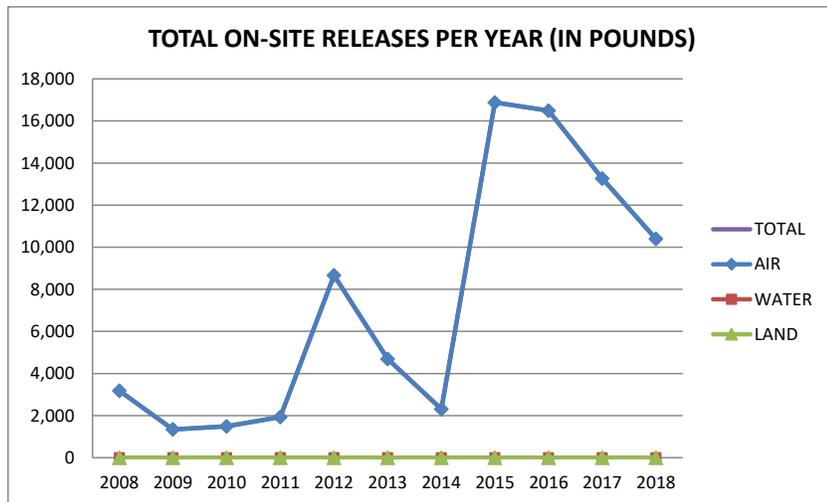
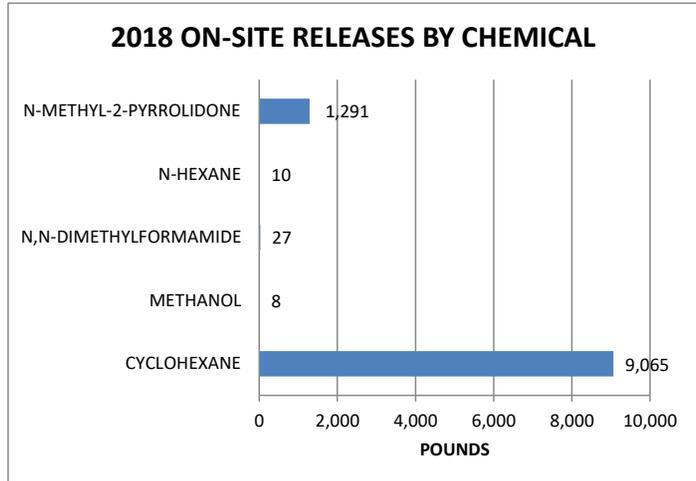
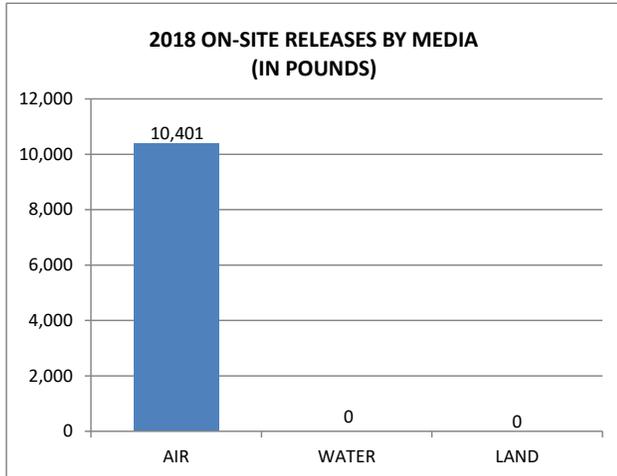
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CYCLOHEXANE	9,065	0	0	9,065	8,014	0	NO	NO
METHANOL	8	0	0	8	91,027	2,882,537	NO	NO
N,N-DIMETHYLFORMAMIDE	27	0	0	27	22,780	0	NO	NO
N-HEXANE	10	0	0	10	0	2,397,027	NO	NO
N-METHYL-2-PYRROLIDONE	1,291	0	0	1,291	111,182	0	NO	NO
TOTAL	10,401	0	0	10,401	233,003	5,279,564		

# TRI FACILITY PROFILES



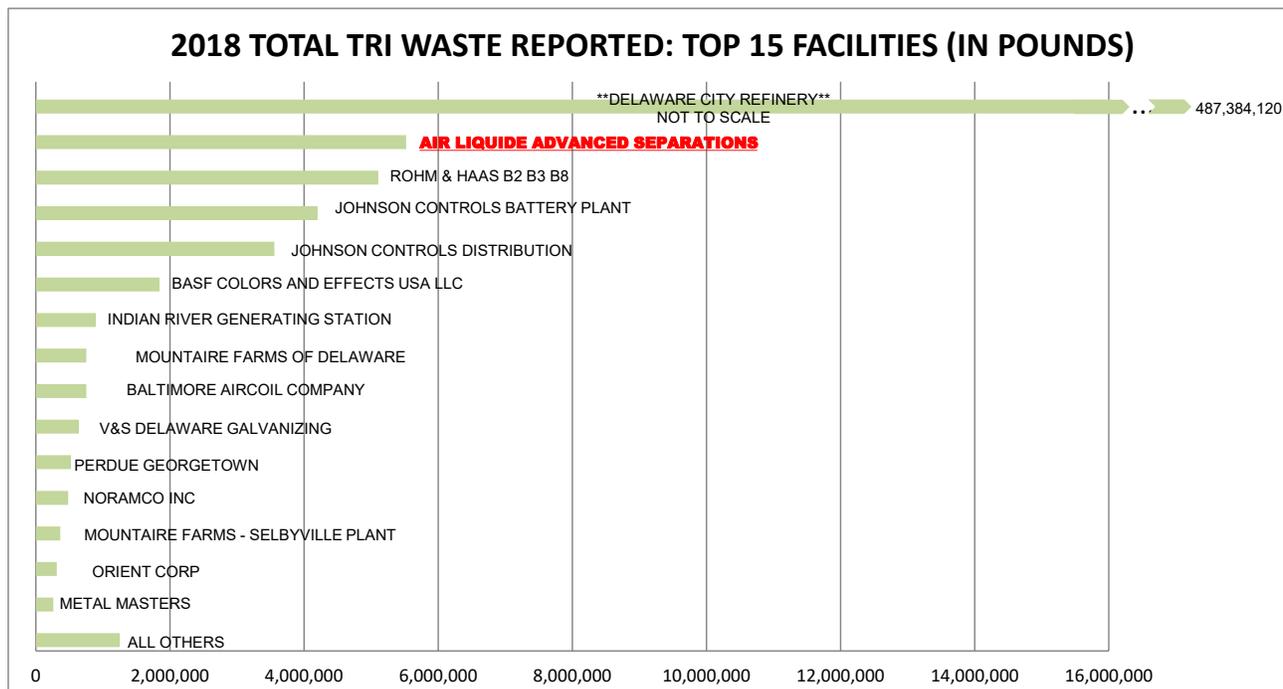
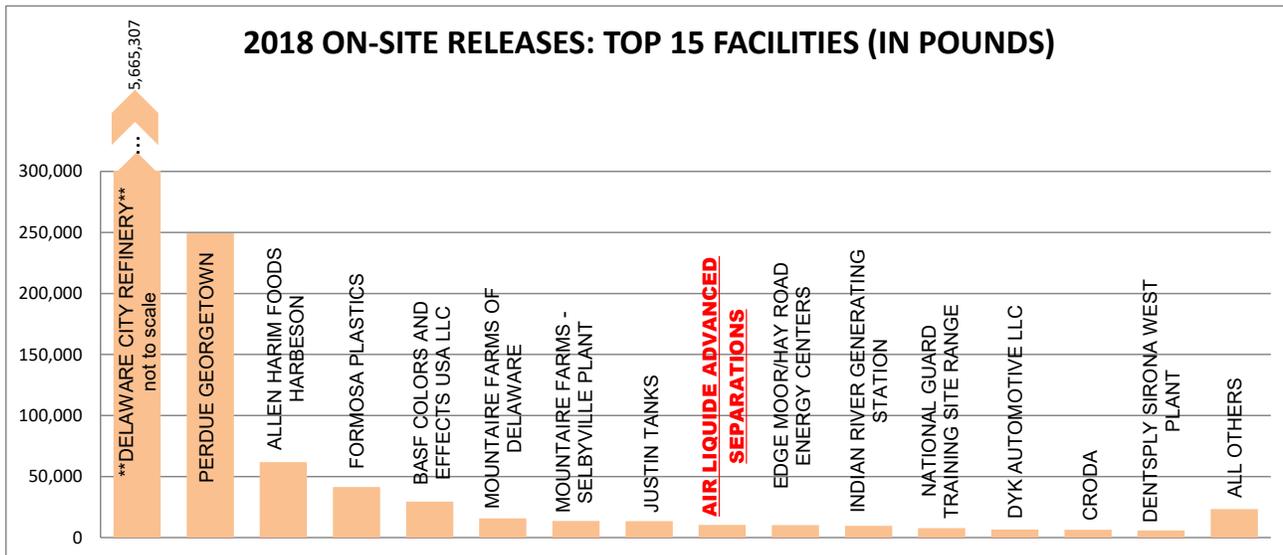
## AIR LIQUIDE ADVANCED SEPARATIONS, CONT.

### GRAPHICAL INFORMATION:



## AIR LIQUIDE ADVANCED SEPARATIONS, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Air Liquide Advanced Separations ranks 31st in the nation for on-site recycling of methanol (out of 2,158 facilities).

Air Liquide Advanced Separations ranks 6th in the nation for on-site recycling of n-hexane (out of 1,237 facilities).

Air Liquide Advanced Separations ranks 52nd in the nation for off-site transfers of n-methyl-2-pyrrolidone (out of 391 facilities).

**ALLEN HARIM FARMS - SEAFORD**

**LOCATION/CONTACT:**

Address: 20799 Allen Road  
Seaford, DE 19973

Phone: (302) 684-1640

Contact: Michael Sause



**FACILITY OVERVIEW:**

Allen Harim Farms-Seaford operates as a mill facility. The primary function of the mill facility is to receive, process, and combine raw ingredients into a nutritional feed for poultry.

The facility has reported since 2008, previously as Allen Family Foods. Allen Harim Farms has reported since it purchased the facility in September 2011. The facility reported on five chemicals in 2018, copper, copper compounds, manganese, manganese compounds and zinc compounds. All chemicals are being reported on the short Form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.) The metal compounds reported are components of a trace mineral additive feed ingredients utilized at the mill.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
COPPER*	0	0	0	0	0	0	NO	NO
COPPER COMPOUNDS*	0	0	0	0	0	0	NO	NO
MANGANESE*	0	0	0	0	0	0	NO	NO
MANGANESE COMPOUNDS*	0	0	0	0	0	0	NO	NO
ZINC COMPOUNDS*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

**GRAPHICAL INFORMATION:**

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.

## ALLEN HARIM FOODS - HARBESON

**LOCATION/CONTACT:**

Address: 18752 Harbeson Road  
Harbeson, DE 19951

Phone: (302) 684-1640

Contact: Michael Sause


**FACILITY OVERVIEW:**

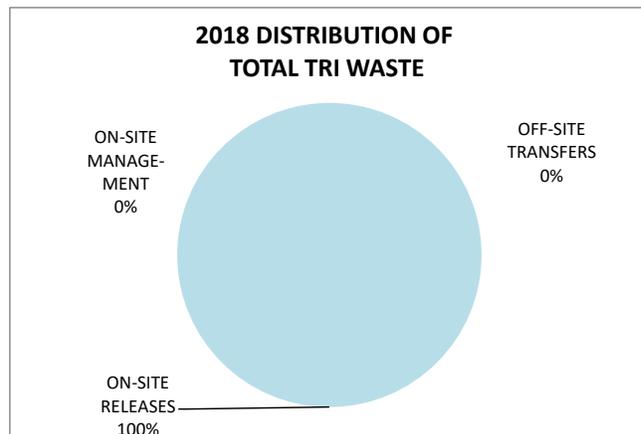
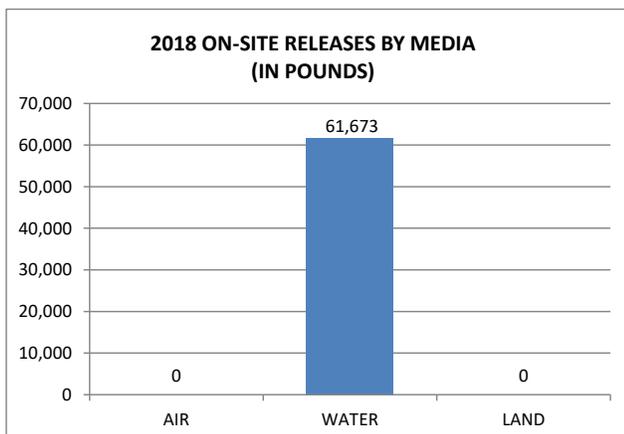
Allen Harim Foods-Harbeson, operates as poultry processing plant. The facility processes poultry for consumer use and utilizes an onsite wastewater system to treat plant water prior to discharging into a stream.

The facility has reported since 1987, previously as Allen Family Foods. Allen Harim Foods has reported since it purchased the facility in September 2011. For 2018, the facility reported on two chemicals, nitrate compounds, and peracetic acid. In the wastewater treatment process, water dissociable nitrate compounds are a by-product of the nitrification process. The second chemical, peracetic acid, was reported on the short Form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.)

**2018 TRI DATA (REPORTED IN POUNDS):**

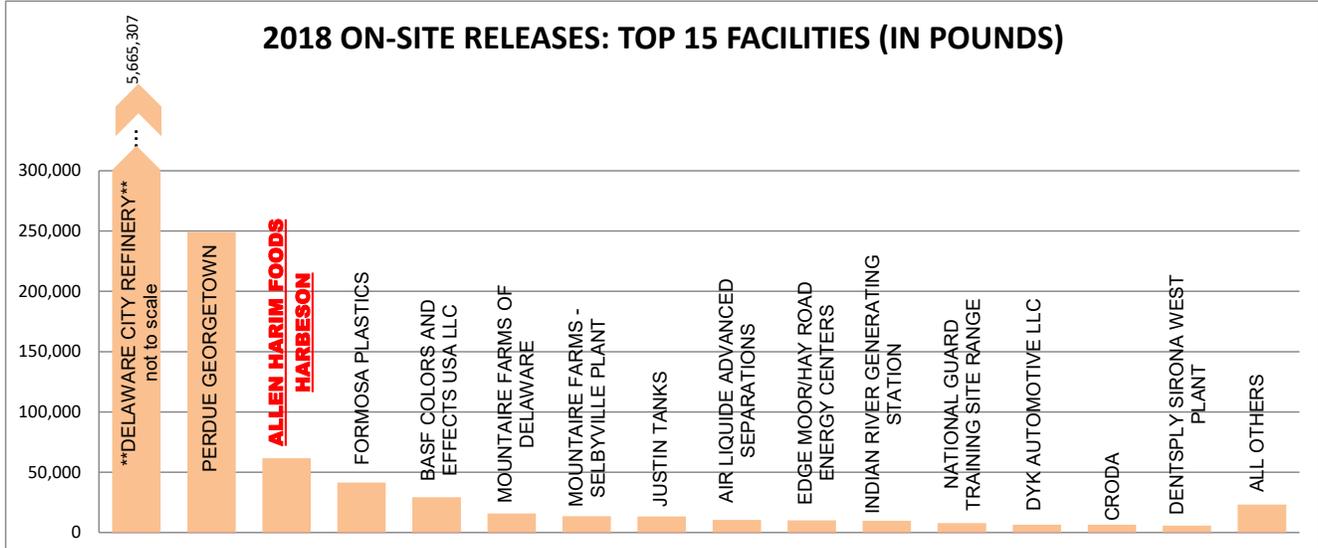
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
NITRATE COMPOUNDS	0	61,673	0	61,673	0	0	NO	NO
PERACETIC ACID*	0	0	0	0	0	0	NO	NO
TOTAL	0	61,673	0	61,673	0	0		

\*Reported on Short Form A

**GRAPHICAL INFORMATION:**


## ALLEN HARIM FOODS - HARBESON, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:





## TRI FACILITY PROFILES

### AMICK FARMS

**LOCATION/CONTACT:**

Address: 10281 Amick Drive  
Delmar, DE 19940

Phone: (302) 846-9511

Contact: Richard Martinson



**FACILITY OVERVIEW:**

Amick Farms reported under the North American Industrial Classification System (NAICS) as 311119, which covers other animal food manufacturing (except facilities primarily engaged in Custom Grain Grinding for Animal Feed).

Amick Farms has owned and operated this facility, and reported to TRI, since 2010. Previous owner/operators Allens Milling Company and Delmar Hatchery filed TRI reports for this facility from 1995-2010. Amick Farms reported on three chemicals in 2018, copper compounds, manganese compounds, and zinc compounds, all on short Form A. Form A reports do not include waste management activities. Form A reports can be used if the chemical being reported is not a PBT chemical; the chemical has not been manufactured, processed, or otherwise used in excess of 1,000,000 lbs.; and, the total annual waste management (i.e., recycling, energy recovery, treatment, and disposal or other releases) of the chemical does not exceed 500 lbs. The metal compounds reported are used in poultry feed.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
COPPER COMPOUNDS*	0	0	0	0	0	0	NO	NO
MANGANESE COMPOUNDS*	0	0	0	0	0	0	NO	NO
ZINC COMPOUNDS*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

**GRAPHICAL INFORMATION:**

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.

**BALTIMORE AIRCOIL COMPANY**

**LOCATION/CONTACT:**

Address: 1162 Holly Hill Road  
Milford, DE 19963

Phone: (302) 424-2566

Contact: Angela Sheppard



**FACILITY OVERVIEW:**

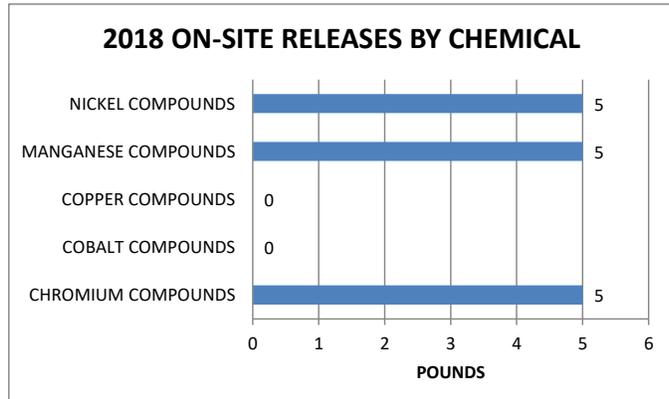
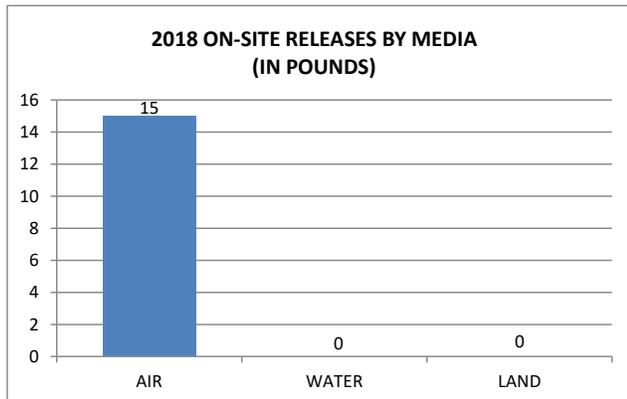
The Baltimore Aircoil Company reported under the North American Industrial Classification System (NAICS) as 333415, which covers air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing.

The Baltimore Aircoil Company has reported since 2011. The facility reported on five chemicals in 2018, with on-site releases only to air due to welding and laser cutting of metal. The chemicals were chromium, cobalt, copper, manganese, and nickel compounds. The chemicals that are reported are from scrap metal that is shipped off-site for recycling. Virtually all of the waste is shipped off-site for recycling, with less than 0.01% being released on-site. The amount of scrap material sent off-site for recycling is determined by stainless steel sales, and is also affected by changes in quality requirements.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHROMIUM COMPOUNDS	5	0	0	5	260,861	0	NO	YES
COBALT COMPOUNDS	0	0	0	0	32,225	0	NO	YES
COPPER COMPOUNDS	0	0	0	0	39,878	0	NO	NO
MANGANESE COMPOUNDS	5	0	0	5	119,020	0	NO	NO
NICKEL COMPOUNDS	5	0	0	5	299,531	0	NO	YES
TOTAL	15	0	0	15	751,515	0		

**GRAPHICAL INFORMATION:**

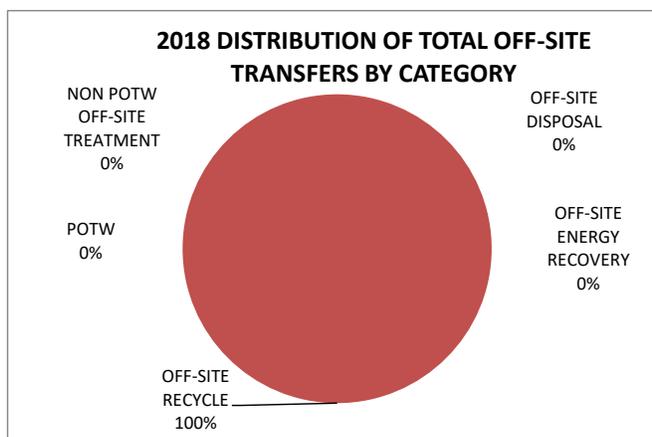
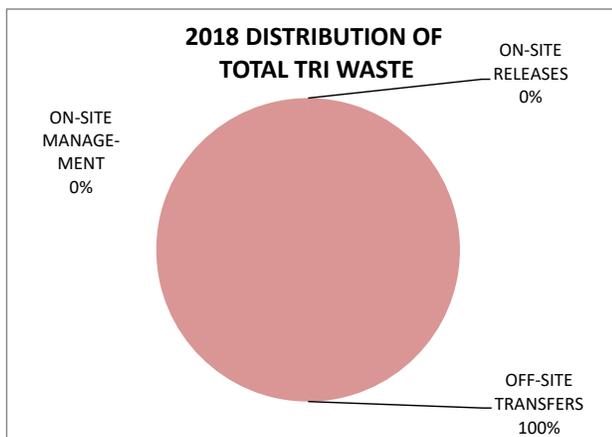
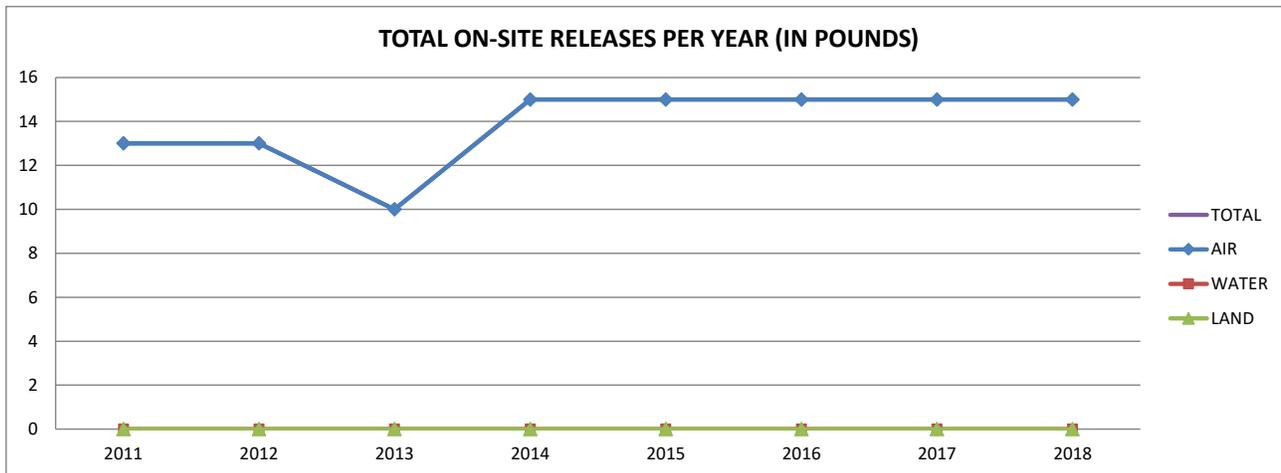


# TRI FACILITY PROFILES

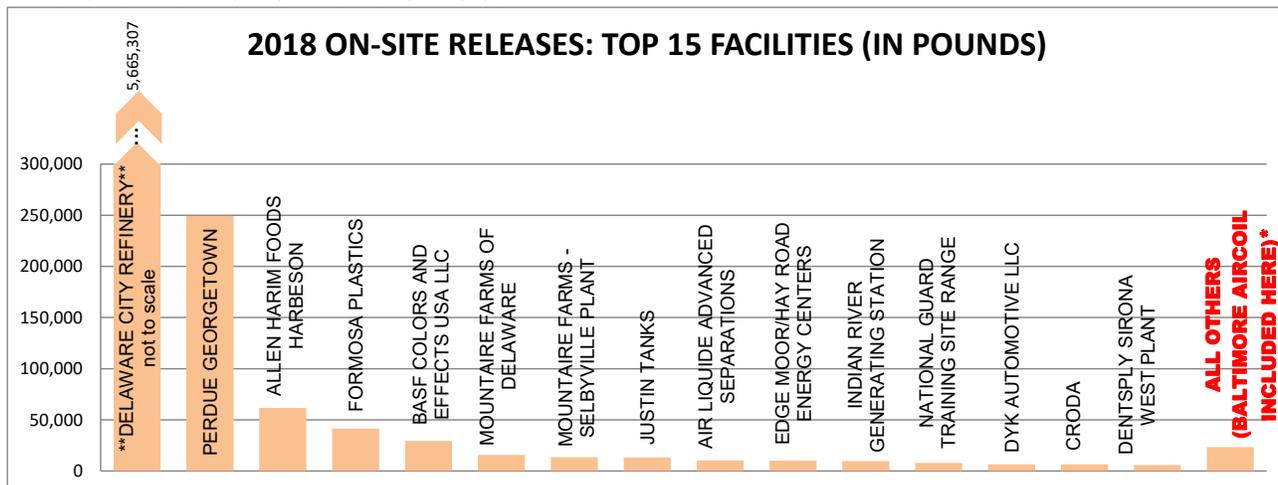


## BALTIMORE AIRCOIL COMPANY, CONT.

### GRAPHICAL INFORMATION CONT.:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



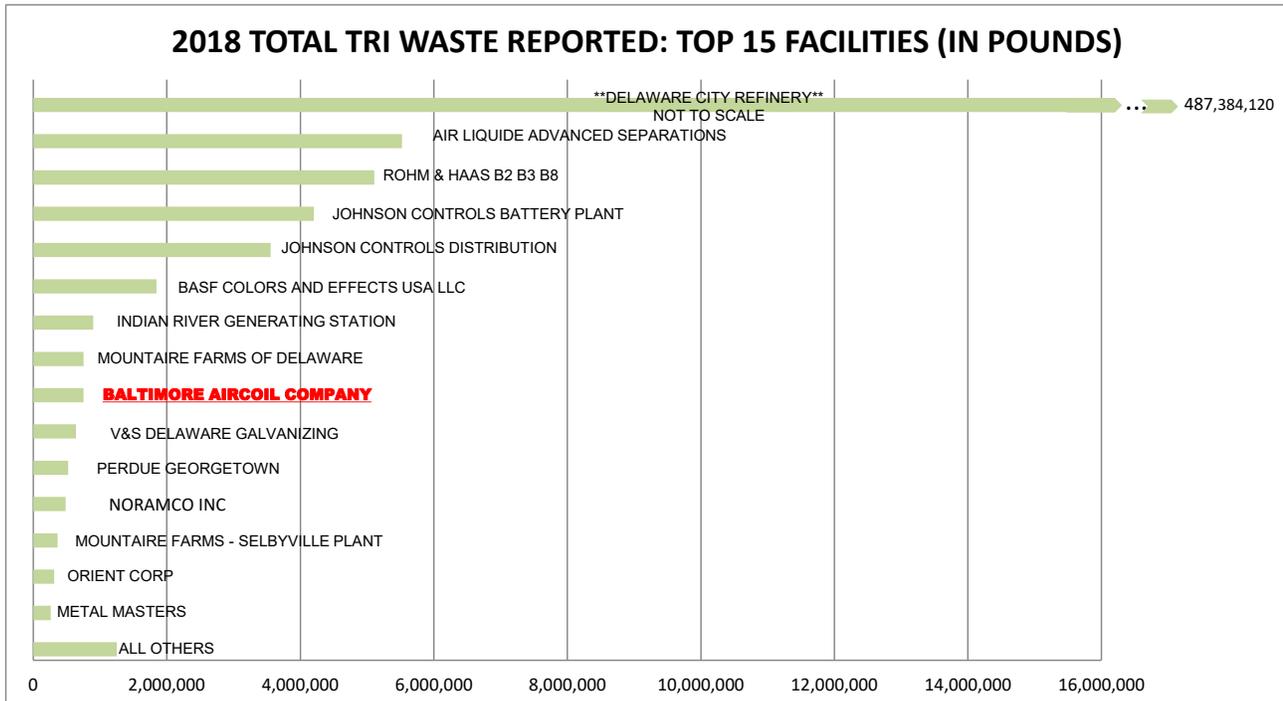
\*The Baltimore Aircoil Company ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.



# TRI FACILITY PROFILES

## BALTIMORE AIRCOIL COMPANY, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:



### NOTABLE 2018 NATIONAL RANKINGS:

The Baltimore Aircoil Company ranks 37th in the nation for off-site transfers of chromium compounds (out of 1,272 facilities).

The Baltimore Aircoil Company ranks 25th in the nation for off-site transfers of nickel compounds (out of 1,141 facilities).



## TRI FACILITY PROFILES

### BASF COLORS AND EFFECTS USA LLC

#### LOCATION/CONTACT:

Address: 205 South James Street  
Newport, DE 19804

Phone: (973)-245-5230

Contact: Roberto Nelson



#### FACILITY OVERVIEW:

BASF Colors and Effects USA LLC manufactures high performance and effect pigments for the paint, plastic, and printing industries. The Newport site has reported since 1998, previously as BASF Corp, and as CIBA Specialty Chemicals. The Newport Site became part of BASF Corporation in April 2010. For 2018, the facility reported on nine chemicals, with the majority either being treated or recycled on or off-site, or sent off-site for energy recovery. Less than 2% of the total amount reported to TRI for 2018 was released on-site.

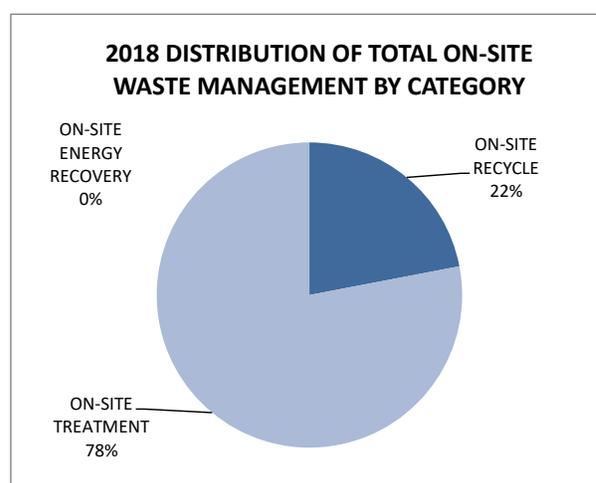
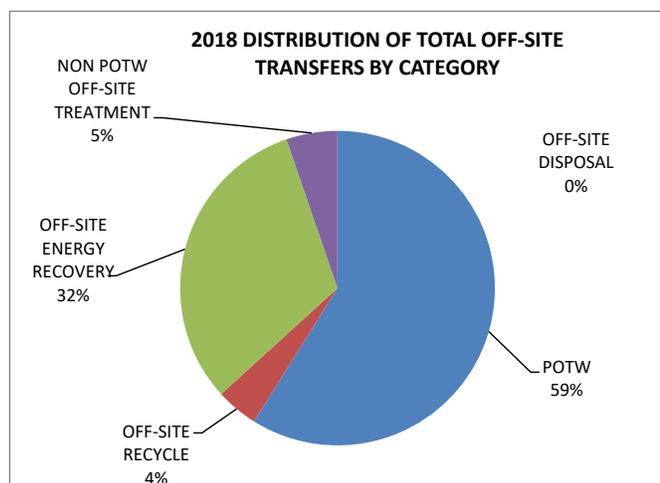
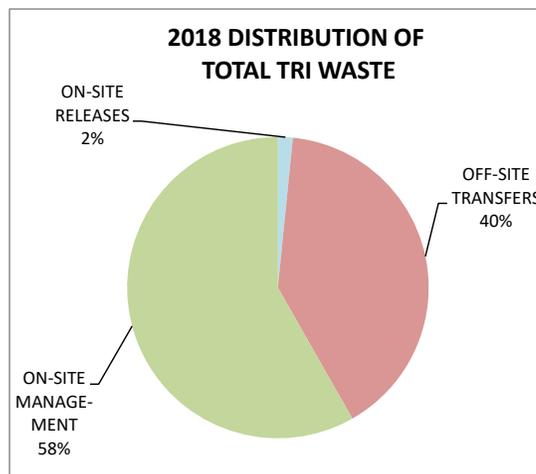
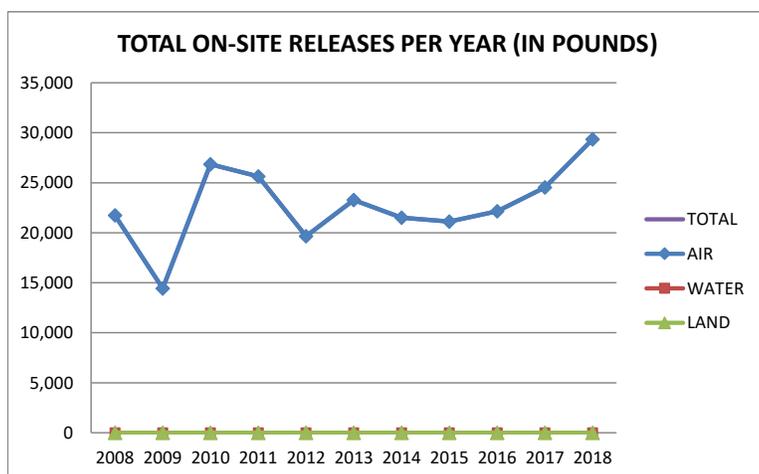
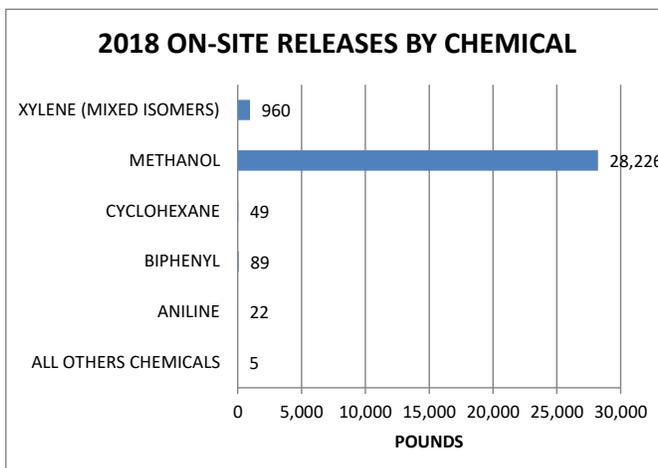
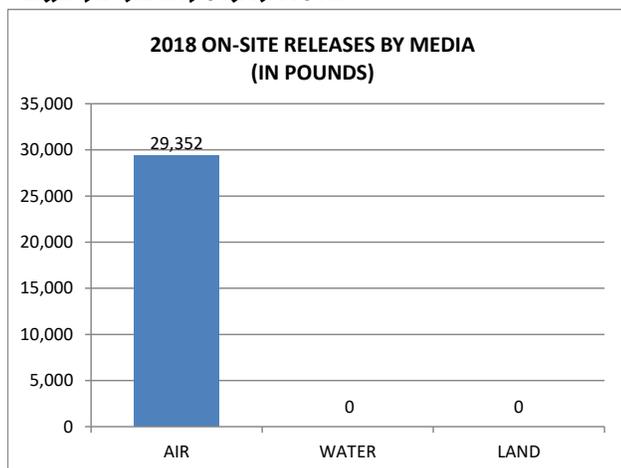
Methanol is the primary chemical released onsite after being processed through air pollution control devices. Methanol is utilized in pigment production while also being generated as a co/by-product in some of the same processes. Methanol is managed both on and off-site, with less than 2% being released on-site. The other TRI chemicals used on-site are either raw materials or process aids.

#### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ANILINE	22	0	0	22	20,042	1,091	NO	NO
BIPHENYL	89	0	0	89	254,139	2,365	NO	NO
CYCLOHEXANE	49	0	0	49	32,079	0	NO	NO
METHANOL	28,226	0	0	28,226	393,446	1,054,103	NO	NO
NITRATE COMPOUNDS	0	0	0	0	15,542	0	NO	NO
NITRIC ACID	0	0	0	0	0	15,793	NO	NO
N-METHYL-2-PYRROLIDONE	0	0	0	0	13,085	9	NO	NO
P-CHLOROANILINE	6	0	0	6	12,187	324	NO	YES
XYLENE (MIXED ISOMERS)	960	0	0	960	461	0	NO	NO
TOTAL	29,352	0	0	29,352	740,980	1,073,685		

## BASF COLORS AND EFFECTS USA LLC, CONT.

### GRAPHICAL INFORMATION:

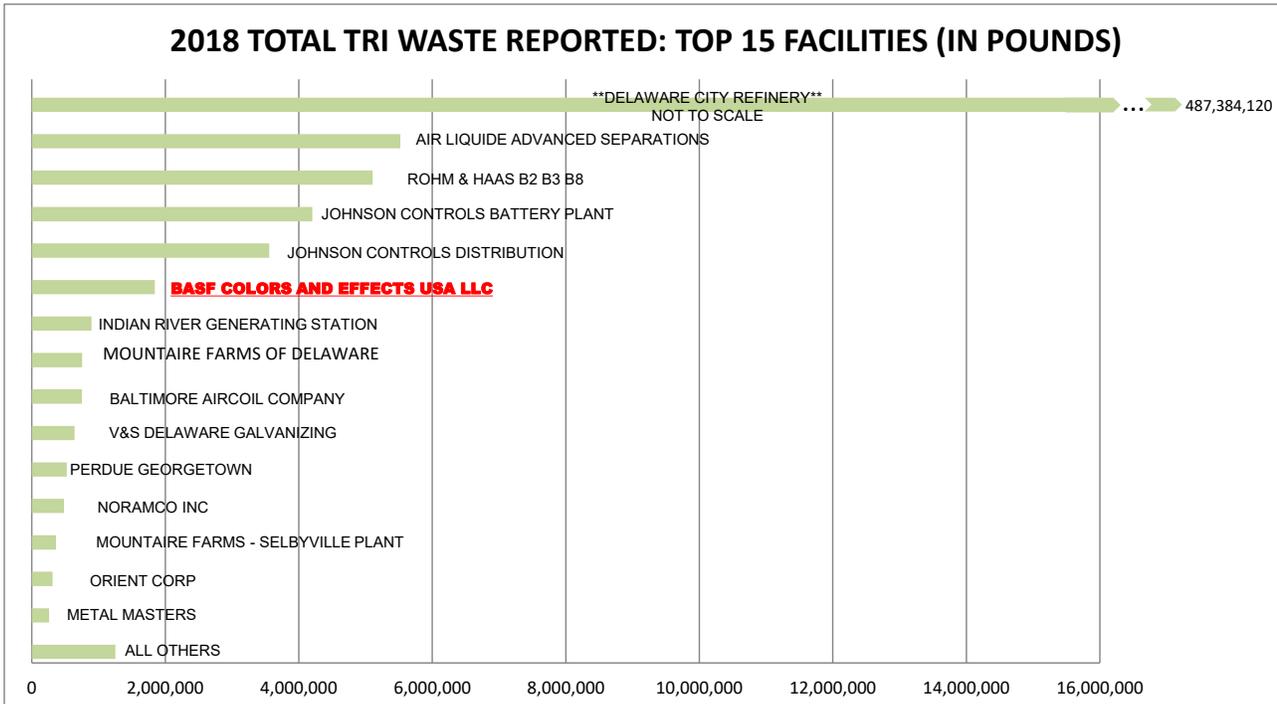
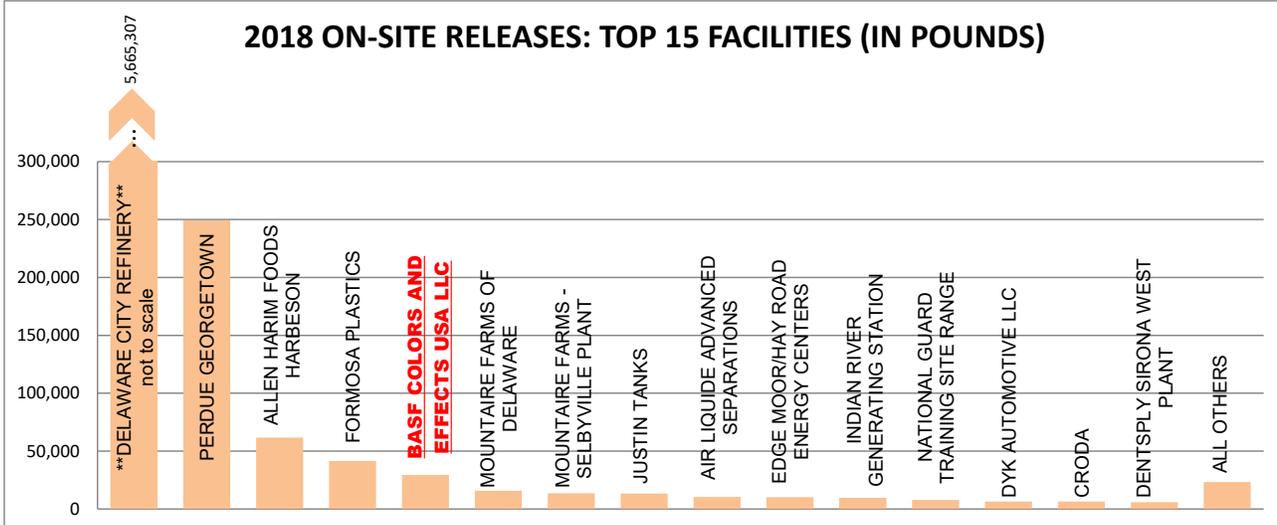




# TRI FACILITY PROFILES

## BASF COLORS AND EFFECTS USA LLC, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

BASF Colors and Effects USA LLC ranks 95th in the nation for off-site transfers of methanol (out of 2,158 facilities).

BASF Colors and Effects USA LLC ranks 65th in the nation for on-site recycling for methanol (out of 2,158 facilities).

BASF Colors and Effects USA LLC ranks 1st in the nation for off-site transfers of biphenyl (out of 115 facilities).

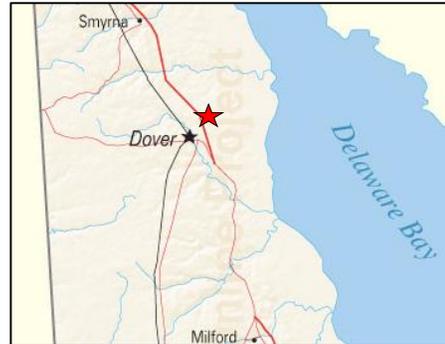
**CALPINE CORP-GARRISON ENERGY CENTER**

**LOCATION/CONTACT:**

Address: 450 Garrison Oak Drive  
Dover, DE 19901

Phone: (713)-830-8883

Contact: Norma Dunn



**FACILITY OVERVIEW:**

Calpine Corporation’s Garrison Energy Center reported under the North American Industrial Classification System (NAICS) as 221112, which covers fossil fuel electric power generation.

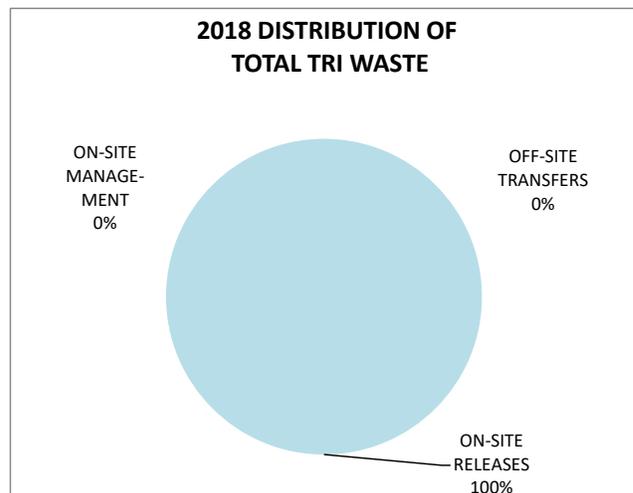
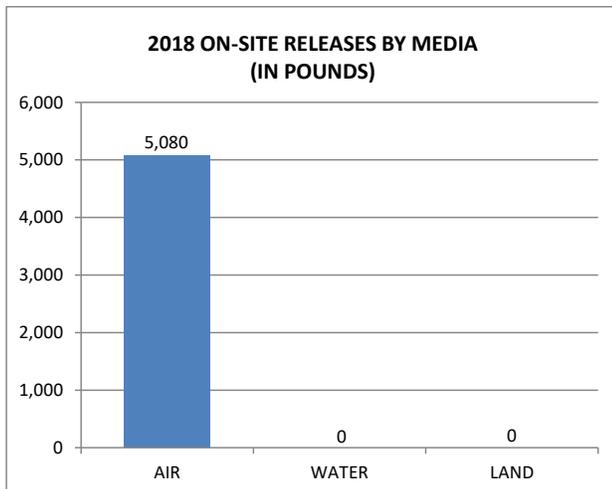
The Garrison Energy Center reported to TRI for the first time for 2016. This 309-megawatt natural gas-fired, combined cycle electric generating facility is located in the Garrison Oak Technological Park in Dover. The plant employs highly efficient combined-cycle technology with advanced environmental controls.

The Garrison Energy Center reported on one chemical in 2018, ammonia, with only on-site releases to air.

**2018 TRI DATA (REPORTED IN POUNDS):**

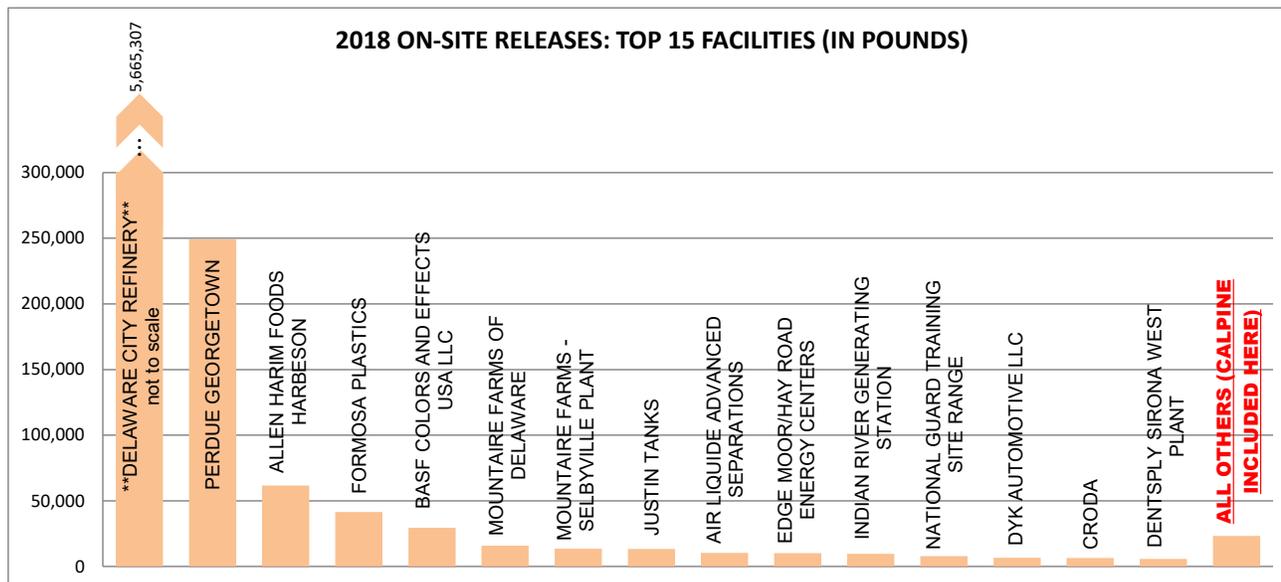
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	5,080	0	0	5,080	0	0	NO	NO
TOTAL	5,080	0	0	5,080	0	0		

**GRAPHICAL INFORMATION:**



**CALPINE CORP-GARRISON ENERGY CENTER, CONT.**

**COMPARISON TO OTHER DELAWARE TRI FACILITIES:**



Calpine Corp-Garrison Energy Center ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.



# TRI FACILITY PROFILES

## COLOR WORKS PAINTING

### LOCATION/CONTACT:

Address: 251 Edwards Ave  
New Castle, DE 19720

Phone: (302)324-8411

Contact: Sean Histed



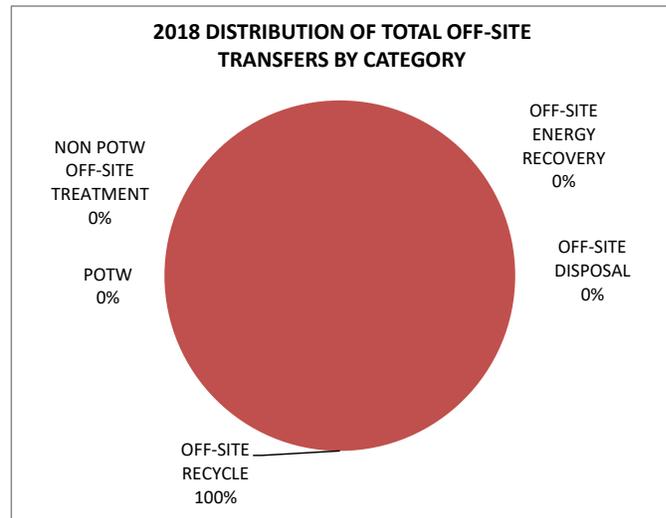
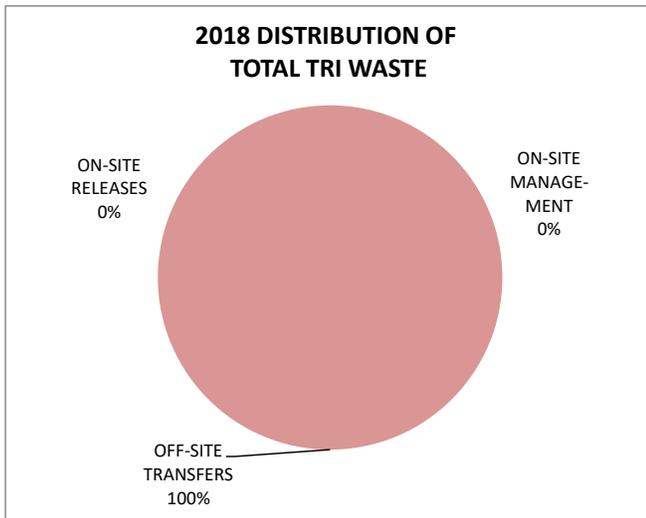
### FACILITY OVERVIEW:

Color Works Painting reported under the North American Industrial Classification System (NAICS) as 332812, which covers metal coating, engraving, and allied services to manufacturers. Color Works reported on one chemical in 2018, manganese. There were no reported on-site releases, with all waste being sent off-site for recycling.

### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
MANGANESE	0	0	0	0	740	0	NO	NO
TOTAL	0	0	0	0	740	0		

### GRAPHICAL INFORMATION:



### **COLOR WORKS PAINTING, CONT.**

#### **COMPARISON TO OTHER DELAWARE TRI FACILITIES:**

Color Works Painting ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.

Color Works Painting ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

## CRODA

**LOCATION/CONTACT:**

Address: 315 Cherry Lane  
New Castle, DE 19720

Phone: (302) 429-5320

Contact: Chris Barnett


**FACILITY OVERVIEW:**

Croda 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.

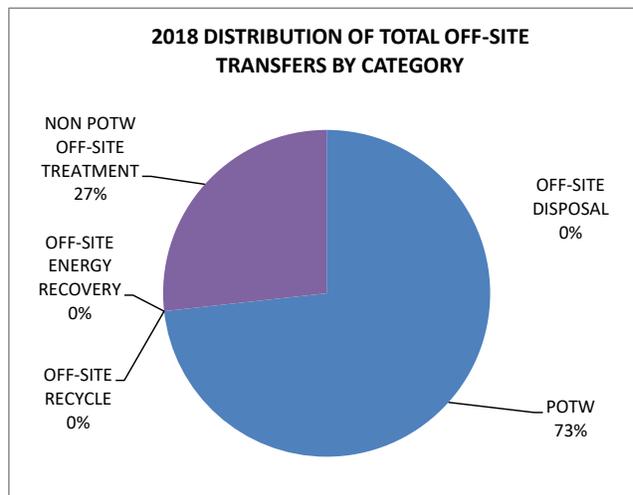
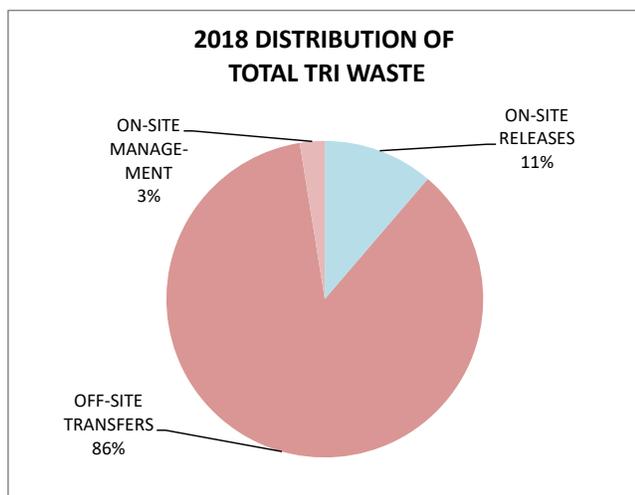
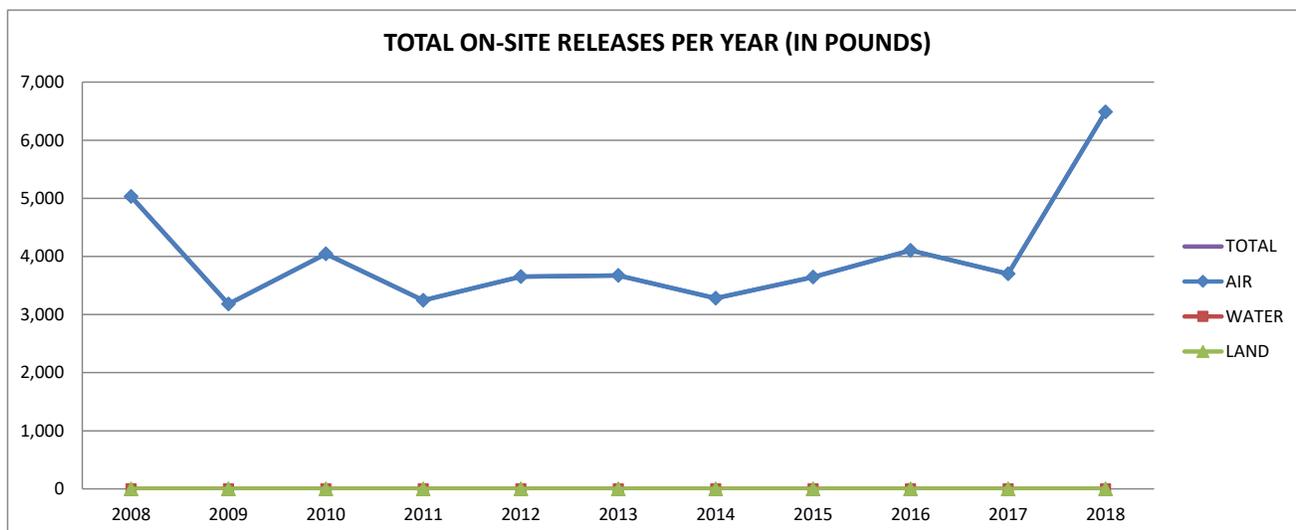
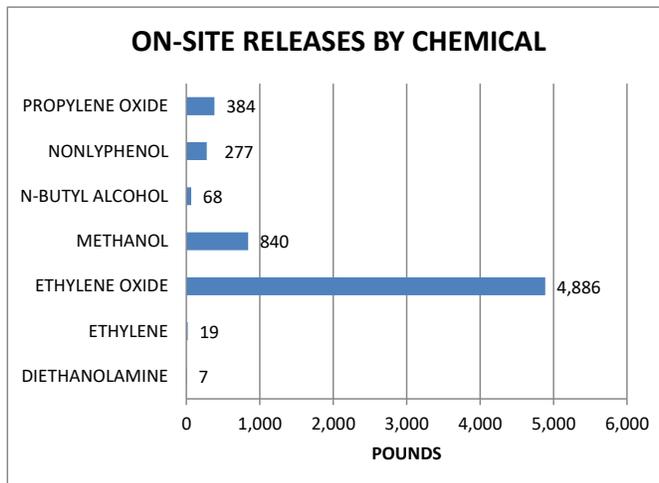
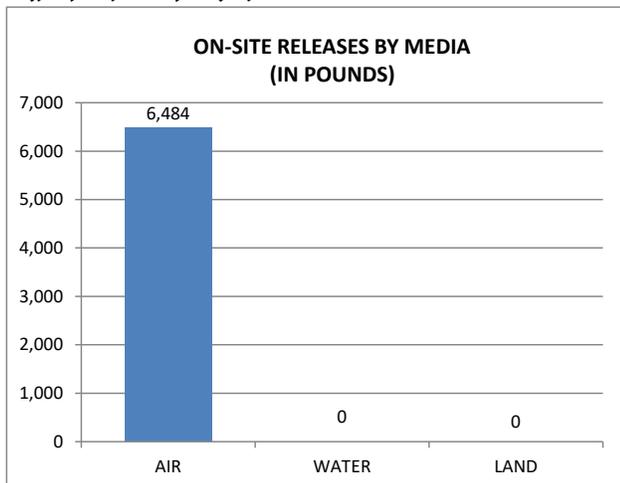
The facility has reported since 1987, previously as ICI Atlas Point and Uniqema, with Croda International acquiring Uniqema in 2006. Croda reported on ten chemicals for 2018. All on-site releases were to air, with the largest being ethylene oxide. The reported increase in ethylene oxide releases for 2018 over 2017 was due to an accidental release of 2,688 pounds of this chemical. The majority of chemicals reported are primarily utilized as ingredients in the facility's products.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CERTAIN GLYCOL ETHERS	1	0	0	1	2,799	0	NO	NO
DIETHANOLAMINE	7	0	0	7	21,988	0	NO	NO
ETHYLENE	19	0	0	19	0	0	NO	NO
ETHYLENE GLYCOL	2	0	0	2	1,668	0	NO	NO
ETHYLENE OXIDE	4,886	0	0	4,886	0	541	NO	YES
METHANOL	840	0	0	840	18,281	0	NO	NO
NAPHTHALENE	1	0	0	1	3,397	0	NO	YES
N-BUTYL ALCOHOL	68	0	0	68	386	0	NO	NO
NONLYPHENOL	277	0	0	277	1,045	0	NO	NO
PROPYLENE OXIDE	384	0	0	384	0	919	NO	YES
<b>TOTAL</b>	<b>6,484</b>	<b>0</b>	<b>0</b>	<b>6,484</b>	<b>49,564</b>	<b>1,460</b>		

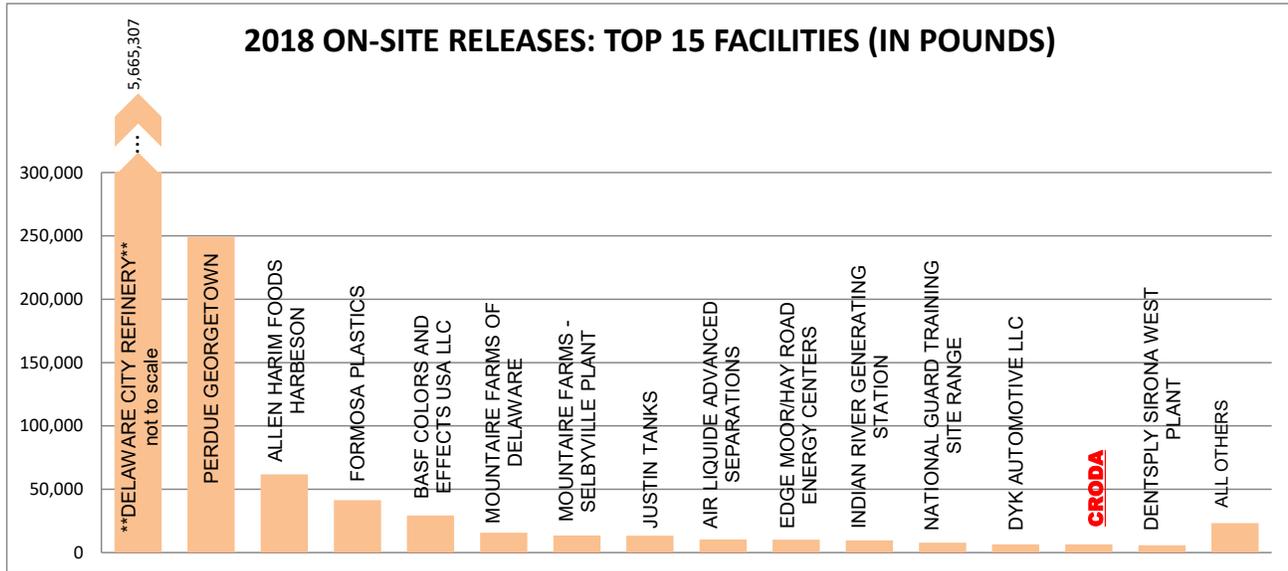
## CRODA, CONT.

### GRAPHICAL INFORMATION:

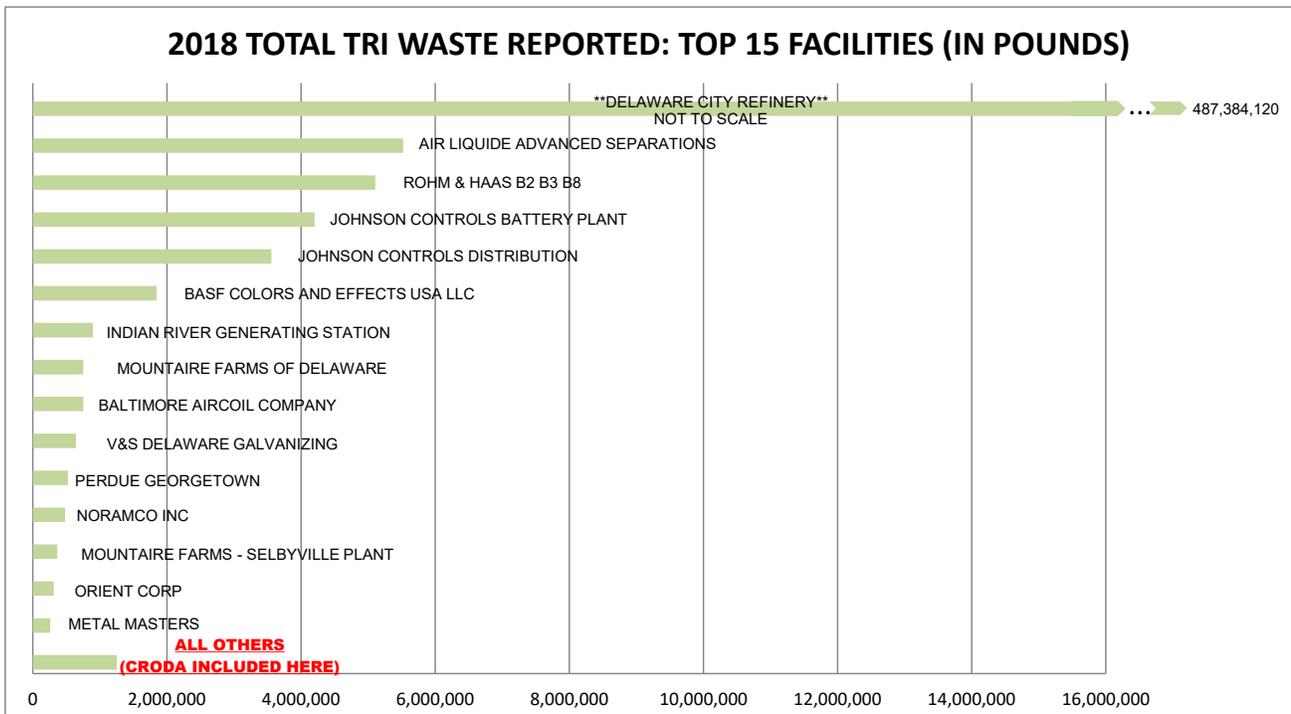


## CRODA, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Croda ranks 13th in the nation for on-site releases of ethylene oxide (out of 109 facilities).

Croda ranks 42nd in the nation for on-site releases of propylene oxide (out of 92 facilities).

## DELAWARE CITY REFINERY

### LOCATION/CONTACT:

Address: 4550 Wrangle Hill Road  
Delaware City, DE 19706

Phone: (302)-834-6033

Contact: Lisa Lindsey



### FACILITY OVERVIEW:

The Delaware City Refinery refines crude oil into automotive gasoline, ultra-low sulfur diesel (ULSD) fuel, ultra-low sulfur kerosene (ULSK), jet fuel, ultra-low sulfur home heating oil, and a variety of other petroleum and energy products. In June of 2010, the Delaware City Refining Company LLC purchased the facility from Valero after the refinery had been idled in November 2009. The refinery began restarting process unit operations in mid-2011 following extensive maintenance activity, and has been fully operational since.

For purposes of the 2018 reporting year, the refinery reported on 38 chemicals, with 5.7 million pounds being released on-site. On-site releases for the refinery are up 42% compared to 2017. This was primarily due to the increase of nitrate compounds being released to water, which are up 1.6 million pounds compared to 2017. The largest two contributors to on-site releases were the 5.1 million pounds of nitrate compounds released to water and 273,190 pounds of sulfuric acid aerosol, accounting for 95% of all on-site releases. Nitrogen, a naturally occurring compound in all crude oil, is removed during the refining process creating ammonia (NH<sub>3</sub>), which is processed at the Sulfur Recovery Unit and residual quantities are treated at the refinery's wastewater treatment. This ammonia is treated via nitrification at the waste water treatment plant, creating the nitrate compounds that are released to water. Nitrate releases vary from year to year. About 13.3 million pounds of ammonia is treated on site, with less than 0.6 percent being released on-site to air and water.

Sulfuric acid mist emissions are released from combustion units at the refinery including process heaters, boilers and combustion turbines. When a sulfur-bearing fuel such as refinery fuel gas is burned, the sulfur is initially converted to Sulfur dioxide (SO<sub>2</sub>). Under certain conditions, a small portion of the SO<sub>2</sub> converts to Sulfur Trioxide (SO<sub>3</sub>). A fraction of the SO<sub>3</sub> can undergo a further reaction to form sulfuric acid aerosol. Sulfuric acid mist emissions vary from year to year.

The refinery reported 481.6 million pounds of chemicals managed on-site, via treatment and energy recovery. The largest of amount reported was hydrogen sulfide with 446.5 million pounds treated on-site. Hydrogen sulfide is a gas that is produced during the petroleum refining treatment processes that remove sulfur compounds from fuel products. The Hydrogen sulfide that is produced from these processes is converted by sulfur recovery processes to elemental sulfur, a material that is sold for agricultural and chemical manufacturing uses.

Aqueous Ammonia is utilized as a reactant for several combustion treatment processes, such as the Selective Catalytic Reduction (SCR) and Selective Non-catalytic Reduction (SNCR) controls. These controls are utilized at the refinery to reduce NO<sub>x</sub> emissions from sources such as process heaters, package boilers and the Fluid Catalytic Cracking Unit (FCCU) CO Boiler and Fluid Coking Unit CO boiler. Very low levels of unreacted ammonia (ammonia slip) from these NO<sub>x</sub> reduction processes are released to the air.

# TRI FACILITY PROFILES



## DELAWARE CITY REFINERY, CONT.

An off-site transfer of asbestos for disposal (77,940 pounds) was recorded in 2018 related to asbestos remediation and abatement activities performed by the refinery.

### 2018 TRI DATA (REPORTED IN POUNDS):

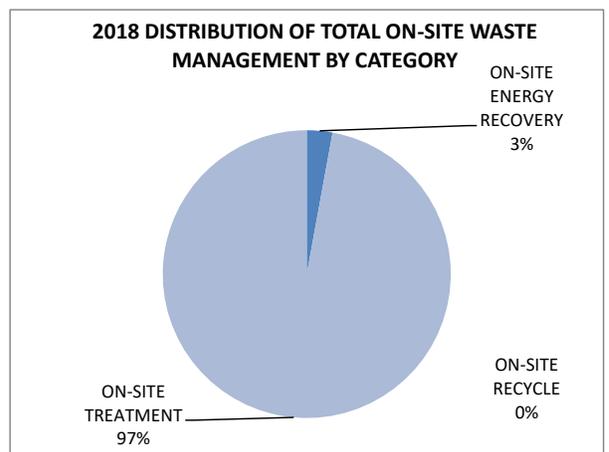
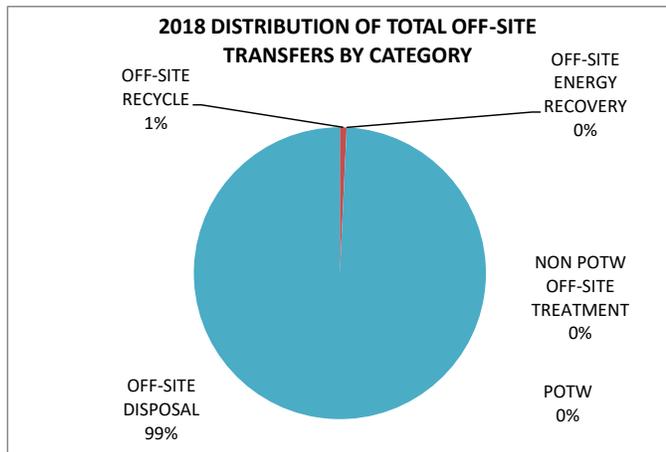
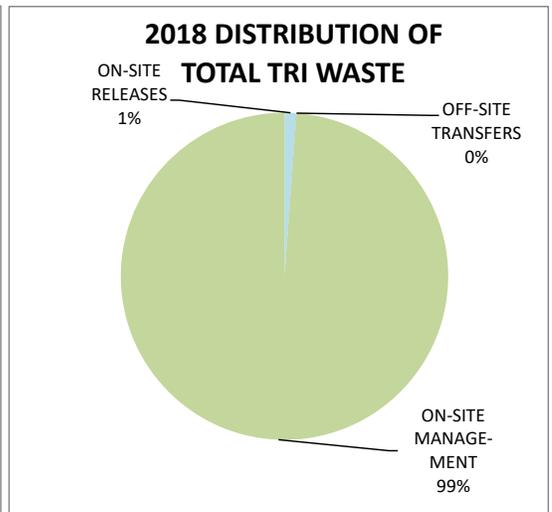
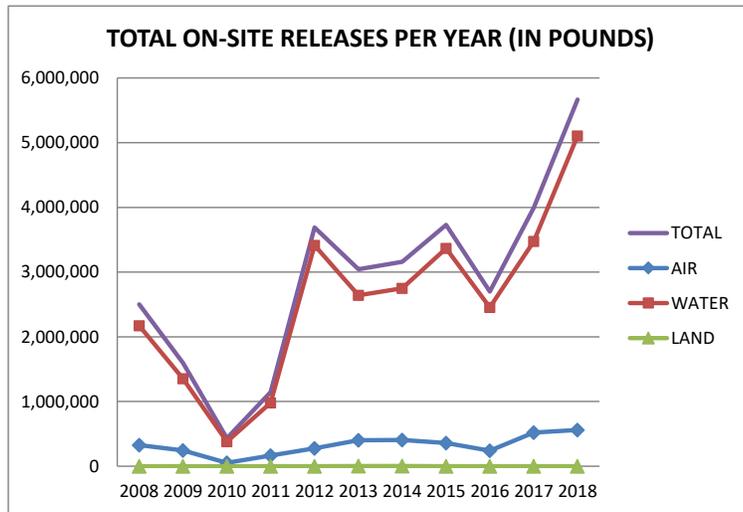
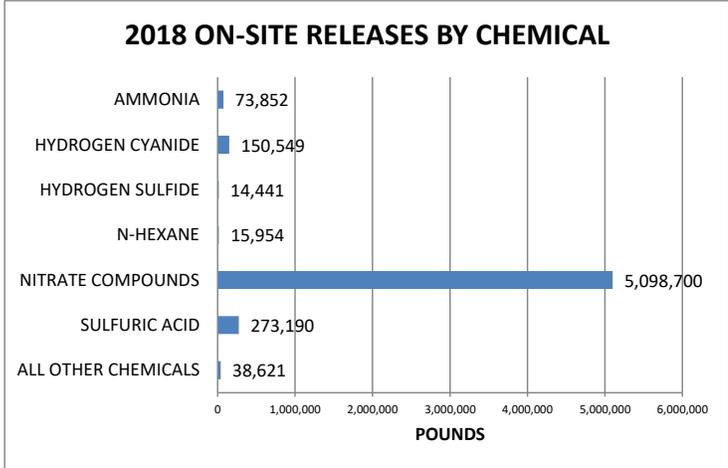
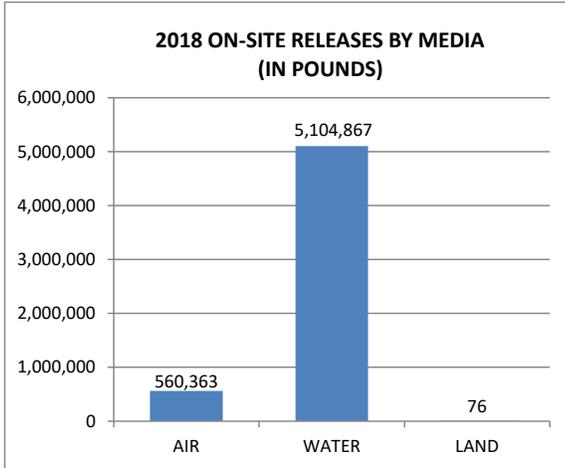
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
1,2,4-TRIMETHYLBENZENE	965	5	0	970	0	79,442	NO	NO
1,3-BUTADIENE	274	0	0	274	0	0	NO	YES
2,4-DIMETHYLPHENOL	0	168	0	168	0	236,392	NO	NO
AMMONIA	69,426	4,426	0	73,852	145	13,320,212	NO	NO
ANTHRACENE	0	5	0	5	0	0	NO	NO
ASBESTOS (FRIABLE)	0	0	0	0	77,940	0	NO	YES
BENZENE	4,736	10	0	4,746	13	514,199	NO	YES
BENZO(G,H,I)PERYLENE	1	5	0	5	0	462	YES	NO
CARBON DISULFIDE	1,443	0	0	1,443	0	4,546,053	NO	NO
CARBONYL SULFIDE	596	0	0	596	0	14,696,433	NO	NO
COBALT	44	214	0	258	33	0	NO	NO
CREOSOTE	13	0	76	89	562	0	NO	YES
CRESOL (MIXED ISOMERS)	0	337	0	337	0	341,552	NO	NO
CUMENE	334	5	0	339	0	4,221	NO	YES
CYANIDE COMPOUNDS	0	148	0	148	0	14,687	NO	NO
CYCLOHEXANE	1,882	5	0	1,887	12	9,095	NO	NO
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0.001268	0.000000	0.000000	0.001268	0.000000	0.001268	YES	NO
ETHYLBENZENE	1,692	5	0	1,697	13	62,757	NO	YES
ETHYLENE	3,697	0	0	3,697	0	0	NO	NO
ETHYLENE GLYCOL	0	192	0	192	0	18,990	NO	NO
HYDROCHLORIC ACID	225	0	0	225	0	102,009	NO	NO
HYDROGEN CYANIDE	150,342	207	0	150,549	0	273,529	NO	NO
HYDROGEN SULFIDE	14,212	229	0	14,441	0	446,479,559	NO	NO
LEAD COMPOUNDS	91	2	0	94	510	0	YES	YES
MERCURY COMPOUNDS	86.9300	1.5300	0.0000	88.4600	0.3985	0.0000	YES	NO
MOLYBDENUM TRIOXIDE	17	0	0	17	13	0	NO	NO
NAPHTHALENE	2,163	5	0	2,168	0	13,305	NO	YES
N-HEXANE	15,949	5	0	15,954	0	84,669	NO	NO
NITRATE COMPOUNDS	0	5,098,700	0	5,098,700	0	0	NO	NO
PHENANTHRENE	3	5	0	8	0	40	NO	NO
PHENOL	113	168	0	281	0	338,160	NO	NO
POLYCYCLIC AROMATIC COMPOUNDS	266	4	0	270	0	380	YES	YES
PROPYLENE	4,010	0	0	4,010	0	0	NO	NO
STYRENE	7	5	0	12	0	1,618	NO	YES
SULFURIC ACID	273,190	0	0	273,190	0	0	NO	NO
TETRACHLOROETHYLENE	7	0	0	7	0	0	NO	YES
TOLUENE	8,886	5	0	8,891	37	242,604	NO	NO
XYLENE (MIXED ISOMERS)	5,692	5	0	5,697	82	259,083	NO	NO
<b>TOTAL</b>	<b>560,363</b>	<b>5,104,867</b>	<b>76</b>	<b>5,665,307</b>	<b>79,362</b>	<b>481,639,451</b>		



# TRI FACILITY PROFILES

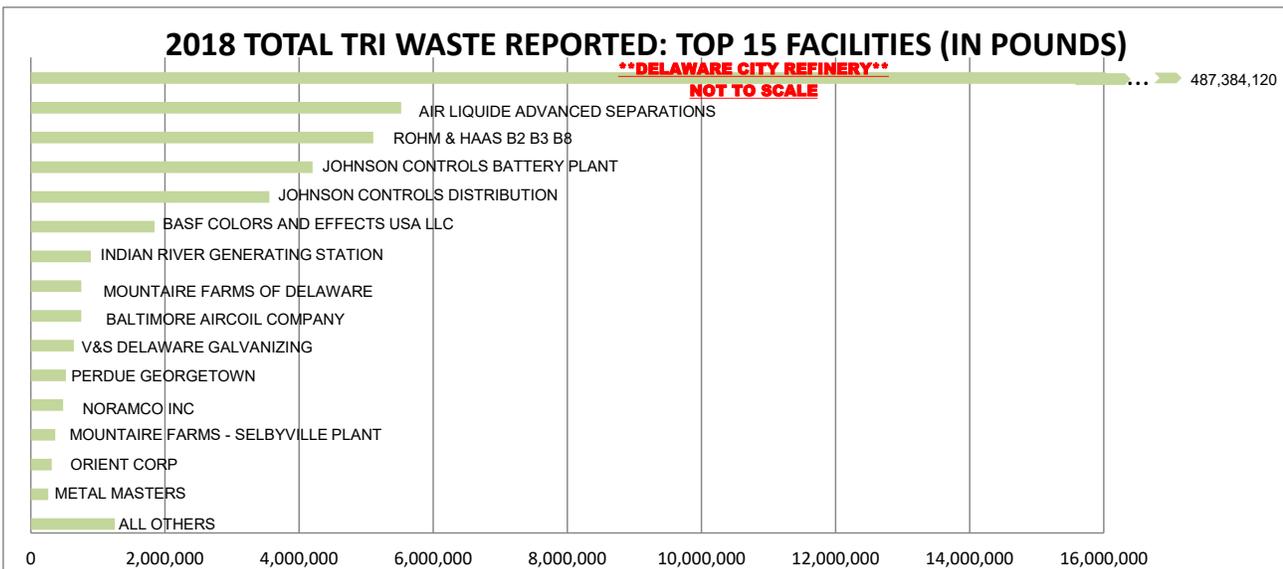
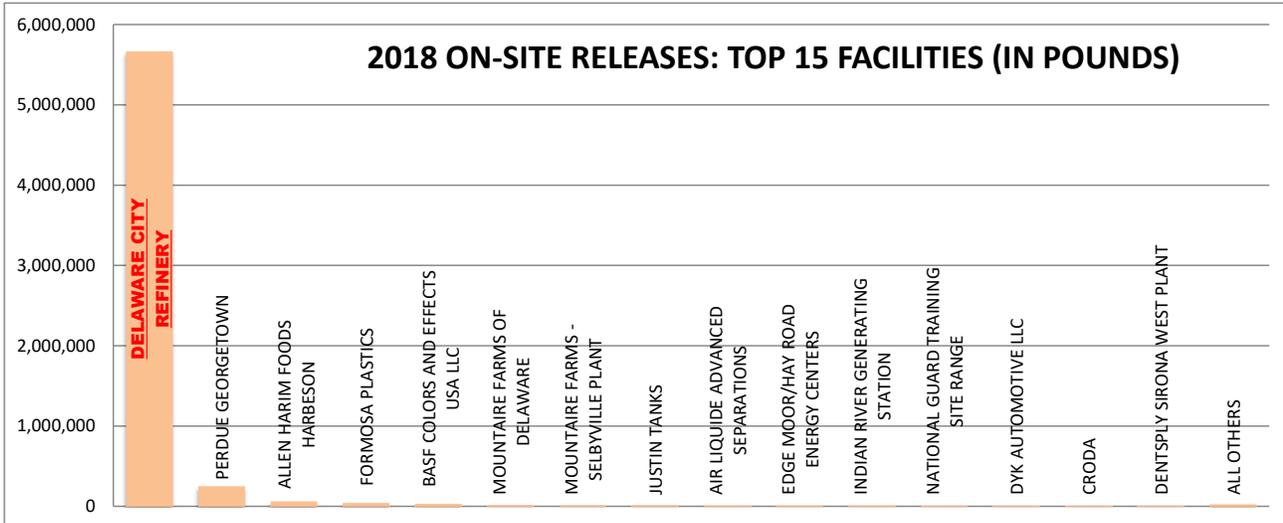
## DELAWARE CITY REFINERY, CONT.

### GRAPHICAL INFORMATION:



## DELAWARE CITY REFINERY, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Delaware City Refinery ranks 5th in the nation for on-site releases of nitrate compounds (out of 2,261 facilities).

Delaware City Refinery ranks 1st in the nation for total waste managed and for total on-site treatment of hydrogen sulfide (out of 492 facilities).

Delaware City Refinery ranks 53rd in on-site releases of sulfuric acid aerosols (out of 632 facilities).

Delaware City Refinery ranks 8th in off-site transfers of asbestos (friable) (out of 43 facilities).

## DENTSPLY SIRONA MAIN PLANT

**LOCATION/CONTACT:**

Address: 38 West Clarke Ave.  
Milford, DE 19963

Phone: (302) 422-4511

Contact: Colby Landiss



**FACILITY OVERVIEW:**

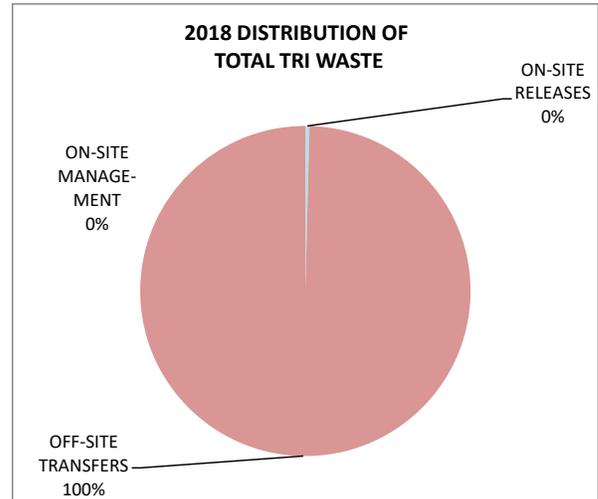
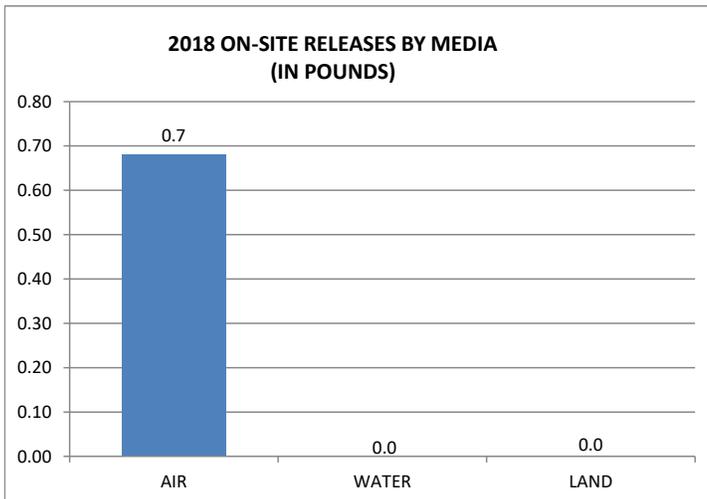
Dentsply Sirona produces a line of consumable products for the dental industry. These products include dental adhesives, dental impression materials, and restoratives. These products are used in dental maintenance and restoration applications.

The facility has reported since 1987, previously as Dentsply Main Plant, L. D. Caulk, and Dentsply Caulk Lakeview. For 2018, the Dentsply Sirona Main Plant reported on one chemical, mercury. Virtually all of their mercury is used in their products or recycled (170.58 pounds recycled), with reported on-site mercury releases to air of 0.68 pounds.

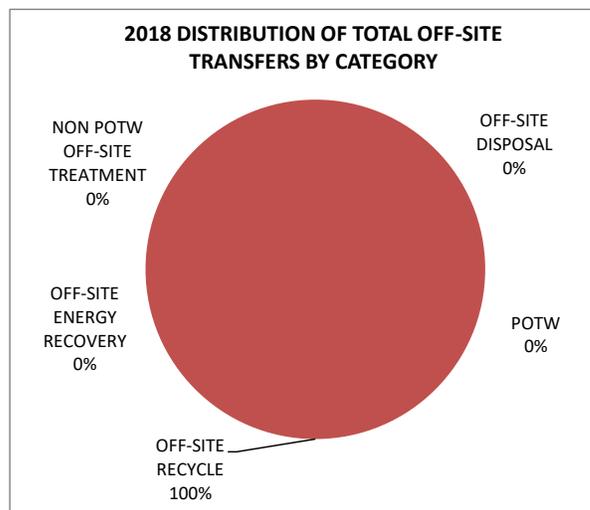
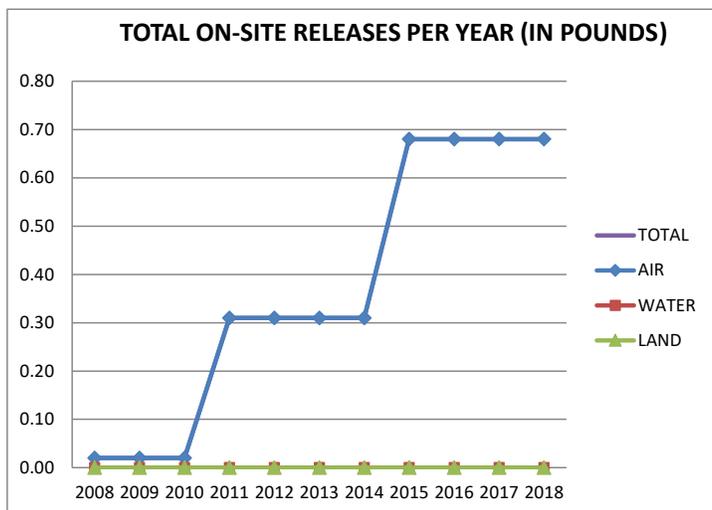
**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
MERCURY	0.6800	0.0000	0.0000	0.6800	170.5800	0.0000	YES	NO
TOTAL	0.7	0.0	0.0	0.7	171	0		

**GRAPHICAL INFORMATION:**



## DENTSPLY SIRONA MAIN PLANT, CONT.



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:

The Dentsply Sirona Main Plant ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.

The Dentsply Sirona Main Plant ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

### NOTABLE 2018 NATIONAL RANKINGS:

The Dentsply Sirona Main Plant ranks 29th in the nation for off-site transfers of mercury (out of 368 facilities).



## TRI FACILITY PROFILES

### DENTSPLY SIRONA WEST

**LOCATION/CONTACT:**

Address: 779 E Masten Circle  
Milford, DE 19963

Phone: (302) 422-4511

Contact: Colby Landiss



**FACILITY OVERVIEW:**

Dentsply Sirona 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. Dentsply Sirona’s East Masten Circle facility (Dentsply Sirona West) and the West Clarke Avenue facility (Dentsply Sirona Main) are located in Milford.

The facility has reported since 1987, previously as Dentsply West Plant, L. D. Caulk, and Dentsply Caulk West Milford. The Dentsply Sirona West Plant reported two TRI chemicals for 2018, methanol and methyl methacrylate (MMA). Methanol is used as a processing aid in the manufacture of polymethacrylates. Methyl methacrylate (MMA) is also used in the manufacture of polymethacrylates. All on-site releases were reported as released to air.

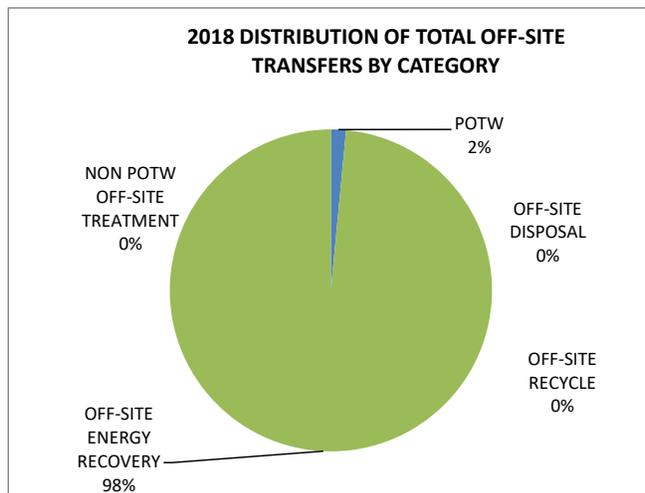
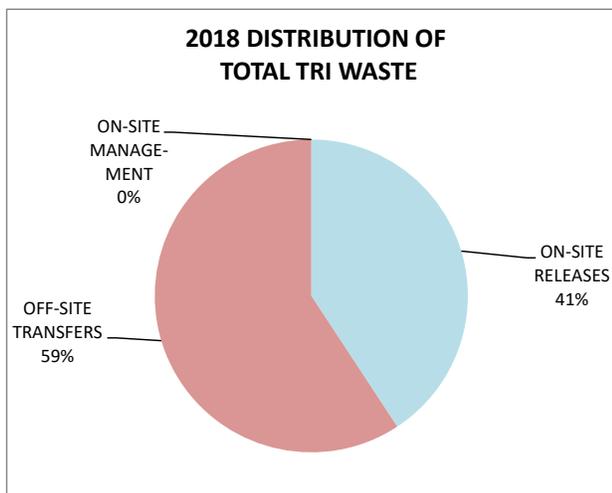
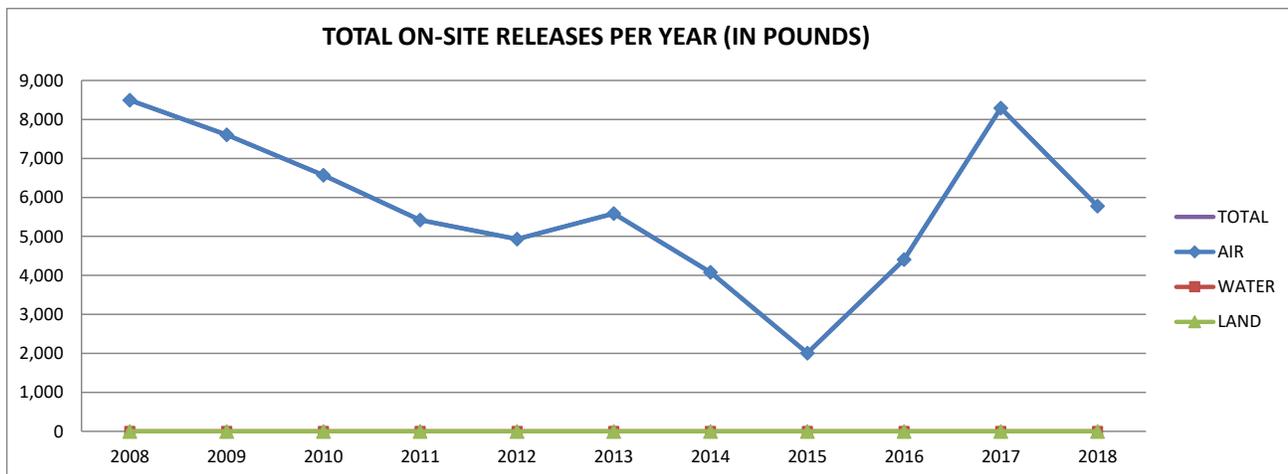
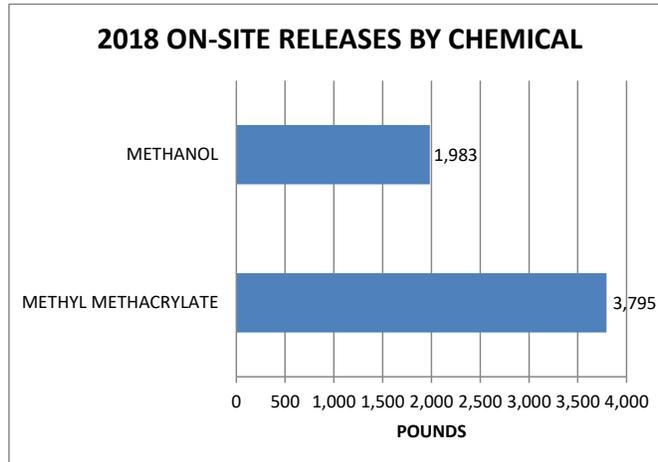
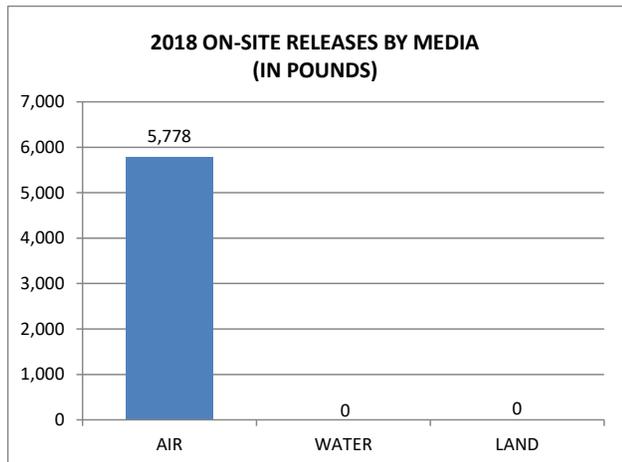
For 2018, on-site releases decreased 30% over 2017 (see *Total On-site Releases Per Year Graph* on the next page).

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
METHANOL	1,983	0	0	1,983	8,224	0	NO	NO
METHYL METHACRYLATE	3,795	0	0	3,795	177	0	NO	NO
TOTAL	5,778	0	0	5,778	8,401	0		

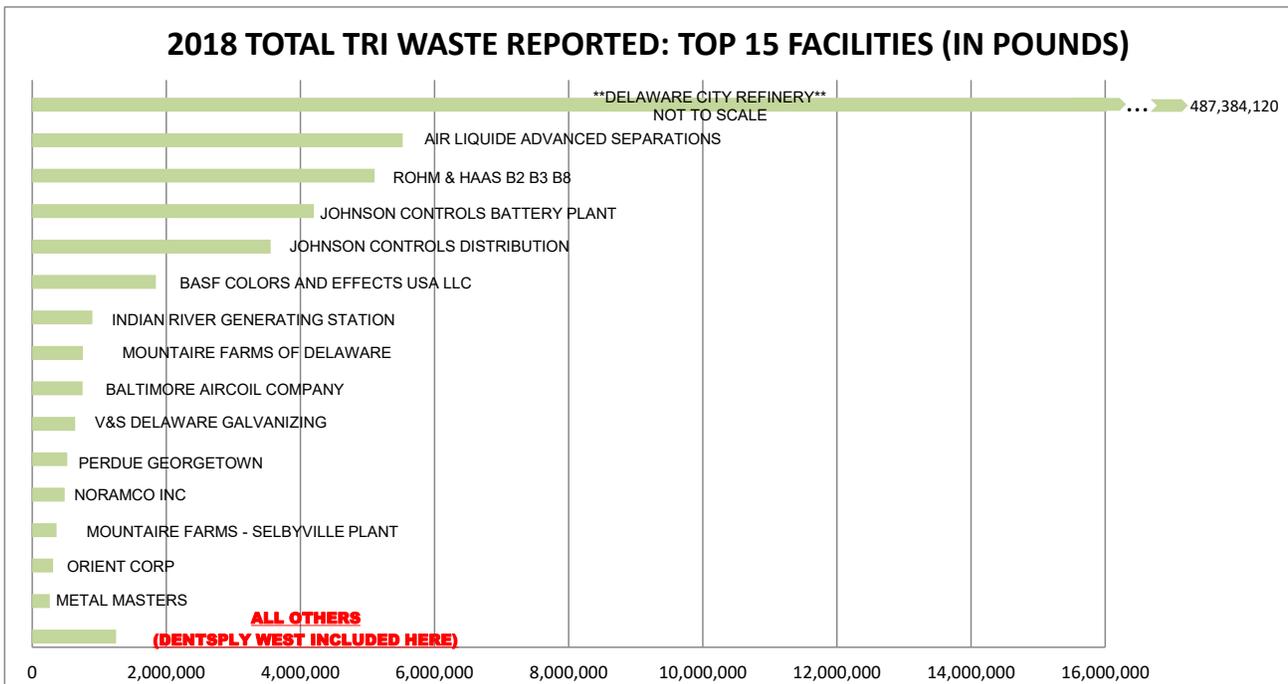
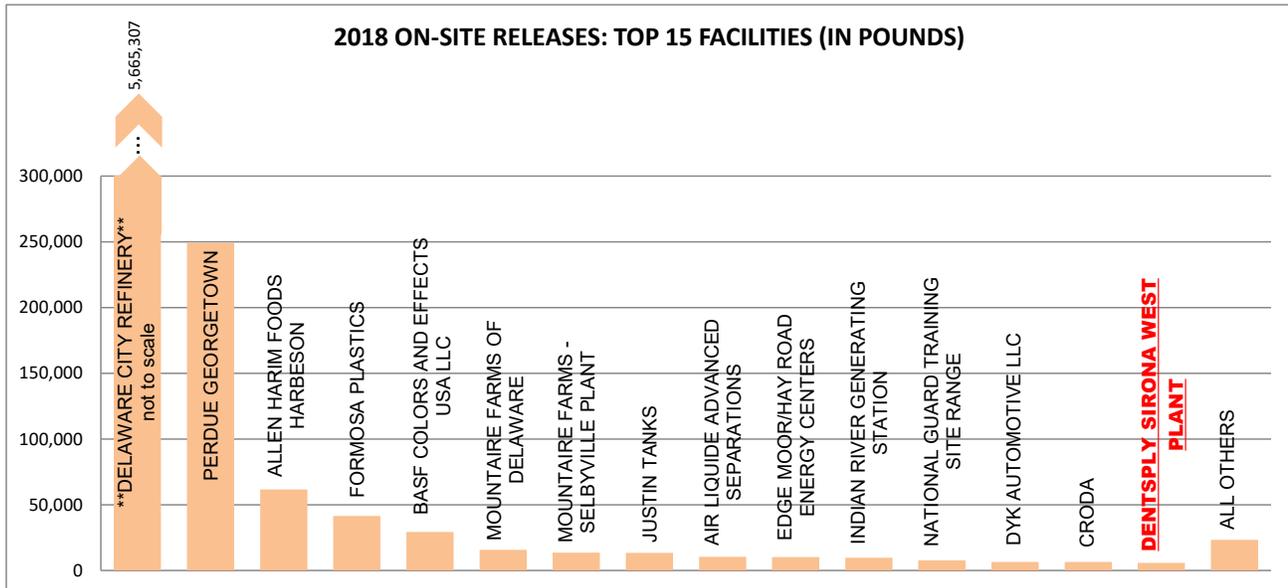
## DENTSPLY SIRONA WEST, CONT.

### GRAPHICAL INFORMATION:



## DENTSPLY SIRONA WEST, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:





## TRI FACILITY PROFILES

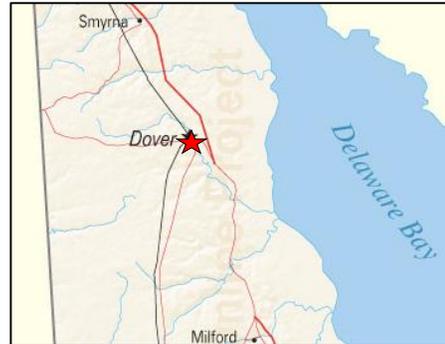
### DOVER AIR FORCE BASE

**LOCATION/CONTACT:**

Address: 436 CES/CC 600 Chevron Ave.  
Dover Air Force Base, DE 19902

Phone: (302) 677-3370

Contact: Jennifer Vallee



**FACILITY OVERVIEW:**

The Dover Air Force Base (DAFB) is a military installation that falls under the federal facility reporting requirements. DAFB is home to the 436th Airlift Wing, commonly known as the "Eagle Wing" and the 512th Airlift Wing, the Reserve associate, as the "Liberty Wing." Dover houses the C-5 Galaxy and C-17 Globemaster III, large transport military aircraft. Team Dover's mission focus is to safely fix and fly aircraft, prepare and deploy Airmen, move cargo, and return America's fallen heroes with dignity, honor and respect.

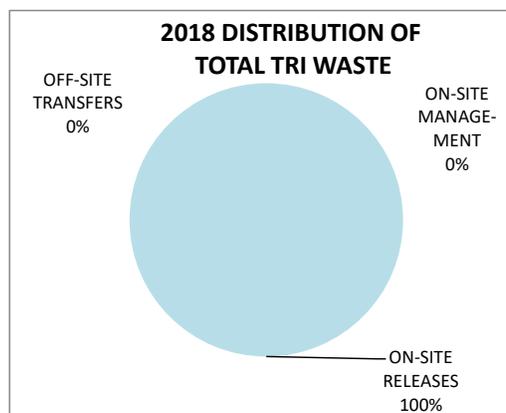
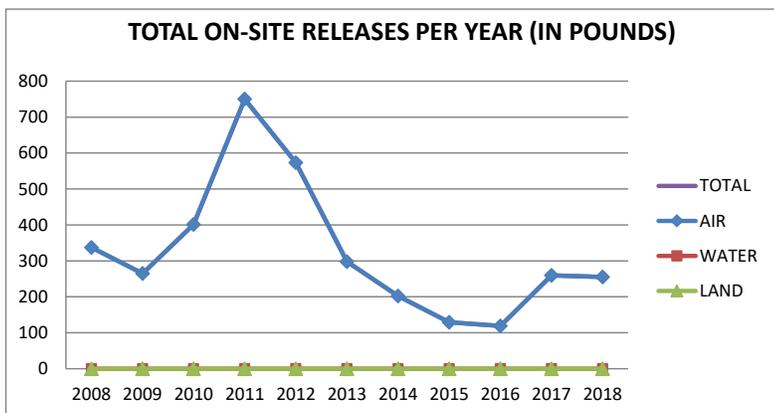
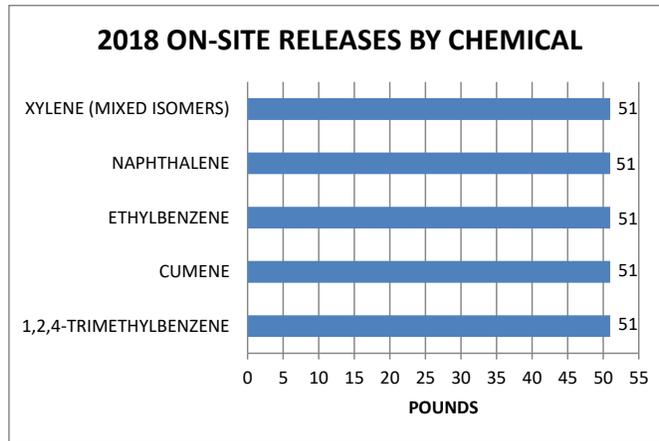
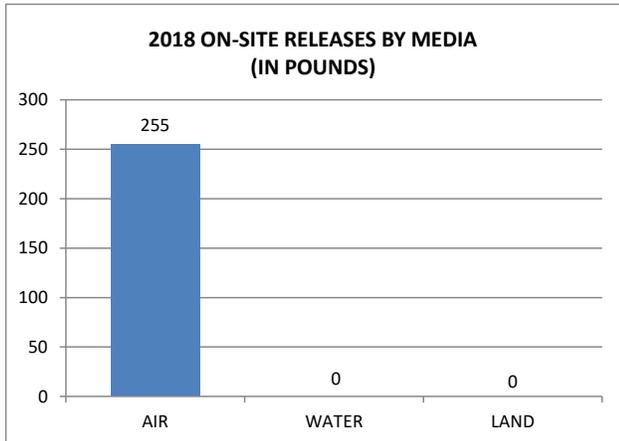
Dover Air Force Base (DAFB) has reported to TRI since 2001. For 2018, the facility reported on five chemicals (naphthalene; xylene; 1,2,4-Trimethylbenzene; cumene and ethylbenzene), with all on-site releases being made to air. These chemicals are the by-product of jet fuel being used on DAFB. The reported TRI data is from the fuel utilized by transient aircraft stopping at DAFB, and the depot level maintenance taking place at the Jet Engine Test Cell. Transient vehicles include only vehicles stopping at the installation for fuel or rest, and that have no assigned mission at the facility. Vehicles with an assigned mission at the base fall under the motor-vehicle reporting exemption. On-site releases to are about the same as in 2017.

**2018 TRI DATA (REPORTED IN POUNDS):**

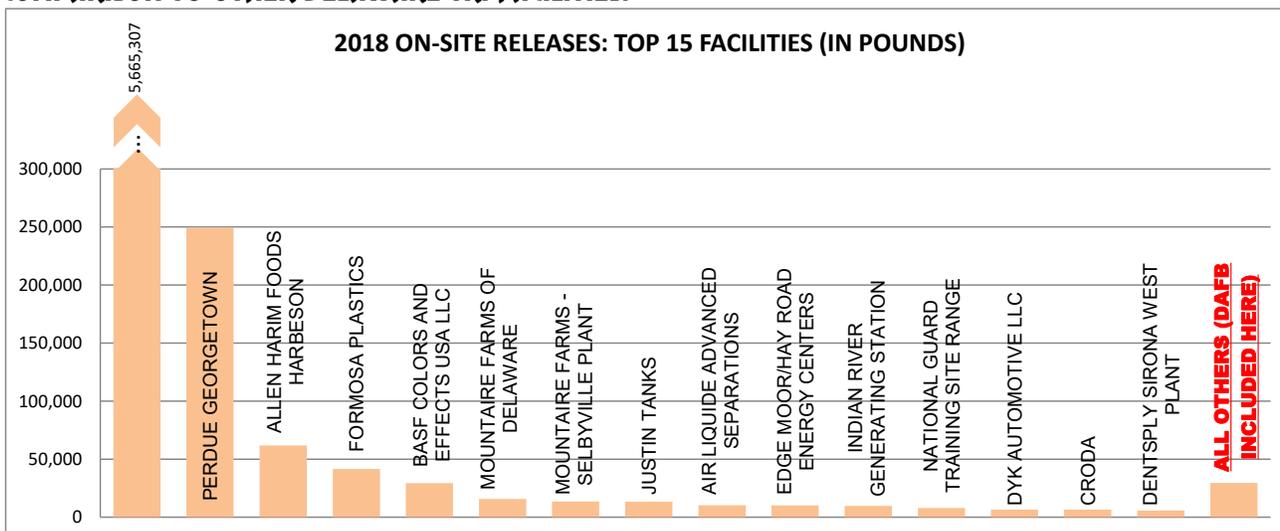
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
1,2,4-TRIMETHYLBENZENE	51	0	0	51	0	0	NO	NO
CUMENE	51	0	0	51	0	0	NO	YES
ETHYLBENZENE	51	0	0	51	0	0	NO	YES
NAPHTHALENE	51	0	0	51	0	0	NO	YES
XYLENE (MIXED ISOMERS)	51	0	0	51	0	0	NO	NO
TOTAL	255	0	0	255	0	0		

## DOVER AIR FORCE BASE, CONT.

### GRAPHICAL INFORMATION:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



Dover Air Force Base ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

**DUHADAWAY TOOL AND DIE**

**LOCATION/CONTACT:**

Address: 801 Dawson Drive  
Newark, DE 19713

Phone: (302) 366-0113

Contact: John O'Donnell



**FACILITY OVERVIEW:**

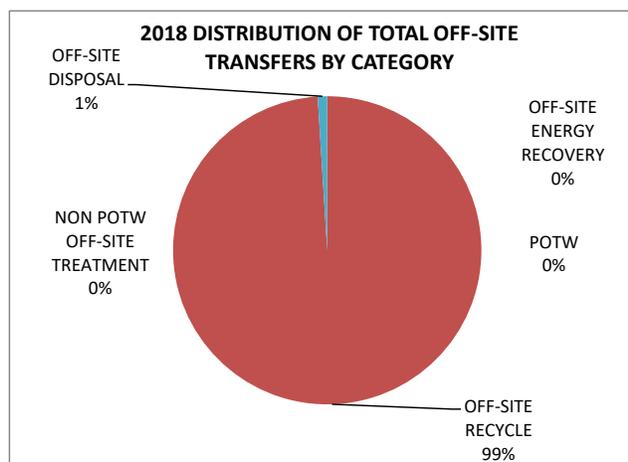
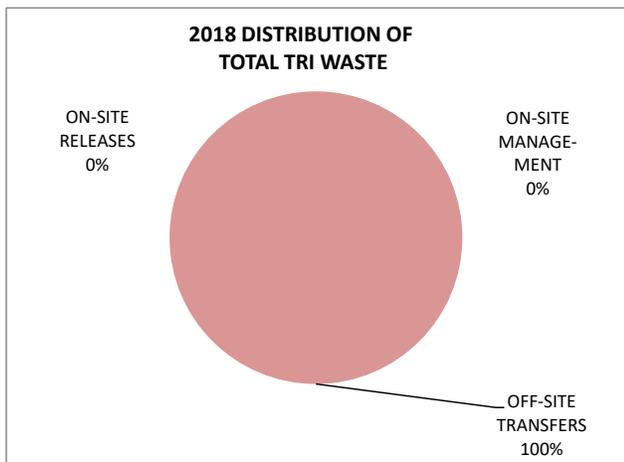
DuHadaway Tool and Die Shop produces precision crafted parts and assemblies for global power generation, automotive, military, and aerospace industries. The facility provides precision machining with the use of horizontal and vertical boring mills, machining centers, lathes, turning centers, electrical discharge machining (EDM), and welding stations.

DuHadaway Tool and Die first filed a TRI report for the 2009 reporting year. The facility was below the reporting thresholds in 2010 and 2011. For 2018, the facility reported on two chemicals, chromium and nickel, with all waste being transferred off-site. Chromium and nickel are present in varying levels in the metals that are used to manufacture parts. The scrap and metal shavings that are the result of the manufacturing process are shipped off-site for recycling. Volumes of scrap and metal shavings are determined by annual sales.

**2018 TRI DATA (REPORTED IN POUNDS):**

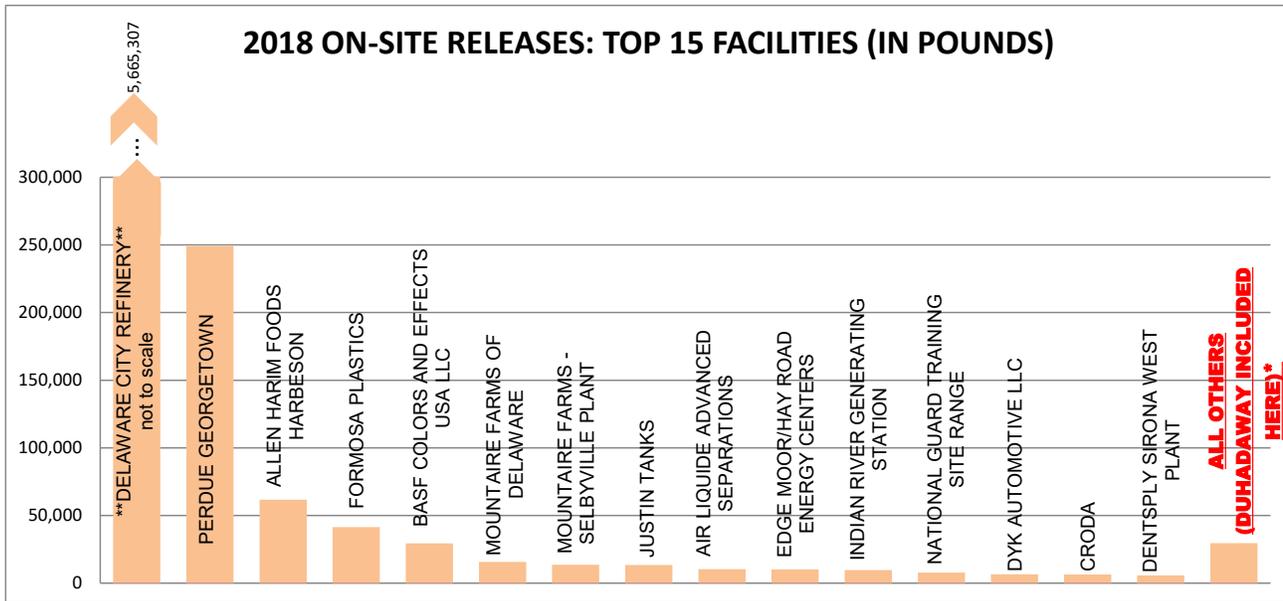
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHROMIUM	0	0	0	0	10,401	0	NO	NO
NICKEL	0	0	0	0	12,805	0	NO	YES
TOTAL	0	0	0	0	23,206	0		

**GRAPHICAL INFORMATION:**

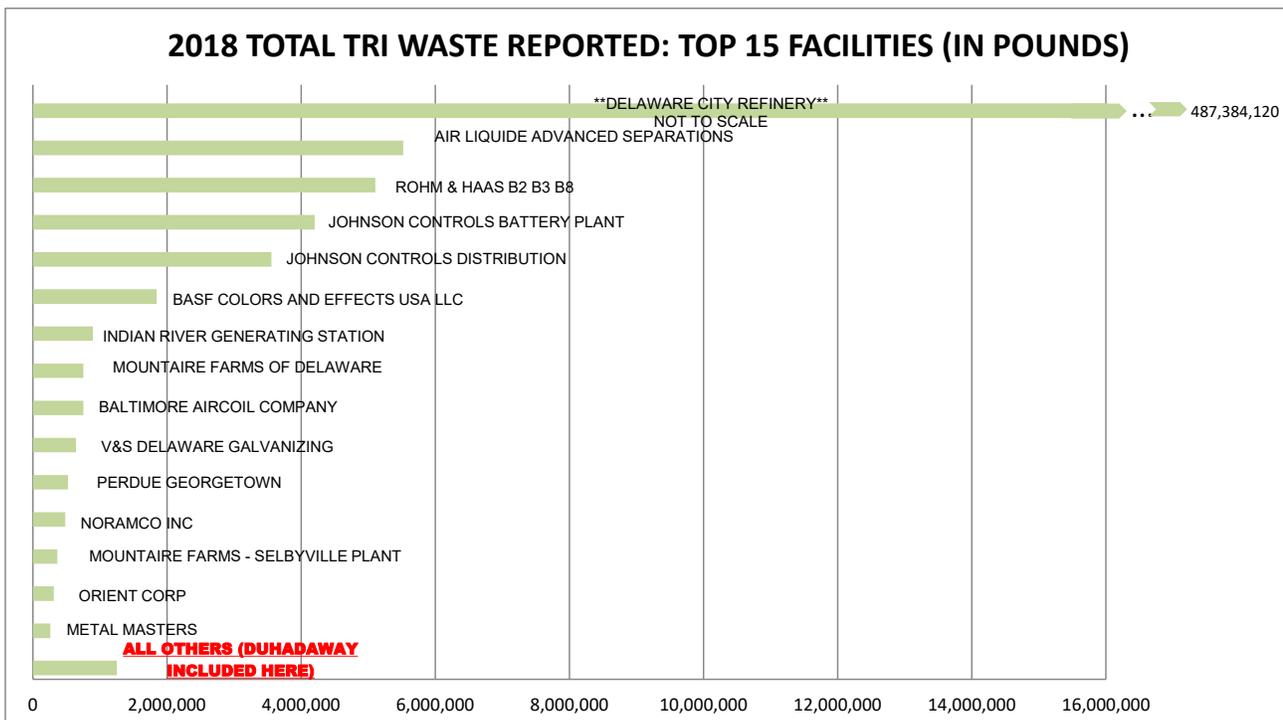


## DUHADAWAY TOOL AND DIE, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



\*DuHadaway Tool and Die ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site. Comparisons only include facilities reporting on Form R.



**DYK AUTOMOTIVE LLC**

**LOCATION/CONTACT:**

Address: 1 Crowell Road  
Wilmington, DE 19804

Phone: (302)-351-1147

Contact: Jerry Ivey



**FACILITY OVERVIEW:**

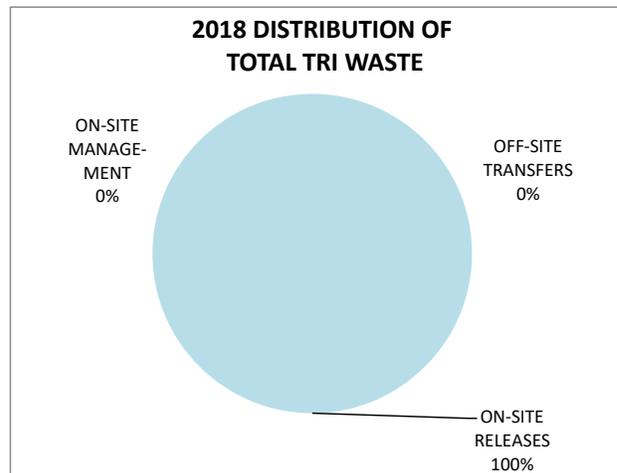
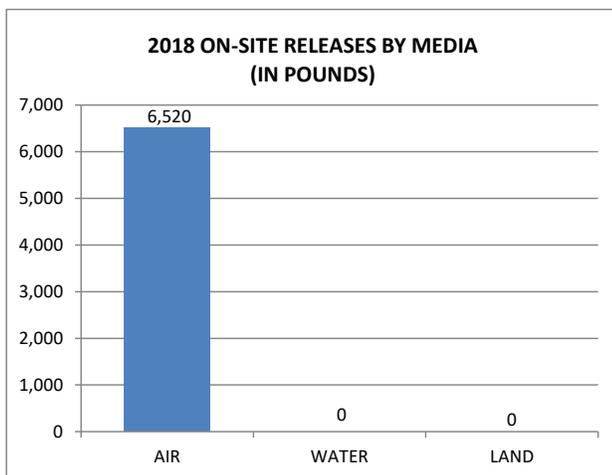
DYK Automotive LLC reported under the North American Industrial Classification System (NAICS) as 325998, which covers miscellaneous chemical product and preparation manufacturing. The facility mixes some products on-site: windshield washer fluid, RV antifreeze, and diesel exhaust fluid; and they also re-package other products for the automotive market.

DYK Automotive LLC, located in Wilmington, reported to TRI for the first time for 2015. The facility reported on one chemical in 2018, methanol, with on-site releases only to air. On-site releases of methanol increased 22% over 2017, and accounted for all of the facility's reportable waste.

**2018 TRI DATA (REPORTED IN POUNDS):**

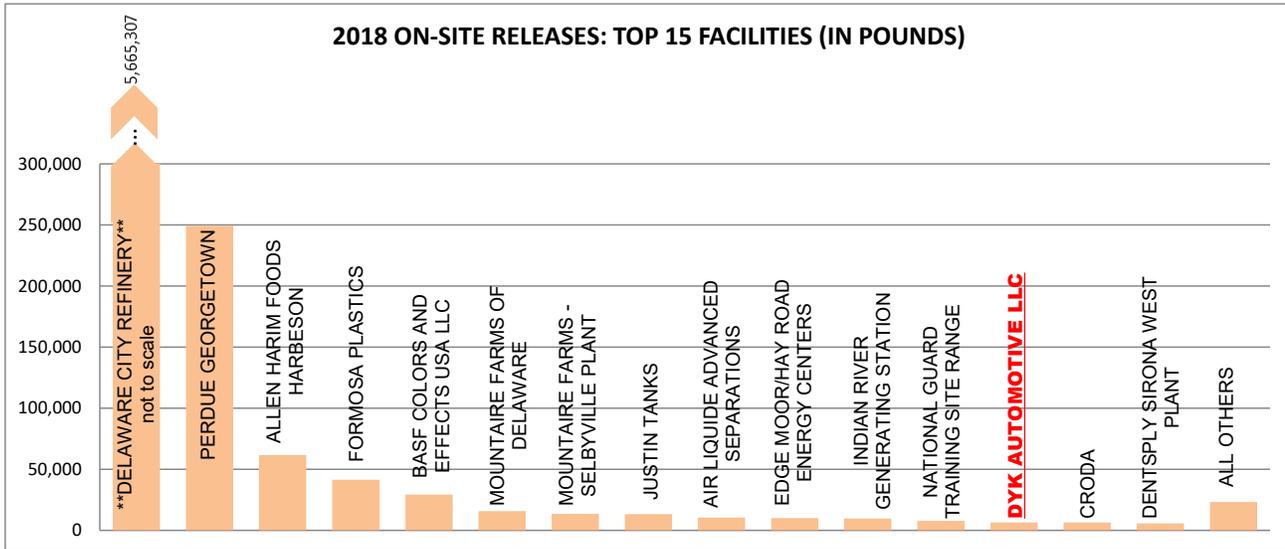
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
METHANOL	6,520	0	0	6,520	0	0	NO	NO
TOTAL	6,520	0	0	6,520	0	0		

**GRAPHICAL INFORMATION:**



DYK AUTOMOTIVE LLC, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



DYK ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.



## TRI FACILITY PROFILES

### EDGE MOOR/HAY ROAD ENERGY CENTERS

**LOCATION/CONTACT:**

Address: 200 Hay Road  
Wilmington, DE 19809

Phone: (713) 830-8833

Contact: Norma Dunn



**FACILITY OVERVIEW:**

The Calpine Edge Moor/Hay Road Energy Center is located along the Delaware River a mile north of the Port of Wilmington and produces electricity.

Pepco Holdings, Inc. (PHI) sold the generation assets owned by Conectiv Energy to Calpine Corporation in 2010. Based in Houston, Texas, Calpine Corporation is an electricity generating company and converted the Edge Moor, DE plant to burning natural gas exclusively. All coal combustion was discontinued in 2010. The ceasing of burning coal has significantly reduced releases on-site made by the facility.

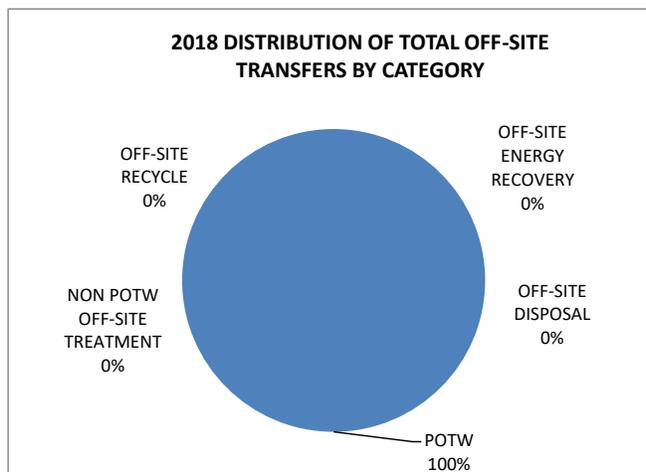
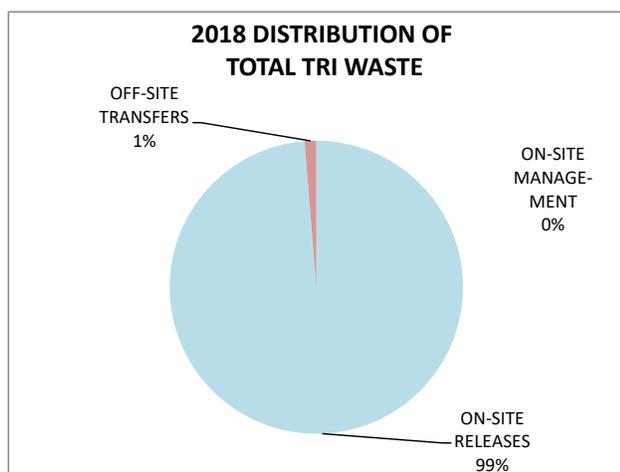
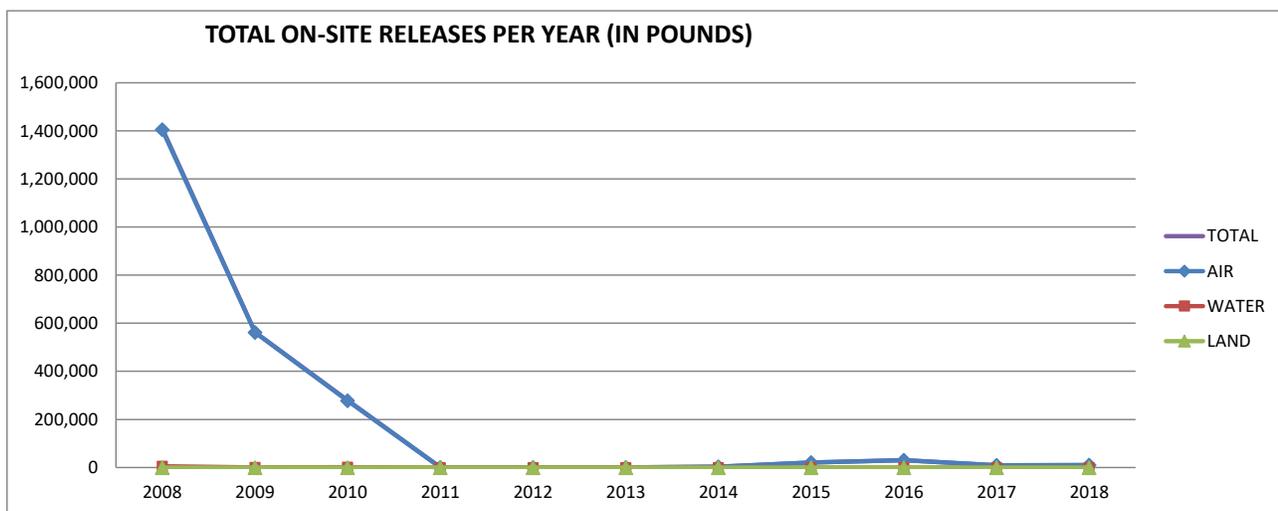
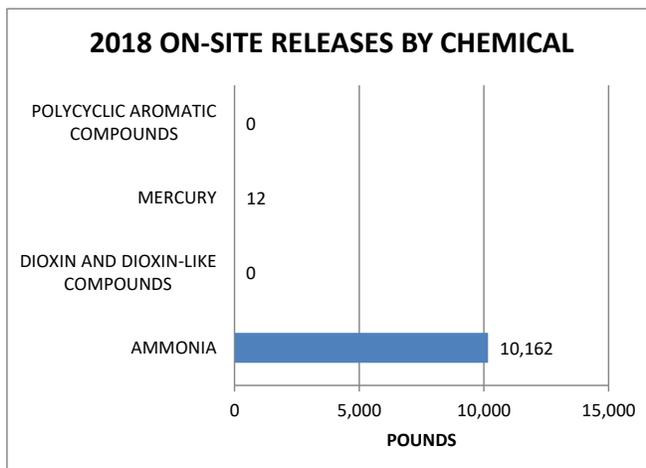
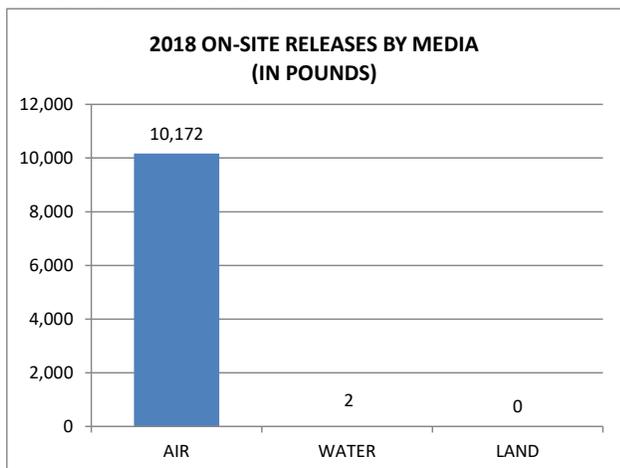
For 2018, the facility reported on 4 chemicals, ammonia, mercury, polycyclic aromatic compounds (PACs) and dioxin and dioxin like compounds (DLCs), with on-site releases mostly to air. All the chemicals released except ammonia are formed as by-products during combustion process due to impurities in the fuel. Ammonia is utilized at the facility for pollution control.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	10,160	2	0	10,162	132	0	NO	NO
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0.004222	0.000000	0.000000	0.004222	0.000000	0.000000	YES	NO
MERCURY	11.8000	0.0100	0.0000	11.8100	0.1000	0.0000	YES	NO
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	YES	YES
TOTAL	10,172	2	0	10,174	132	0		

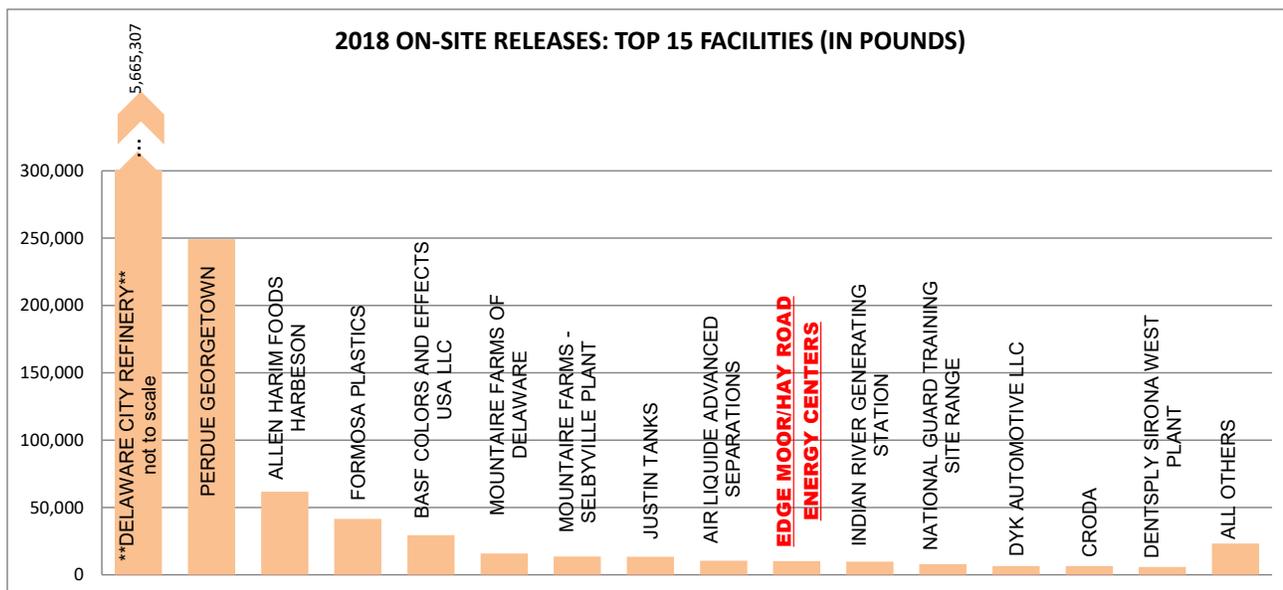
## EDGE MOOR/HAY ROAD ENERGY CENTERS, CONT.

### GRAPHICAL INFORMATION:



**EDGE MOOR/HAY ROAD ENERGY CENTERS, CONT.**

**COMPARISON TO OTHER DELAWARE TRI FACILITIES:**



**NOTABLE 2018 NATIONAL RANKINGS:**

Edge Moor-Hay Road Energy Centers ranks 21st for on-site releases of mercury from electric utility facilities (NAICS code 2211) (out of 23 facilities).



## TRI FACILITY PROFILES

### FORMOSA PLASTICS

#### LOCATION/CONTACT:

Address: 780 Schoolhouse Road  
Delaware City, DE 19706

Phone: (973)-716-7257

Contact: Thomas Andersen



#### FACILITY OVERVIEW:

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

The facility has reported since 1987, and ceased operations in August of 2018. Formosa reported on four TRI chemicals for 2018; vinyl acetate monomer, vinyl chloride monomer, ammonia, and dioxins and dioxin-like compounds. Vinyl acetate monomer (VAM) is a raw material used in certain products and is released through the drying process. Vinyl chloride monomer (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. Trace amounts of dioxins and dioxin-like compounds were detected in the plant emissions (0.000005 pounds) and waste and recycled solids (0.000232 pounds), possibly the result of on-site incineration of waste gases. Scrubber water from the incinerator is processed by the wastewater treatment system.

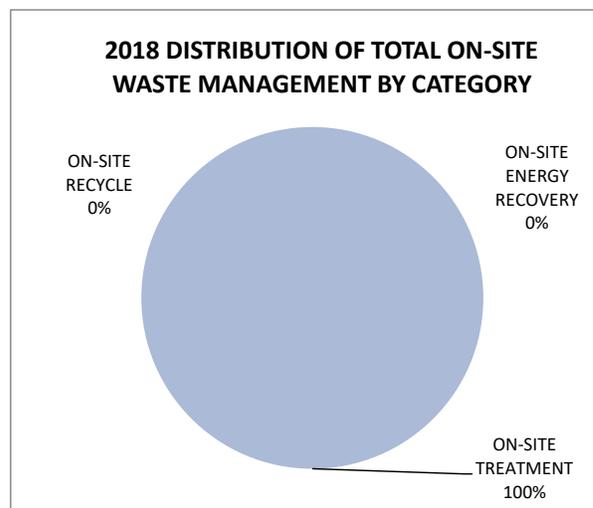
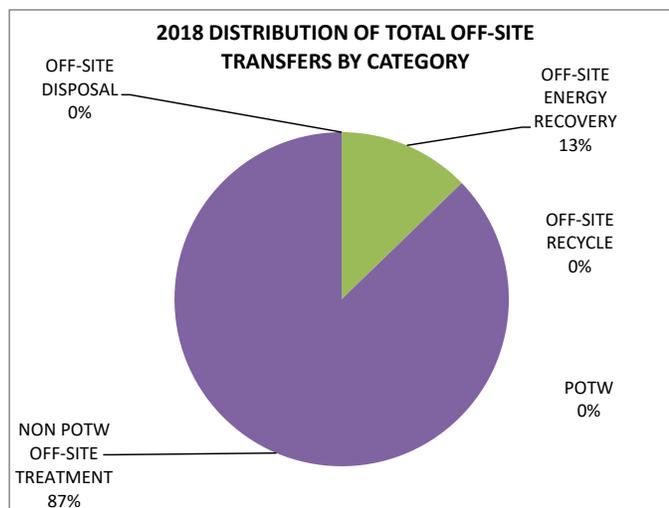
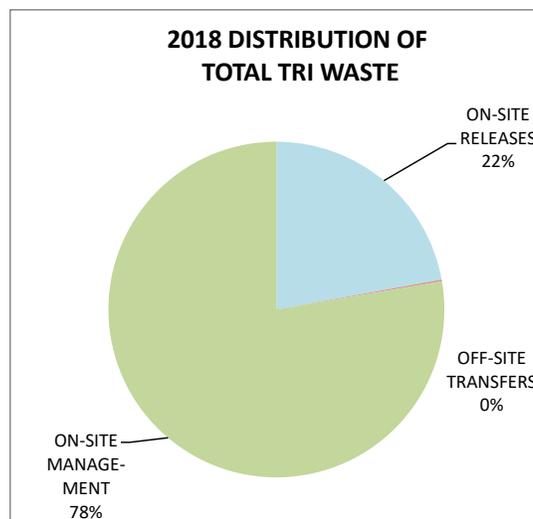
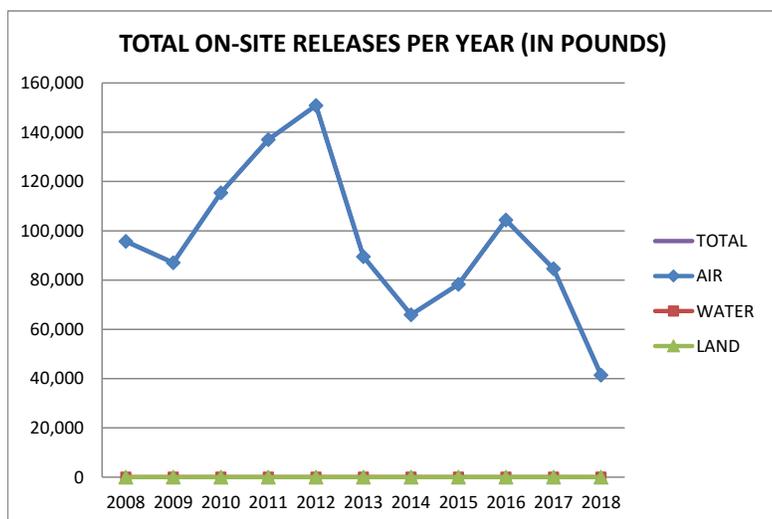
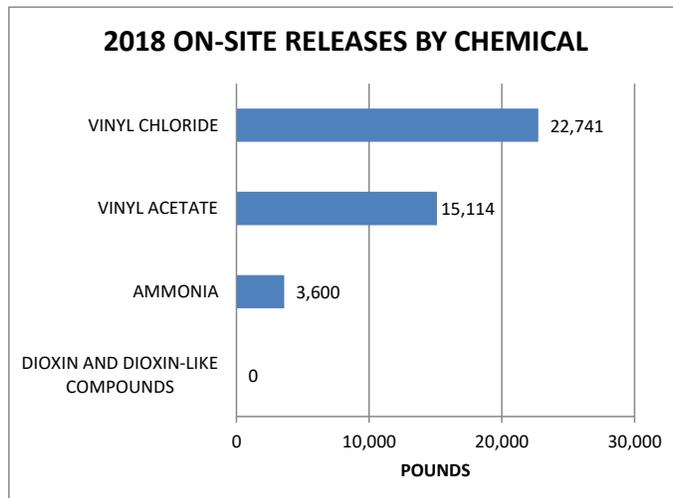
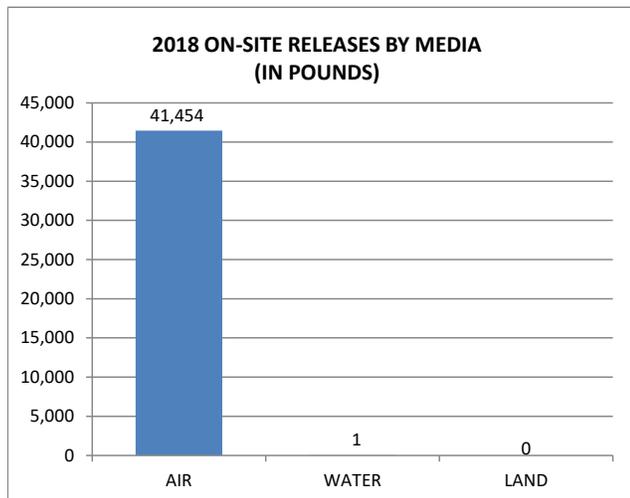
For 2018, total on-site releases were down 51%, compared to 2017.

#### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	3,600	0	0	3,600	0	7,200	NO	NO
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0.000005	0.000000	0.000000	0.000005	0.000232	0.000000	YES	NO
VINYL ACETATE	15,114	0	0	15,114	112	3,700	NO	YES
VINYL CHLORIDE	22,740	1	0	22,741	221	134,600	NO	YES
TOTAL	41,454	1	0	41,455	333	145,500		

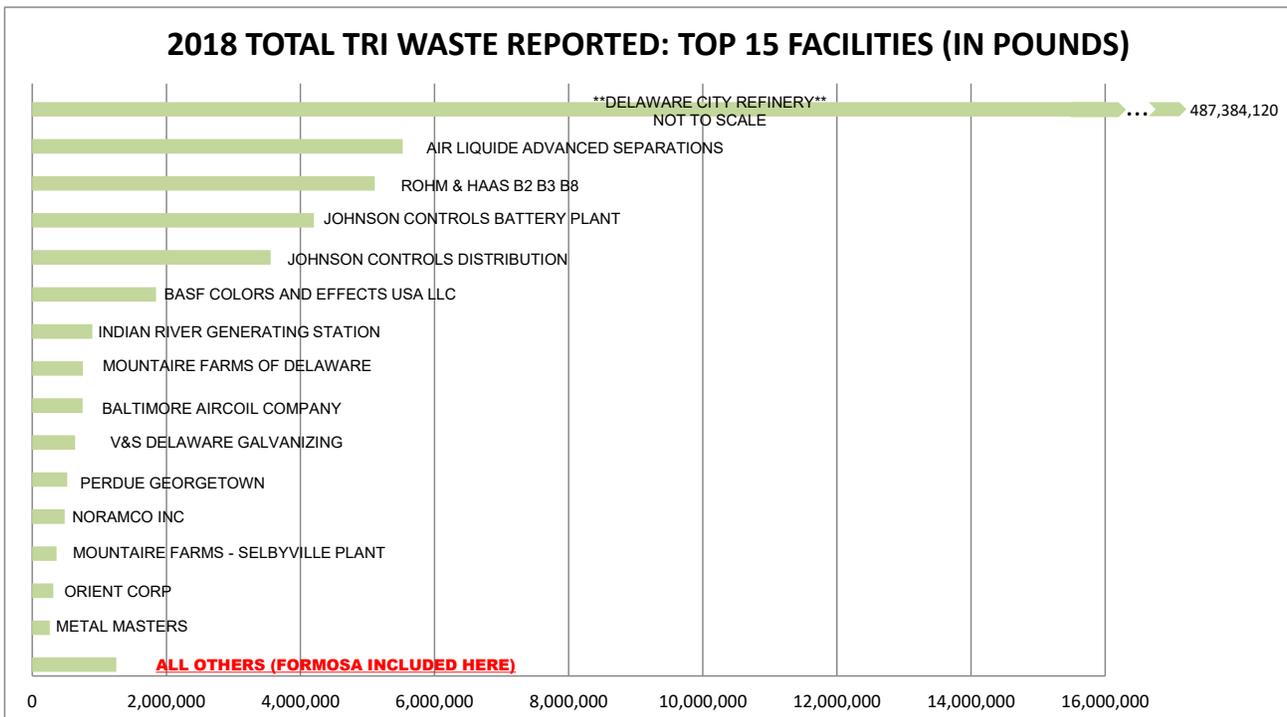
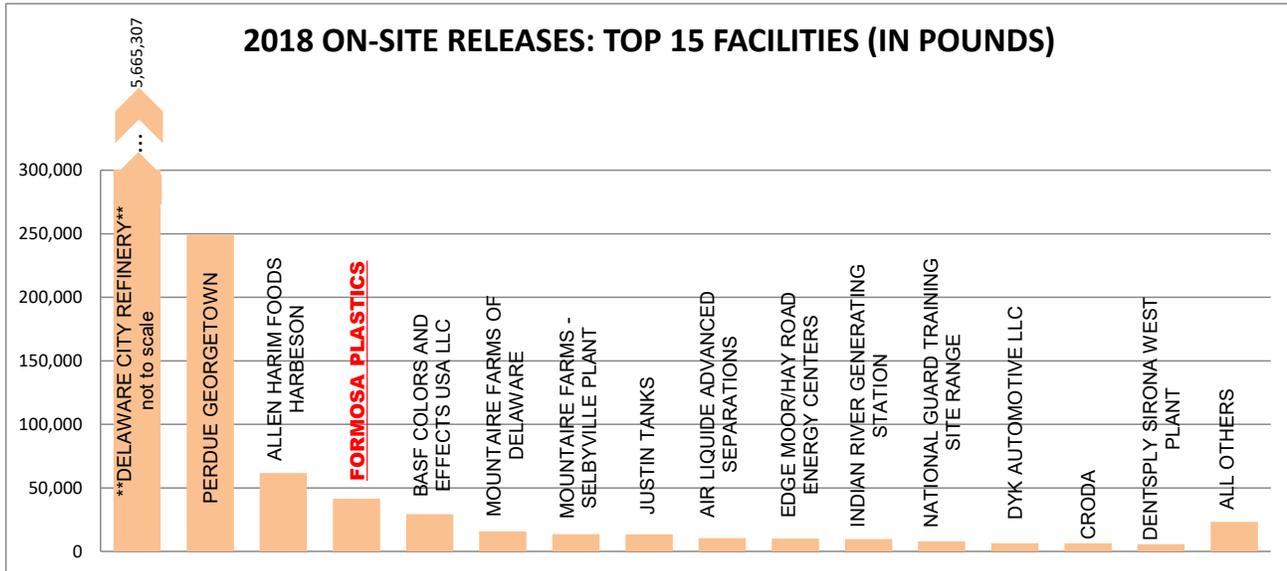
## FORMOSA PLASTICS, CONT.

### GRAPHICAL INFORMATION:



## FORMOSA PLASTICS, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Formosa Plastics ranks 6th in the nation for on-site releases of vinyl chloride (out of 38 facilities).

Formosa Plastics ranks 20th in the nation for on-site releases of vinyl acetate (out of 139 facilities).

Formosa Plastics ranks 15th in the nation for on-site treatment of vinyl chloride (out of 38 facilities).

**FUJIFILM**

**LOCATION/CONTACT:**

Address: 233 Cherry Lane  
New Castle, DE 19720

Phone: (302) 472-1257

Contact: Maureen Concordia



**FACILITY OVERVIEW:**

FujiFilm Imaging Colorants, Inc. produces both purified dye or inks, as well as several raw material intermediates used in the manufacture of dyes and inks. The processes are essentially a series of physical chemical steps involving no complex chemical reactions (i.e. exothermic) requiring significant process safety precautions.

The facility has reported since 1993, previously as Avecia; but did not report in 2016 and 2017 because they were below the reporting threshold. FujiFilm reported on one chemical in 2018, ethylene glycol on short Form A. The ethylene glycol is added into a vessel with other chemicals to make aqueous ink formulations. The facility started making new products for 2018, which resulted in increased ethylene glycol usage, and brought them above the TRI reporting threshold. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.)

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ETHYLENE GLYCOL*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

**GRAPHICAL INFORMATION:**

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.

**GAC SEAFORD**

**LOCATION/CONTACT:**

Address: 25938 Nanticoke Street  
Seaford, DE 19973

Phone: (813) 248-2101

Contact: Michael Thrasher



**FACILITY OVERVIEW:**

GAC Seaford manufactures asphalt based roof and driveway coatings and repair products. The products are manufactured in a batch process then filled into retail sized containers. The products are palletized and shipped to retail chains across the northeast.

The facility has reported since 1988. GAC Seaford reported one chemical in 2018, trimethylbenzene, on short form A. Trimethylbenzene is listed as a minor/trace component of Mineral Spirits on some supplier safety data sheets. Mineral Spirits are used to thin asphalt to make it flowable at ambient temperatures so it can be used as a cold process coating, sealant, or adhesive in finished products. Mineral spirits are not a generated waste at the site. Any unused mineral spirits from a previous batch are reworked into the next process batch. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.)

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
1,2,4-TRIMETHYLBENZENE*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

**GRAPHICAL INFORMATION:**

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.



## TRI FACILITY PROFILE

### GRIFFITH ENERGY -CARL KING

#### LOCATION/CONTACT:

Address: 1400 E. Lebanon Road  
Dover, DE 19901

Phone: (301) 322-6691

Contact: Charlie Raines



#### FACILITY OVERVIEW:

Griffith Energy Services, Inc.-Carl King, Inc. distributes heating oil and bulk stores fuel onsite. The operation involves loading petroleum products onto tank wagons and distributing them to customers. The tank wagons are top loaded in a diked area.

Griffith Energy-Carl King has reported since 1998, previously as Carl King. The facility reported on three chemicals in 2018, (1,2,4-trimethylbenzene, naphthalene, xylene(mixed isomers)), with all chemicals being reported on the short Form A. These chemicals are found in the fuels that are sold. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 lbs. to be eligible to submit a Form A report.)

#### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
1,2,4-TRIMETHYLBENZENE*	0	0	0	0	0	0	NO	NO
NAPHTHALENE*	0	0	0	0	0	0	NO	YES
XYLENE (MIXED ISOMERS)*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

#### GRAPHICAL INFORMATION:

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.

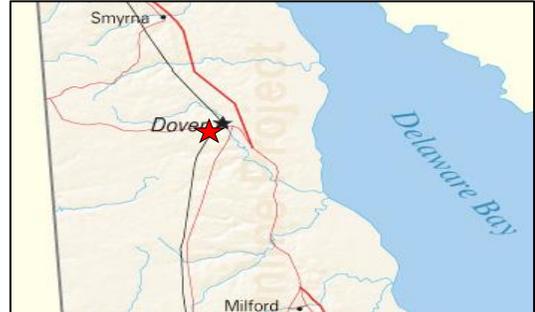
**HANDYTUBE**

**LOCATION/CONTACT:**

Address: 124 Veeco Boulevard  
Camden, DE 19934

Phone: (302)-697-9521

Contact: Rebecca Reimer



**FACILITY OVERVIEW:**

HandyTube Corporation specializes in the production of seamless stainless steel coiled and straight length tubing. These tubes are produced for numerous applications in the Petrochemical, Oil and Gas, Subsea and Downhole, Geothermal, Chromatography, Flow Measurement and Sensing, Medical, Ship Building, Military, Aerospace, Semiconductor and Instrumentation industries. HandyTube produces continuous seamless coils which can be in excess of 6,000 feet. The tubing ranges in size from .020 to 1.0 inch outer diameter.

The facility has reported since 1987, previously as Camdel Metals. Trichloroethylene (TCE) is the primary TRI chemical reported by HandyTube and makes up 100% of the on-site release amount. It is used as a solvent to clean the tubing. After 1994, HandyTube switched to a closed vacuum system for the TCE, which significantly reduced releases to air (92,000 pounds of TCE were released to air in 1994). HandyTube has continued to make improvements to the closed vacuum system that have further reduced TCE releases to air. In 2017, the facility added its first nonhazardous coil degreaser whereby fewer coils run through the TCE degreaser, resulting in continued TCE reductions. The facility reported a 66% reduction in releases to air, in both 2017 and 2018, compared to 2016.

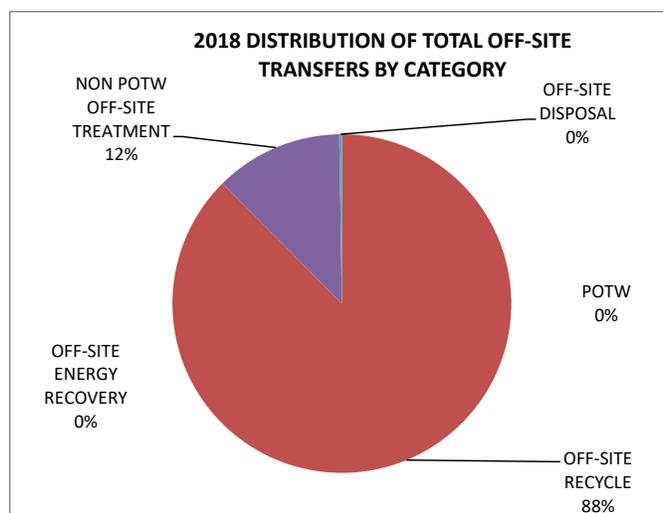
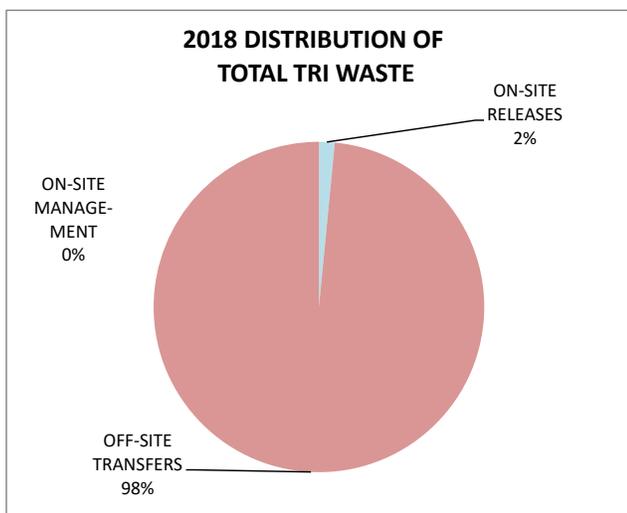
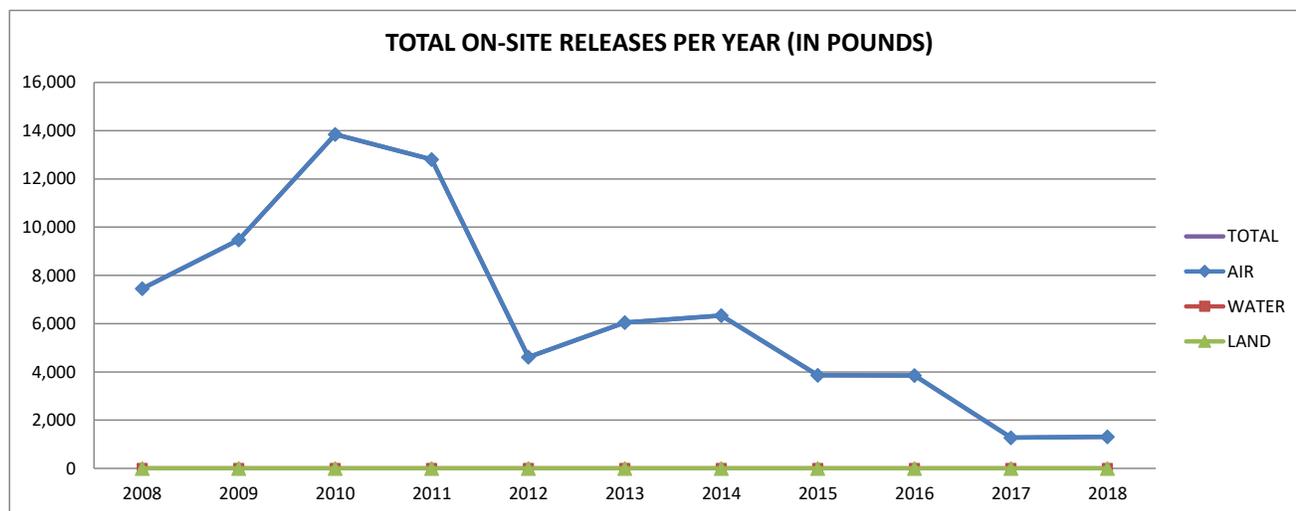
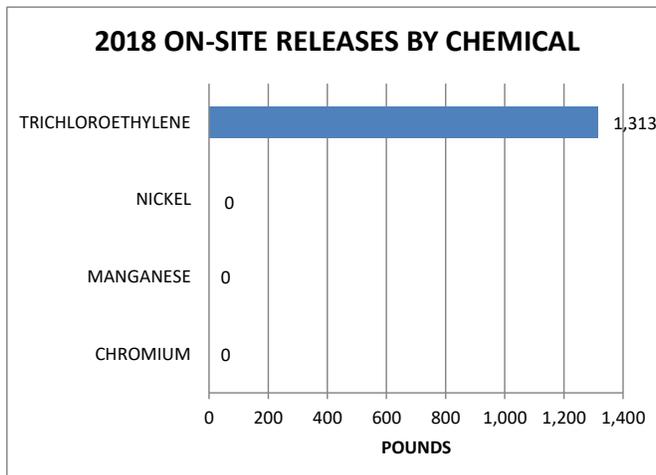
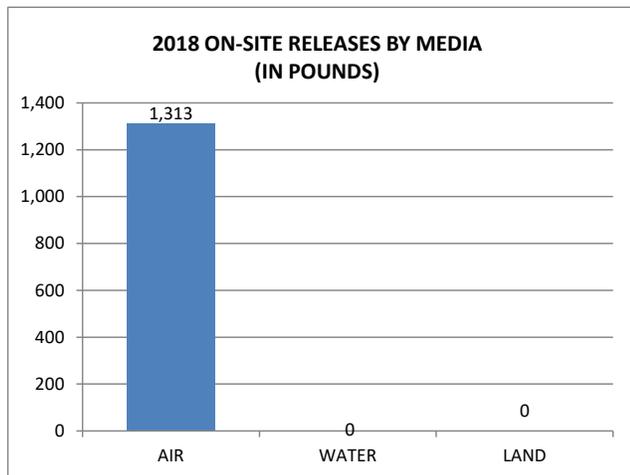
Of the scrap metal generated at the facility, over 99% is sent off site for recycle.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHROMIUM	0	0	0	0	35,287	0	NO	NO
MANGANESE	0	0	0	0	3,535	0	NO	NO
NICKEL	0	0	0	0	35,211	0	NO	YES
TRICHLOROETHYLENE	1,313	0	0	1,313	10,295	0	NO	YES
TOTAL	1,313	0	0	1,313	84,328	0		

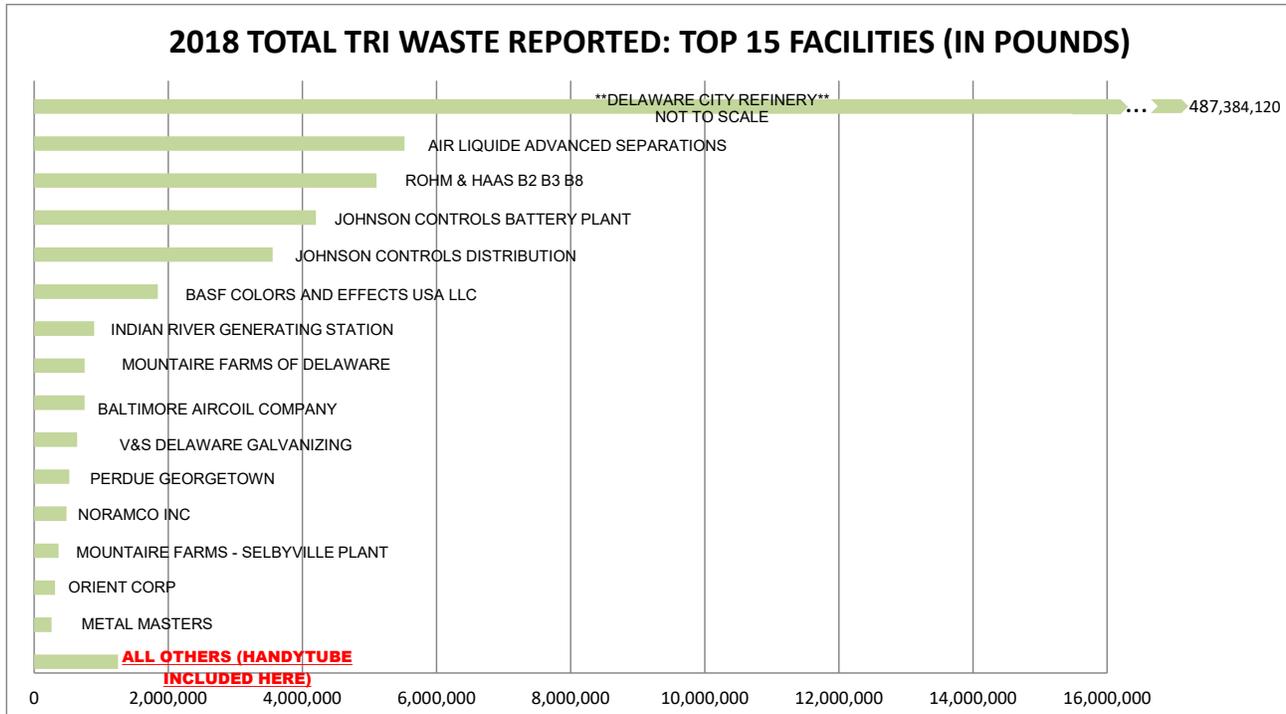
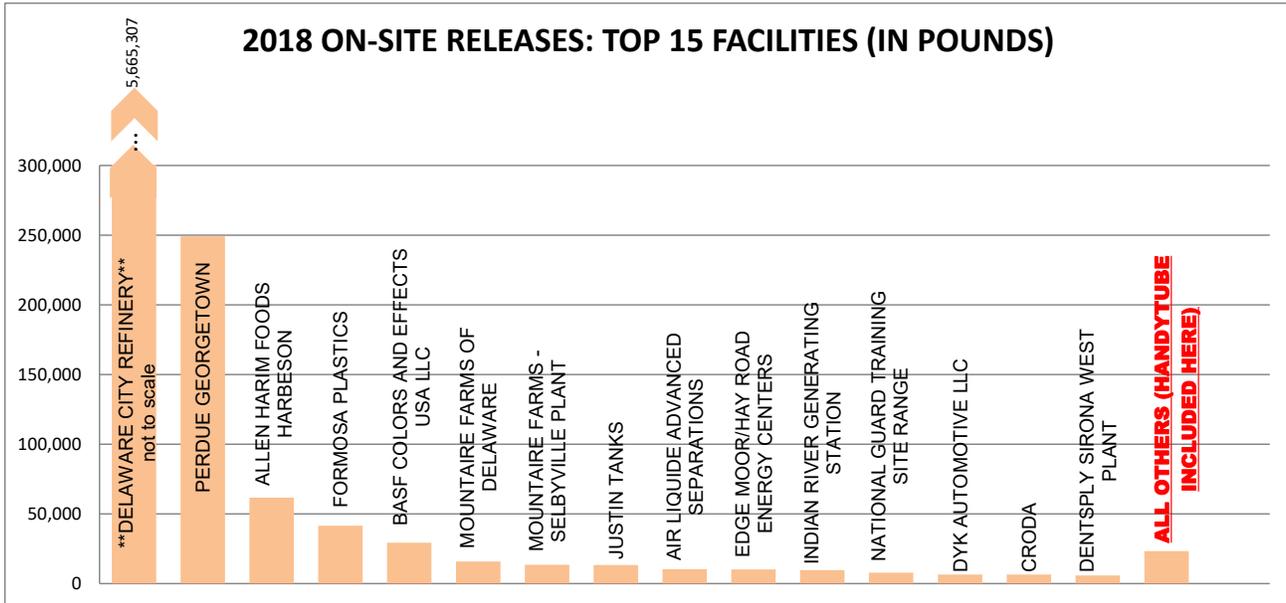
## HANDYTUBE, CONT.

### GRAPHICAL INFORMATION:



## HANDYTUBE, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

HandyTube ranks 67th in the nation for on-site releases of trichloroethylene (out of 144 facilities).

## HANESBRANDS

**LOCATION/CONTACT:**

Address: 631 Ridgley Street  
Dover, DE 19904

Phone: (336)-519-2582

Contact: David Swicegood



**FACILITY OVERVIEW:**

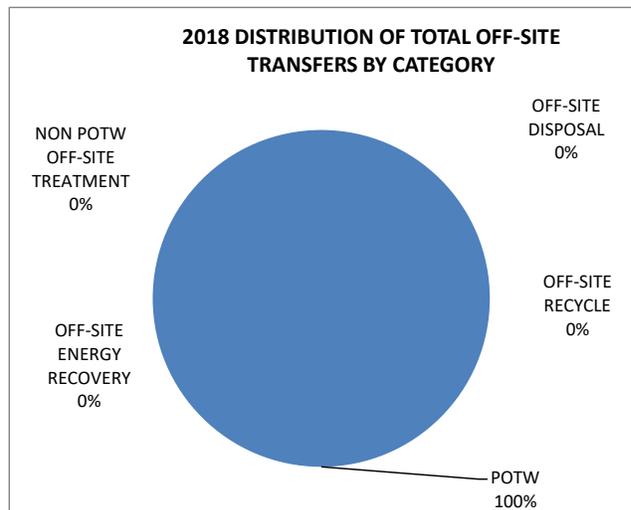
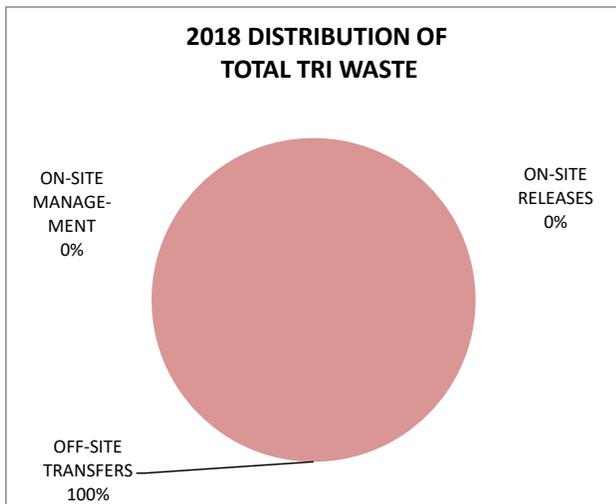
Hanesbrands makes the 18-Hour material for the Playtex 18-Hour Bras. By compounding the latex with different chemicals, a rubber latex is produced. This latex is placed on an engraved roll which then goes through a process which coats the rubber latex with adhesive, and nylon fabric is adhered to both sides to create the 18-Hour material.

Hanesbrands has reported since 2003, formerly as Sara Lee Apparel and Playtex Apparel. The facility ceased operations in 2018. Hanesbrands reported on one chemicals in 2018, nitrate compounds. Nitrate Compounds are a by-product of compounding the latex and are transferred off-site for treatment.

**2018 TRI DATA (REPORTED IN POUNDS):**

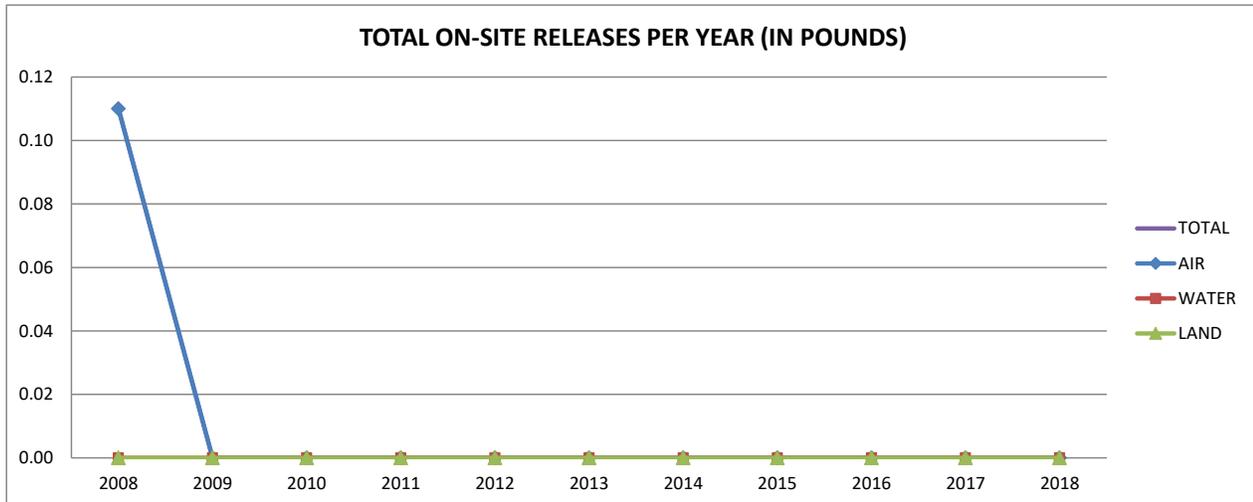
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
NITRATE COMPOUNDS	0	0	0	0	25,237	0	NO	NO
TOTAL	0	0	0	0	25,237	0		

**GRAPHICAL INFORMATION:**

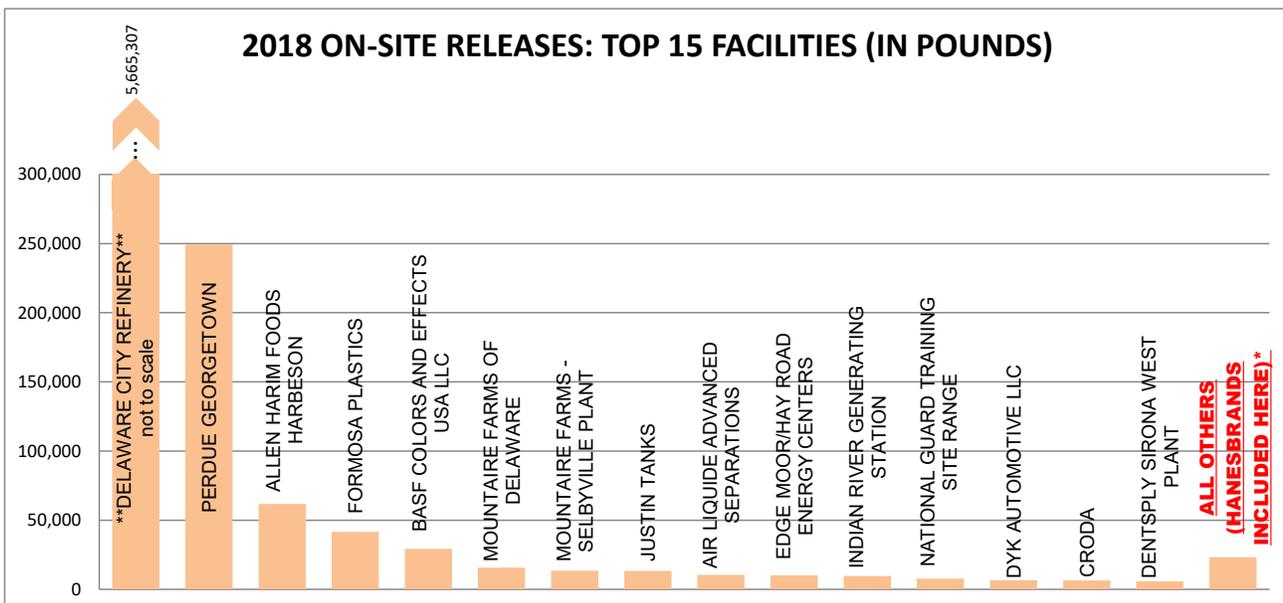


## HANESBRANDS, CONT.

### GRAPHICAL INFORMATION CONT.:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



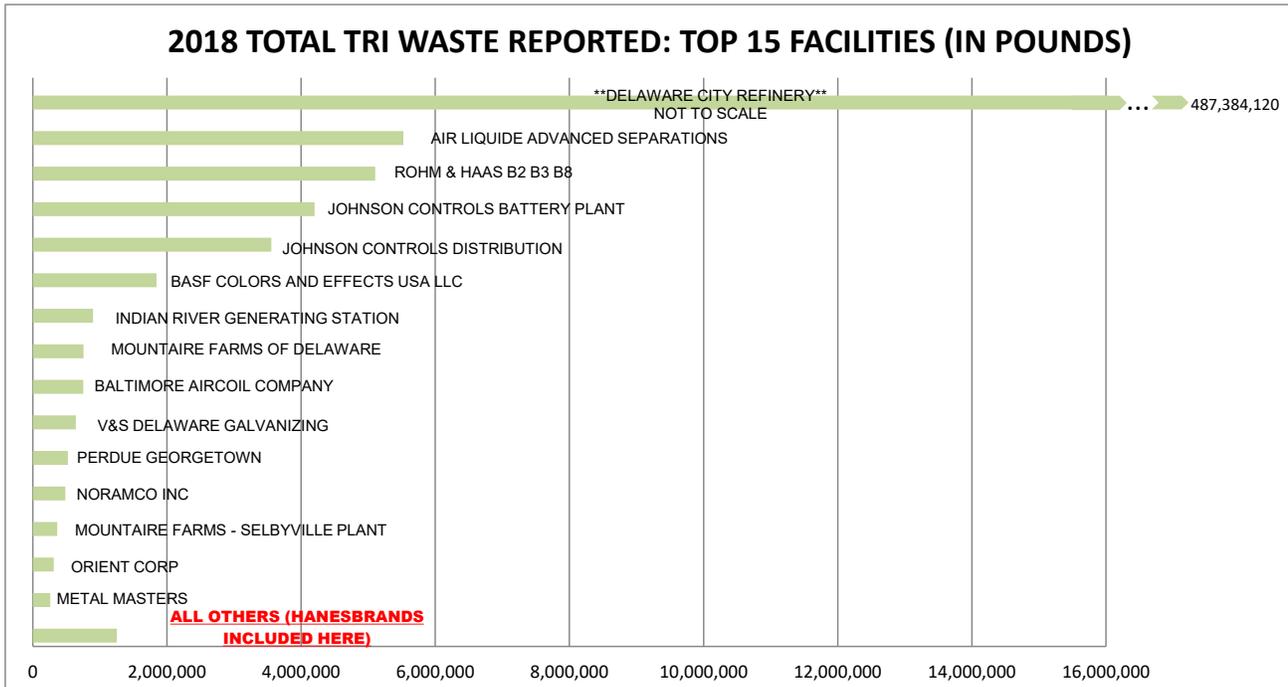
\*Hanesbrands ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site. Comparisons only include facilities reporting on Form R.



# TRI FACILITY PROFILES

## HANESBRANDS, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:



### NOTABLE 2018 NATIONAL RANKINGS:

Hanesbrands ranks 2nd in the off-site transfer of nitrate compounds for textile facilities (NAICS 313/314) (out of 7 facilities).

**HMA HERITAGE CONCRETE-BEAR**

**LOCATION/CONTACT:**

Address: 1250 Porter Road  
Bear, DE 19701

Phone: (717)-236-7023

Contact: John Rice



**FACILITY OVERVIEW:**

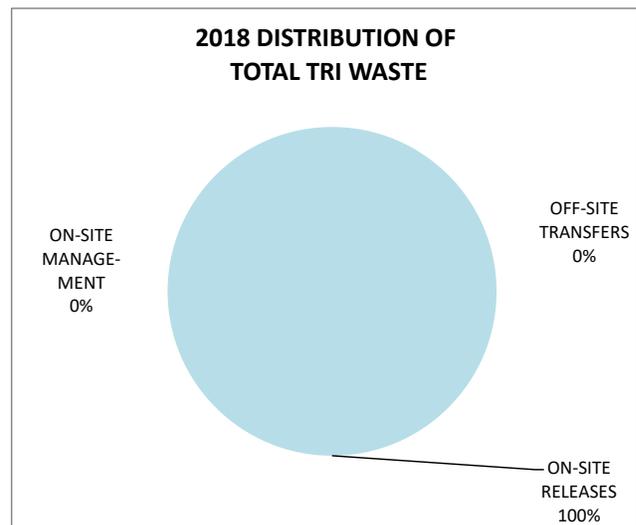
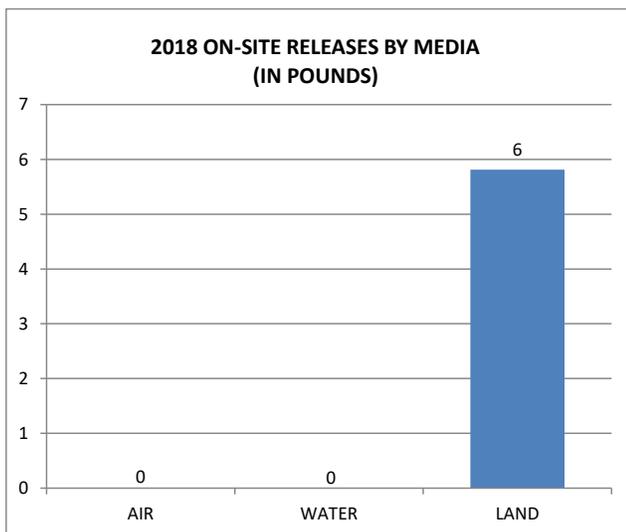
HMA Heritage Concrete reported under the North American Industrial Classification System (NAICS) as 327320, which covers ready-mix concrete manufacturing.

HMA Heritage Concrete has four facilities in Delaware that report to TRI located in Bear, Cheswold, Wilmington, and Middletown. The company first reported to TRI in 2013. These facilities each reported on one chemical in 2018, lead, with on-site releases to air and land. Lead is reported as being processed as an impurity.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	0	0	6	6	0	0	YES	YES
TOTAL	0	0	6	6	0	0		

**GRAPHICAL INFORMATION:**



### HMA HERITAGE CONCRETE-BEAR, CONT.

#### **COMPARISON TO OTHER DELAWARE TRI FACILITIES:**

HMA Heritage Concrete-Bear ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.

HMA Heritage Concrete-Bear ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for about 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

#### **NOTABLE 2018 NATIONAL RANKINGS:**

HMA Heritage Concrete-Bear ranks 123rd in on-site releases of lead for stone/clay/glass facilities (NAICS 327) (out of 903 facilities).

**HMA HERITAGE CONCRETE-CHESWOLD**

**LOCATION/CONTACT:**

Address: 376 Holly Oak Lane  
Cheswold, DE 19936

Phone: (717)-236-7023

Contact: John Rice



**FACILITY OVERVIEW:**

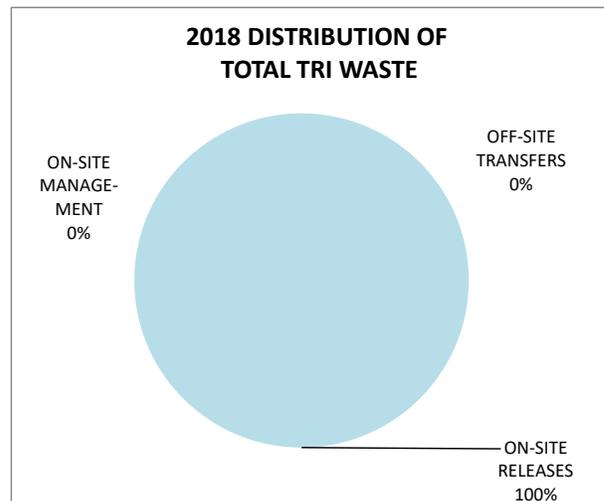
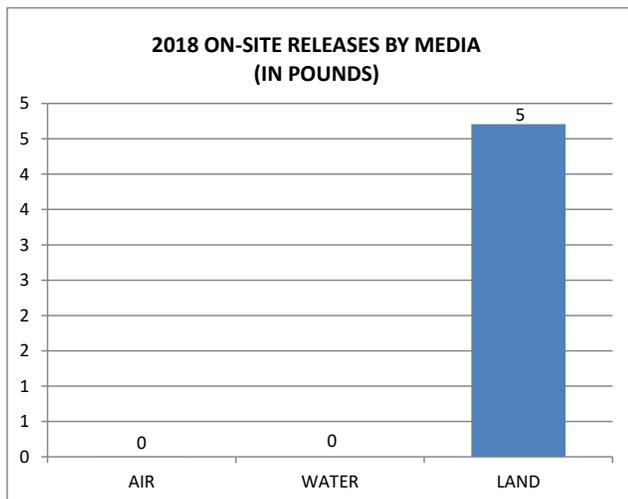
HMA Heritage Concrete reported under the North American Industrial Classification System (NAICS) as 327320, which covers ready-mix concrete manufacturing.

HMA Heritage Concrete has four facilities in Delaware that report to TRI located in Bear, Cheswold, Wilmington, and Middletown. The company first reported to TRI in 2013. These facilities each reported on one chemical in 2018, lead, with on-site releases to air and land. Lead is reported as being processed as an impurity.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	0	0	5	5	0	0	YES	YES
TOTAL	0	0	5	5	0	0		

**GRAPHICAL INFORMATION:**



### HMA HERITAGE CONCRETE-CHESWOLD, CONT.

#### **COMPARISON TO OTHER DELAWARE TRI FACILITIES:**

HMA Heritage Concrete-Cheswold ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.

HMA Heritage Concrete Cheswold ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for about 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

#### **NOTABLE 2018 NATIONAL RANKINGS:**

HMA Heritage Concrete-Cheswold ranks 135th in on-site releases of lead for stone/clay/glass facilities (NAICS 327) (out of 903 facilities).

**HMA HERITAGE CONCRETE-HEALD STREET**

**LOCATION/CONTACT:**

Address: 1100 Heald Street  
Wilmington, DE 19801

Phone: (717)-236-7023

Contact: John Rice



**FACILITY OVERVIEW:**

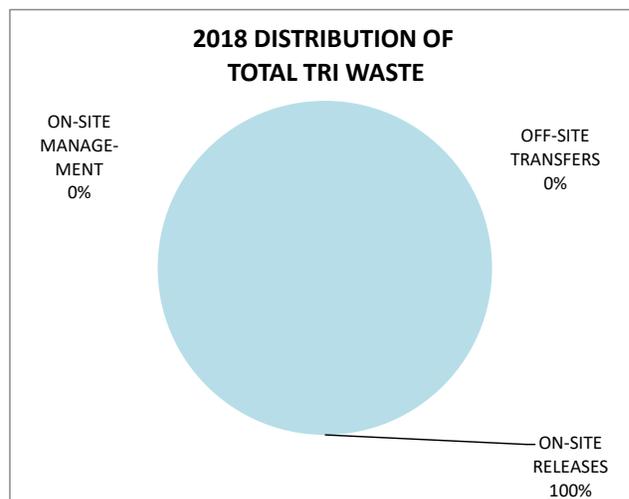
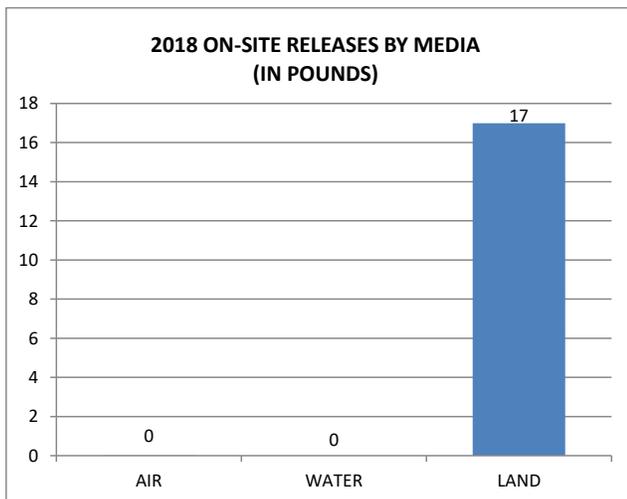
HMA Heritage Concrete reported under the North American Industrial Classification System (NAICS) as 327320, which covers ready-mix concrete manufacturing.

HMA Heritage Concrete has three facilities in Delaware that report to TRI located in Bear, Cheswold, Middletown, and on Heald Street in Wilmington. The company first reported to TRI in 2013. These facilities each reported on one chemical in 2018, lead, with on-site releases to air and land. Lead is reported as being processed as an

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	0	0	17	17	0	0	YES	YES
TOTAL	0	0	17	17	0	0		

**GRAPHICAL INFORMATION:**



## TRI FACILITY PROFILES

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### HMA HERITAGE CONCRETE-HEALD STREET, CONT.

#### **COMPARISON TO OTHER DELAWARE TRI FACILITIES:**

HMA Heritage Concrete-Heald Street ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for about 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

#### **NOTABLE 2018 NATIONAL RANKINGS:**

HMA Heritage Concrete-Heald Street ranks 62nd in on-site releases of lead for stone/clay/glass facilities (NAICS 327) (out of 903 facilities).

**HMA HERITAGE CONCRETE-MIDDLETOWN**

**LOCATION/CONTACT:**

Address: 734 Dexters Corner Road  
Middletown, DE 19734

Phone: (717)-236-7023

Contact: John Rice



**FACILITY OVERVIEW:**

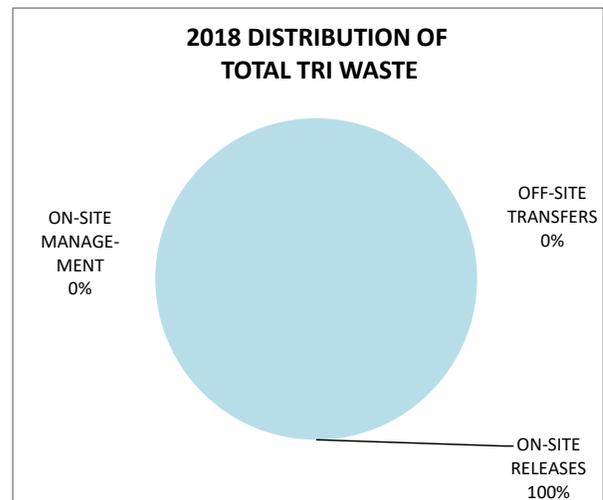
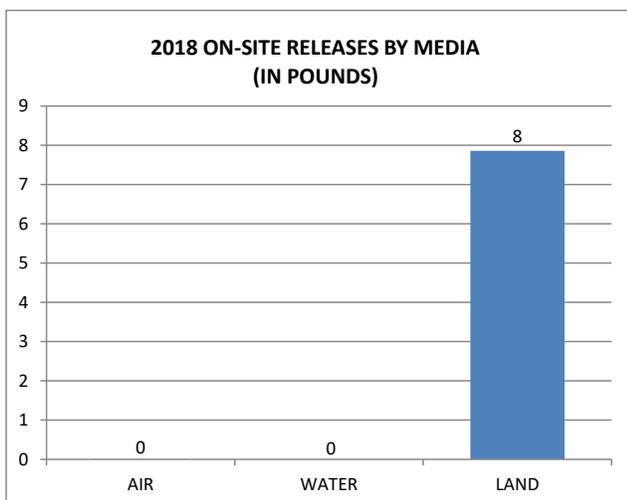
HMA Heritage Concrete reported under the North American Industrial Classification System (NAICS) as 327320, which covers ready-mix concrete manufacturing.

HMA Heritage Concrete has four facilities in Delaware that report to TRI located in Bear, Cheswold, Wilmington, and Middletown. The company first reported to TRI in 2013, with the Middletown facility added in 2018. These facilities each reported on one chemical in 2018, lead, with on-site releases to air and land. Lead is reported as being processed as an impurity.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	0	0	8	8	0	0	YES	YES
TOTAL	0	0	8	8	0	0		

**GRAPHICAL INFORMATION:**



## TRI FACILITY PROFILES

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### HMA HERITAGE CONCRETE-MIDDLETOWN, CONT.

#### **COMPARISON TO OTHER DELAWARE TRI FACILITIES:**

HMA Heritage Concrete-Middletown ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.

HMA Heritage Concrete-Middletown ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for about 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

#### **NOTABLE 2018 NATIONAL RANKINGS:**

HMA Heritage Concrete-Middletown ranks 105th in on-site releases of lead for stone/clay/glass facilities (NAICS 327) (out of 903 facilities).



# TRI FACILITY PROFILES

## HONEYWELL

### LOCATION/CONTACT:

Address: 6100 Philadelphia Pike  
Claymont, DE 19703

Phone: (302)-791-6748

Contact: Russell Davis



### FACILITY OVERVIEW:

Honeywell manufactures specialty chemicals that are used in the production of hydrocarbon resins, lubricants, and adhesives.

The facility has reported since 1987, previously as Allied Signal. Honeywell reported four TRI chemicals for 2018, with on-site releases to air and land. Releases of boron trifluoride and hydrogen fluoride accounted for over 99% of the on-site releases to air, while releases of methanol accounted for less than 1%. These three chemicals are utilized in the manufacture of fluorine based chemicals.

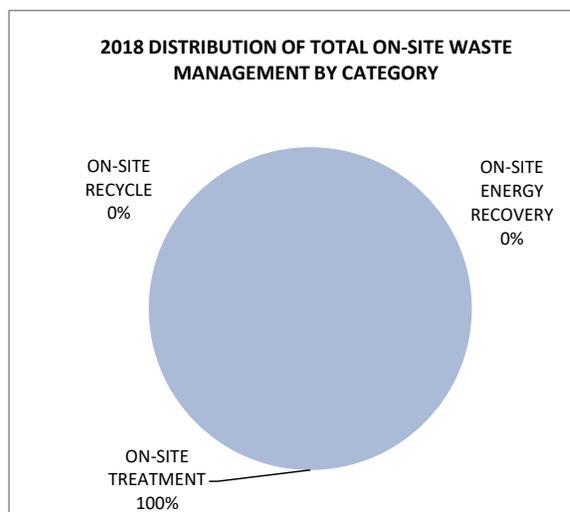
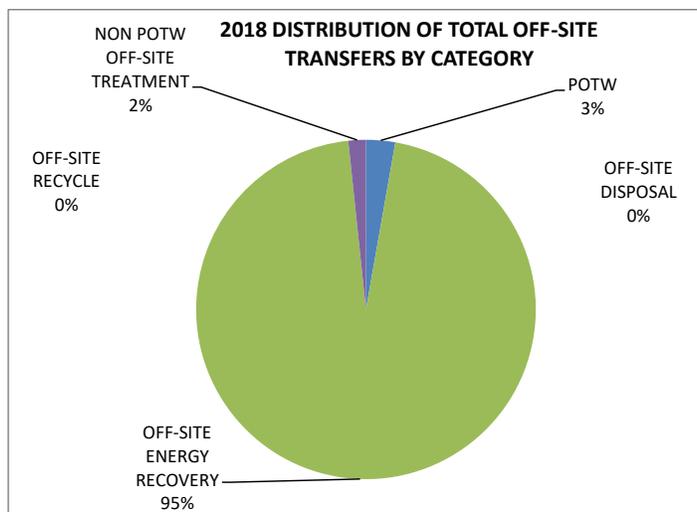
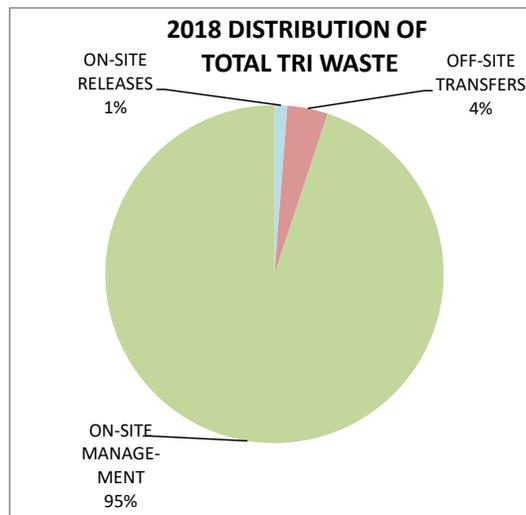
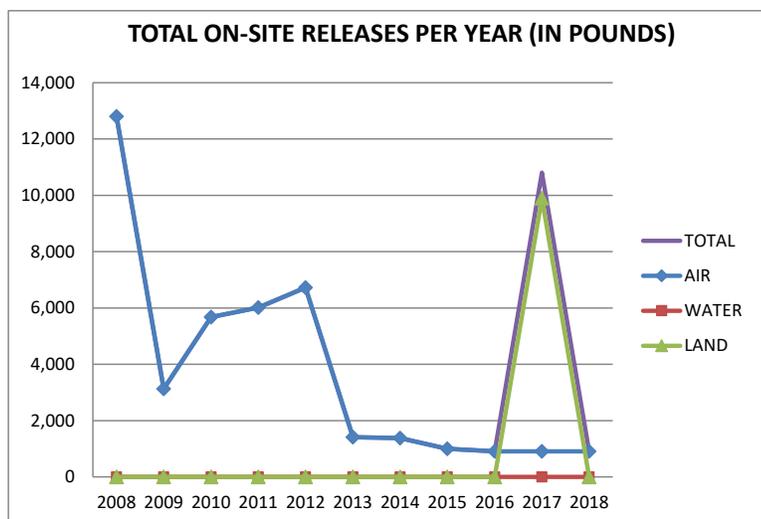
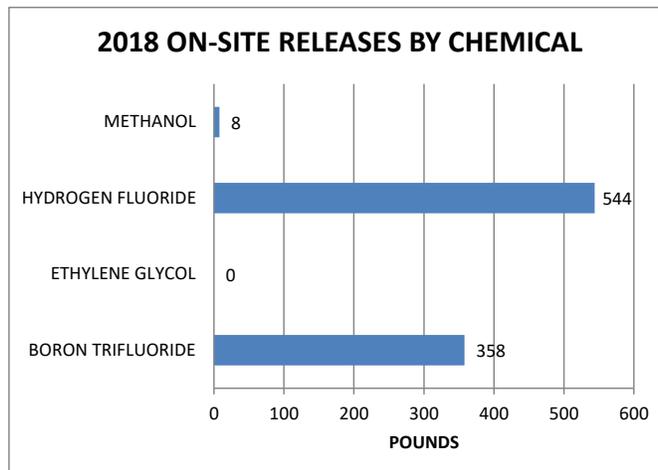
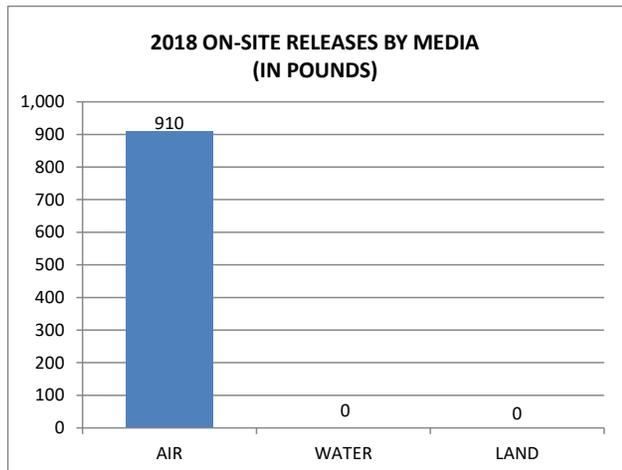
In 2017, Honeywell had a one-time release of ethylene glycol to land due to work on a tank; which resulted in a 92% decrease in total on-site releases for 2018, when compared to 2017. In 2013, Honeywell discontinued the use of hexane and ammonia at the facility, resulting in a significant reduction in on-site releases to air.

### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
BORON TRIFLUORIDE	358	0	0	358	0	70,754	NO	NO
ETHYLENE GLYCOL	0	0	0	0	200	0	NO	NO
HYDROGEN FLUORIDE	544	0	0	544	0	91	NO	NO
METHANOL	8	0	0	8	2,688	0	NO	NO
TOTAL	910	0	0	910	2,888	70,845		

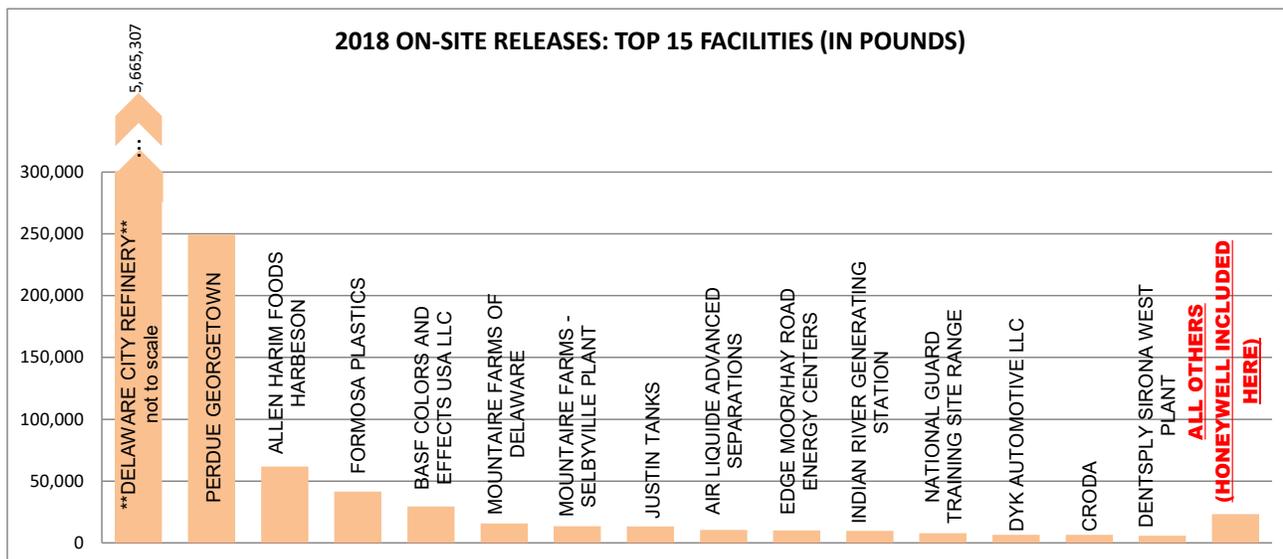
## HONEYWELL, CONT.

### GRAPHICAL INFORMATION:



## HONEYWELL, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Honeywell ranks 4th nationally in on-site releases of boron trifluoride (out of 21 facilities).

## IKO

### LOCATION/CONTACT:

Address: 120 Hay Road  
Wilmington, DE 19809

Phone: (302) 764-3100

Contact: Stephen Heyer



### FACILITY OVERVIEW:

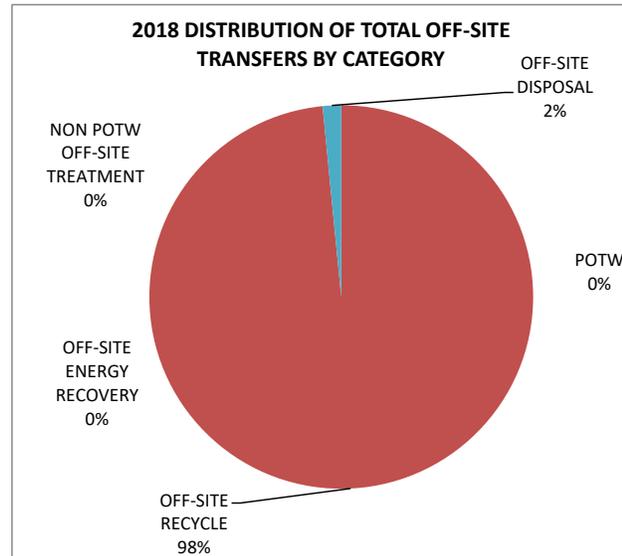
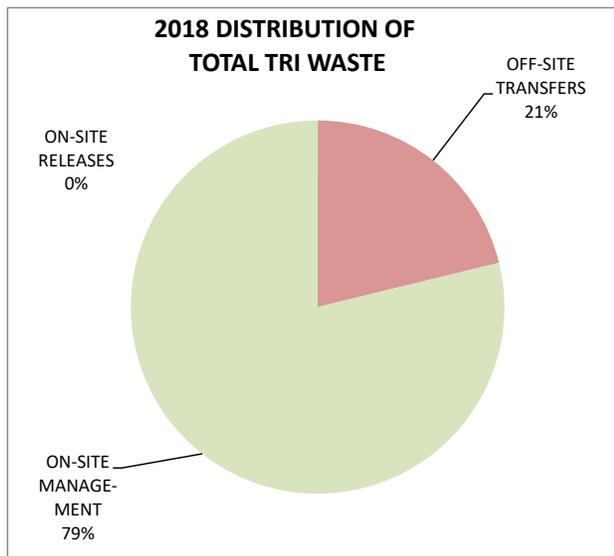
IKO Production, Inc. manufactures residential roofing products, mainly asphalt shingles, which are made from fiberglass mat coated with asphalt and finished with colored roofing granules.

IKO has reported since 2000. The facility reported on one chemical in 2018, polycyclic aromatic compounds (PACs), with 100% of the waste being managed on and off-site. PACs are a byproduct of asphalt, which is a residual petroleum product from crude oil distillation.

### 2018 TRI DATA (REPORTED IN POUNDS):

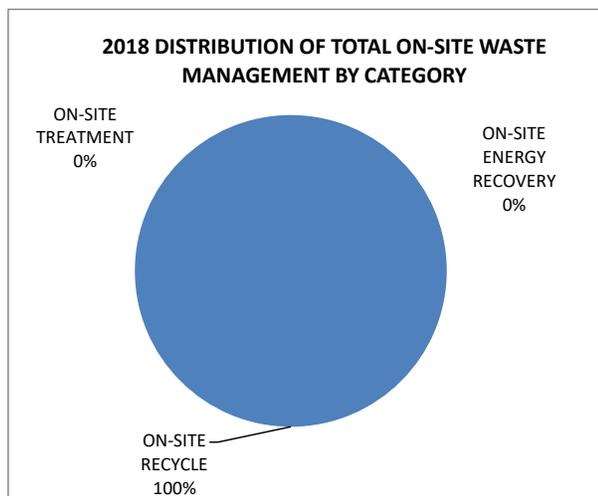
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	148	551	YES	YES
TOTAL	0	0	0	0	148	551		

### GRAPHICAL INFORMATION:



## IKO, CONT.

### GRAPHICAL INFORMATION CONT.:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:

IKO ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.

IKO ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

### NOTABLE 2018 NATIONAL RANKINGS:

IKO ranks 55th in the nation for on-site recycling of polycyclic aromatic compounds (out of 1,614 facilities).

## INDIAN RIVER GENERATING STATION

### LOCATION/CONTACT:

Address: 29416 Power Plant Road  
Dagsboro, DE 19966

Phone: (713)-537-5730

Contact: David Knox



### FACILITY OVERVIEW:

Indian River Generating Station is a 426 megawatt facility that produces electricity, primarily from the combustion of coal. The facility previously consisted of four coal burning units and one combustion turbine. As of 2011, Units #1 and #2 were retired; and Unit #3 was retired at the end of 2013.

For these units, these retirements took place even after additional emission controls and operational strategies were applied. These applications include reduced sulfur content of the coal burned for SO<sub>2</sub> reduction, Activated Carbon Injection (ACI) for Mercury reductions, and Selective Non-Catalytic Reduction (SNCR) for NO<sub>x</sub> reductions. On Unit 4, in addition to SNCR and ACI technology, in 2011 the facility installed a Circulating Dry Scrubber (CDS) with a Baghouse for removal of acid gases including SO<sub>2</sub> and HCl, metals, and particulate matter and Selective Catalytic Reduction (SCR) for NO<sub>x</sub> reductions. These shutdowns, along with the additional controls, and the operation of the facility primarily for peak usage have reduced the overall on-site releases by 99.7% compared to 2008.

The Indian River Generating Station reported on seven TRI chemicals for 2018. Three of these were metal or metal compounds, three were acid gases, and the remaining chemical was ammonia. 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 nitrogen oxide emissions reduction process.

Coal analysis data, emissions data, and emissions factors are used as a basis for calculating releases. This gives 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.

Acid gasses including hydrochloric acid, sulfuric acid, and hydrofluoric acid accounted for 18% of the on-site releases for 2018 compared to 98% in 2011. On-site releases for acid gases in 2018 decreased by 37% compared to 2017, and by 99% compared to 2013. These decreases are due to the acid gases being treated on-site by the CDS control technology, to the shutdown of Unit 3, and to the operation of the facility primarily on peak electrical usage days.

Metal compounds, formed as a result of impurities in the coal, are largely captured (99.4%) in the fly ash and bottom ash. Coal ash is disposed of in the on-site landfill, which includes a liner system and leachate collection. For 2018, chromium, copper, manganese, and zinc compounds were below the reporting threshold.

# TRI FACILITY PROFILES

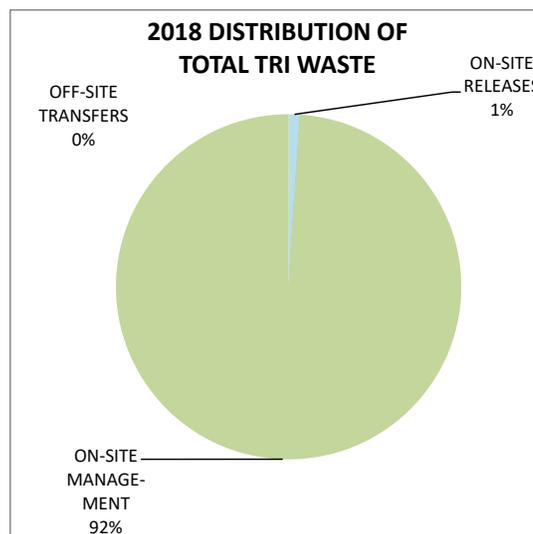
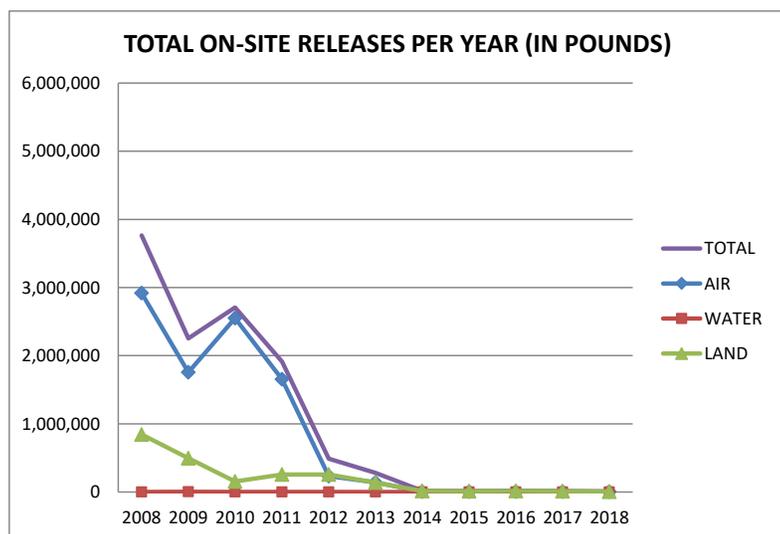
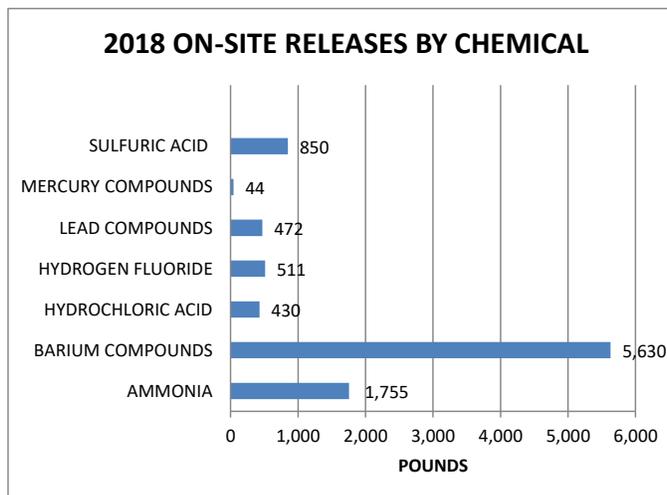
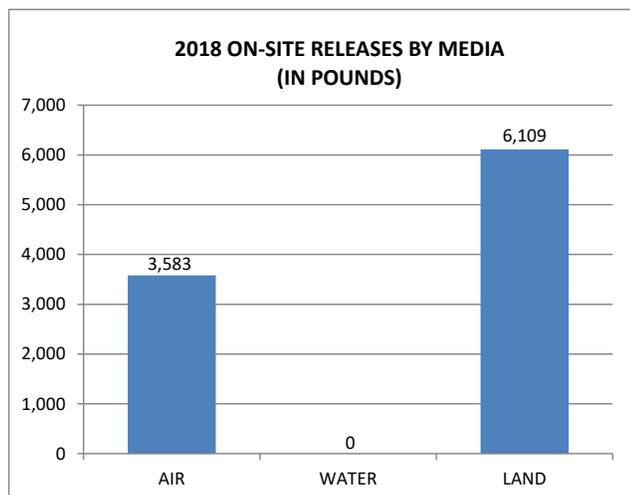


## INDIAN RIVER GENERATING STATION, CONT.

### 2018 TRI DATA (REPORTED IN POUNDS):

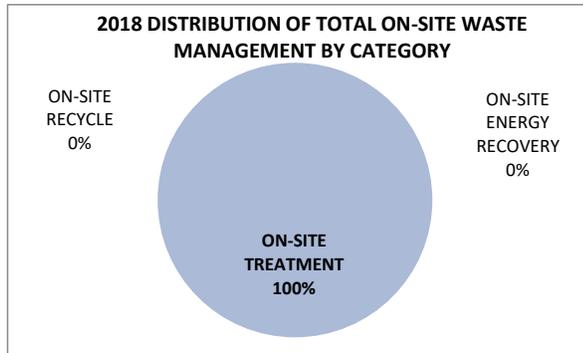
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	1,755	0	0	1,755	0	38,446	NO	NO
BARIUM COMPOUNDS	25	0	5,605	5,630	2	0	NO	NO
HYDROCHLORIC ACID	430	0	0	430	0	330,135	NO	NO
HYDROGEN FLUORIDE	511	0	0	511	0	37,936	NO	NO
LEAD COMPOUNDS	10	0	462	472	1	0	YES	YES
MERCURY COMPOUNDS	1.6000	0.0000	42.3000	43.9000	0.0000	0.0000	YES	NO
SULFURIC ACID	850	0	0	850	0	479,362	NO	NO
<b>TOTAL</b>	<b>3,583</b>	<b>0</b>	<b>6,109</b>	<b>9,692</b>	<b>3</b>	<b>885,879</b>		

### GRAPHICAL INFORMATION:

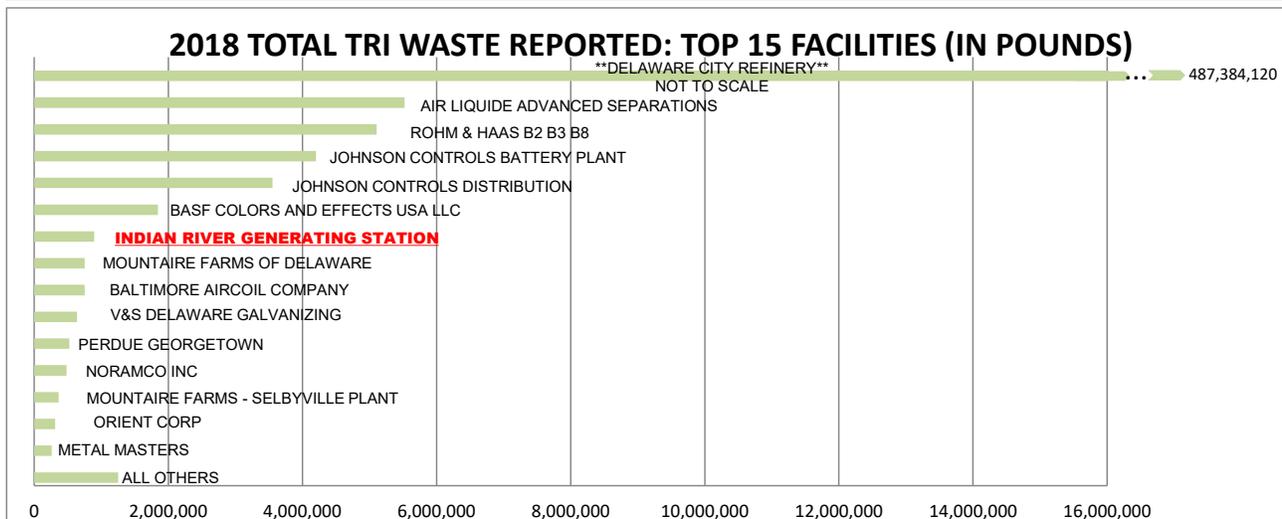
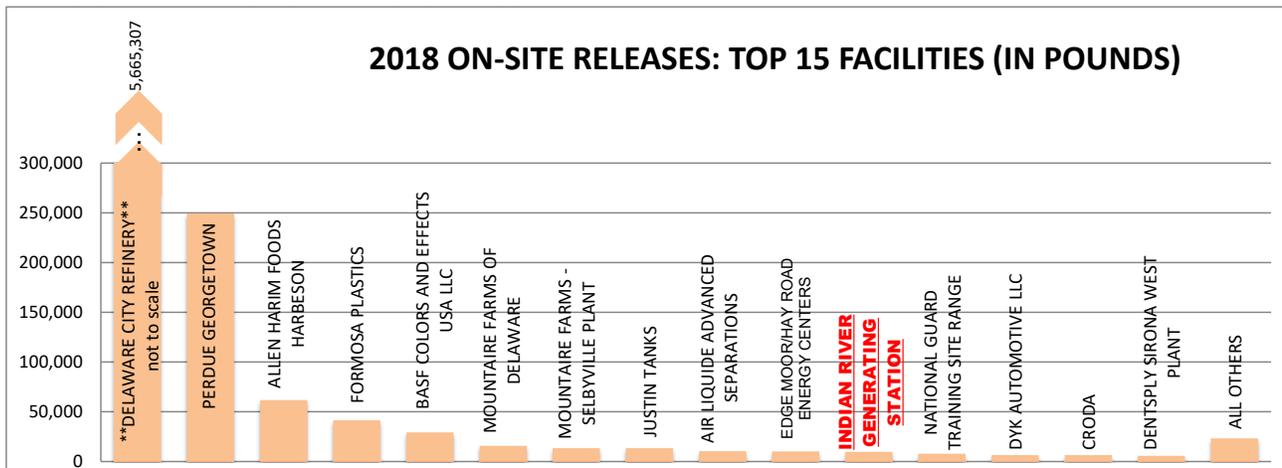


## INDIAN RIVER GENERATING STATION, CONT.

### GRAPHICAL INFORMATION CONT.:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

The Indian River Generating Station ranks 87th in on-site treatment of sulfuric acid aerosol by electric utility facilities (NAICS 2211) (out of 237 facilities).

The Indian River Generating Station ranks 108th in on-site treatment of hydrochloric acid aerosol by electric utility facilities (NAICS 2211) (out of 246 facilities).

## INTERVET

**LOCATION/CONTACT:**

Address: 29160 Intervet Lane  
Millsboro, DE 19966

Phone: (302) 934-4043

Contact: Eric Seward



**FACILITY OVERVIEW:**

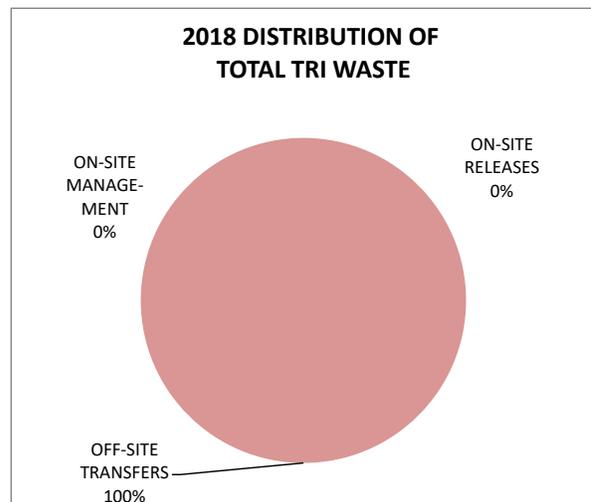
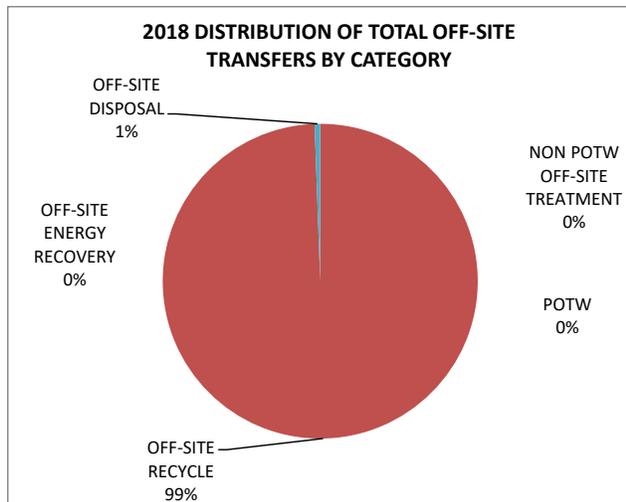
Intervet reported under the North American Industrial Classification System (NAICS) as 325414, which covers biological product manufacturing. The facility, located in Millsboro, is a fully integrated Animal Health site dedicated to the bio-manufacturing of animal vaccines.

Intervet has reported since 2000. The facility reported on one chemical, mercury compounds. All waste reported for mercury compounds were transferred off-site for recycle or disposal. Mercury compounds are utilized in the production of vaccines (Thimerosal) as a preservative, and mercury containing light bulbs are at the site.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
MERCURY COMPOUNDS	0.0000	0.0000	0.0000	0.0000	71.4064	0.0000	YES	NO
TOTAL	0	0	0	0	71	0		

**GRAPHICAL INFORMATION:**





### INTERVET, CONT.

#### **COMPARISON TO OTHER DELAWARE TRI FACILITIES:**

Intervet ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.

Intervet ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

#### **NOTABLE 2018 NATIONAL RANKINGS:**

Intervet ranks 10th in the off-site transfer of mercury compounds for chemical facilities (NAICS 325) (out of 90 facilities).



## TRI FACILITY PROFILES

### JOHNSON CONTROLS BATTERY PLANT

**LOCATION/CONTACT:**

Address: 700 N. Broad Street  
Middletown, DE 19709

Phone: (260)-740-9336

Contact: Stephen Garrett



**FACILITY OVERVIEW:**

Johnson Controls Battery Plant manufactures the internal lead parts of batteries that are formed and filled 1.5 miles away at their Middletown Distribution Center, before being shipped to customers. These completed batteries are used in a wide variety of vehicle types including passenger, commercial, agricultural, golf carts, and boats.

Johnson Controls Battery plant has reported since 1987. The facility reported on two chemicals in 2018, with on-site releases of lead compounds to air and water. Lead compounds are utilized in the manufacturing of the battery’s internal (positive and negative) plates, and for completing the circuit between these plates throughout the battery. The other chemical reported was antimony compounds, an impurity within the lead received from smelters, which is recycled off-site. The facility assumes worst case for this impurity, which is 3% of all lead.

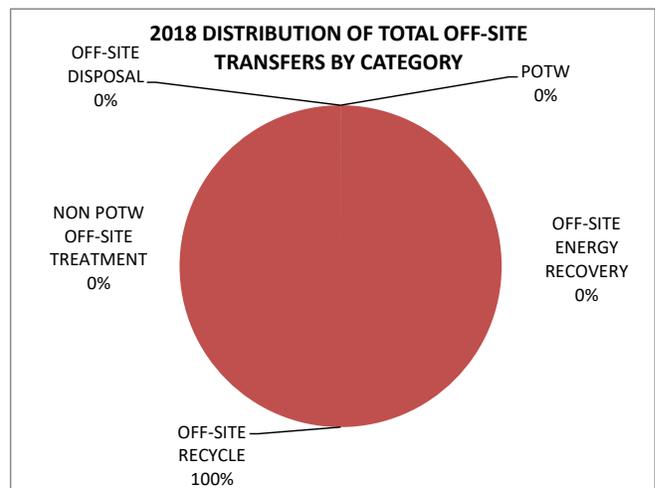
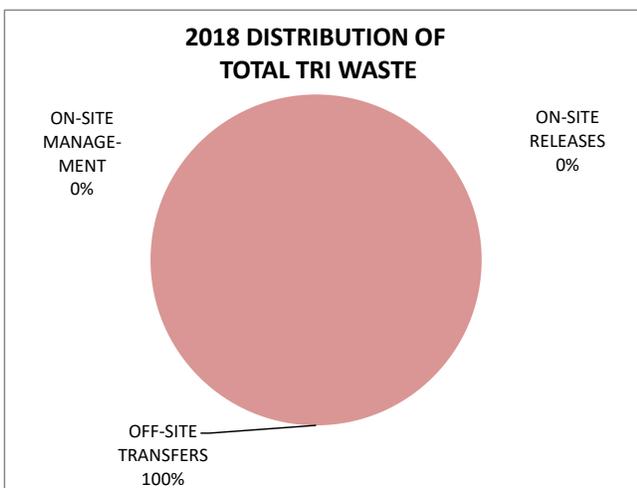
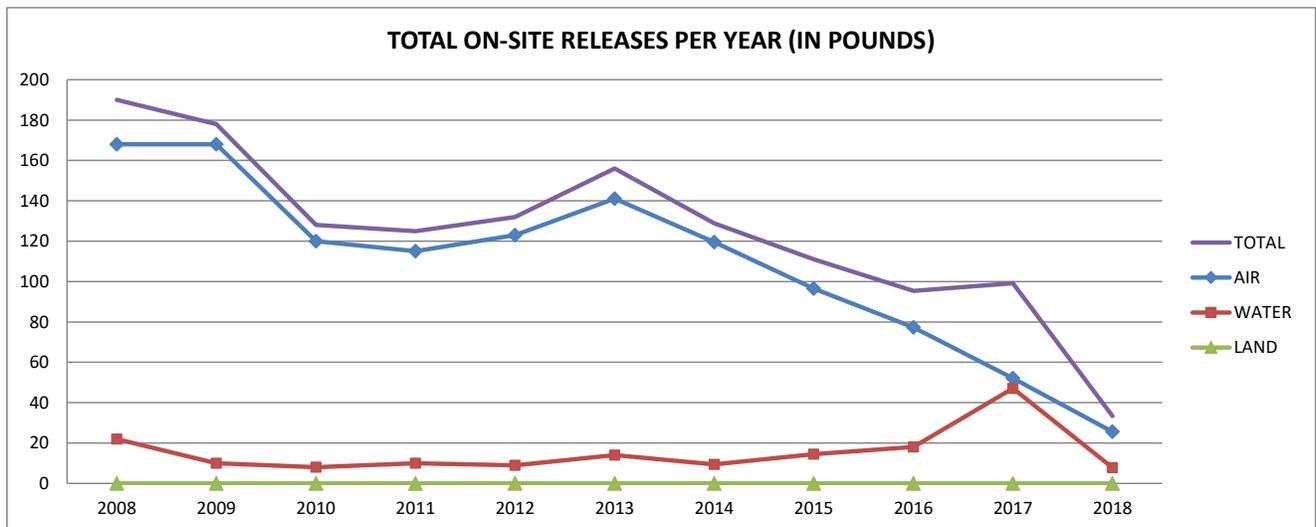
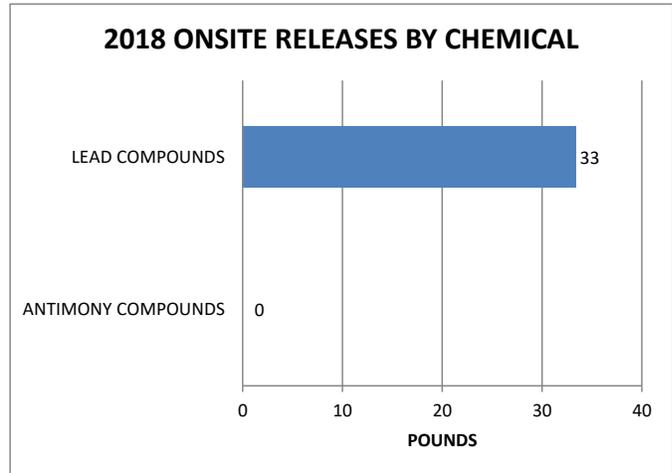
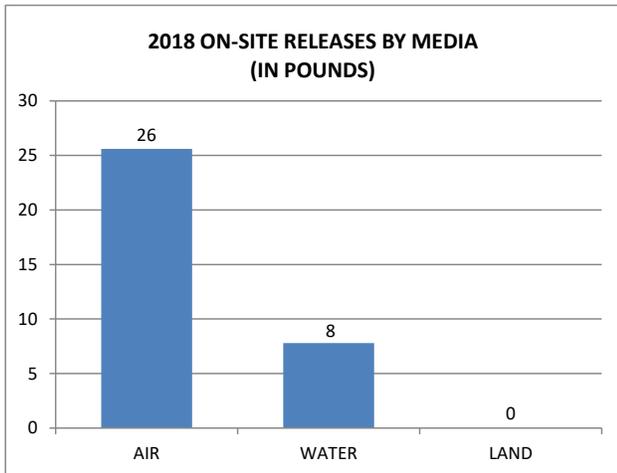
The majority of waste is sent off-site for recycling, with less than 0.01 % being released on-site. On-site releases for 2018 decreased by 66% compared to 2017 (see *Total On-site Releases Per Year Graph* on the next page).

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ANTIMONY COMPOUNDS	0	0	0	0	17,120	0	NO	NO
LEAD COMPOUNDS	26	8	0	33	4,183,816	0	YES	YES
TOTAL	26	8	0	33	4,200,936	0		

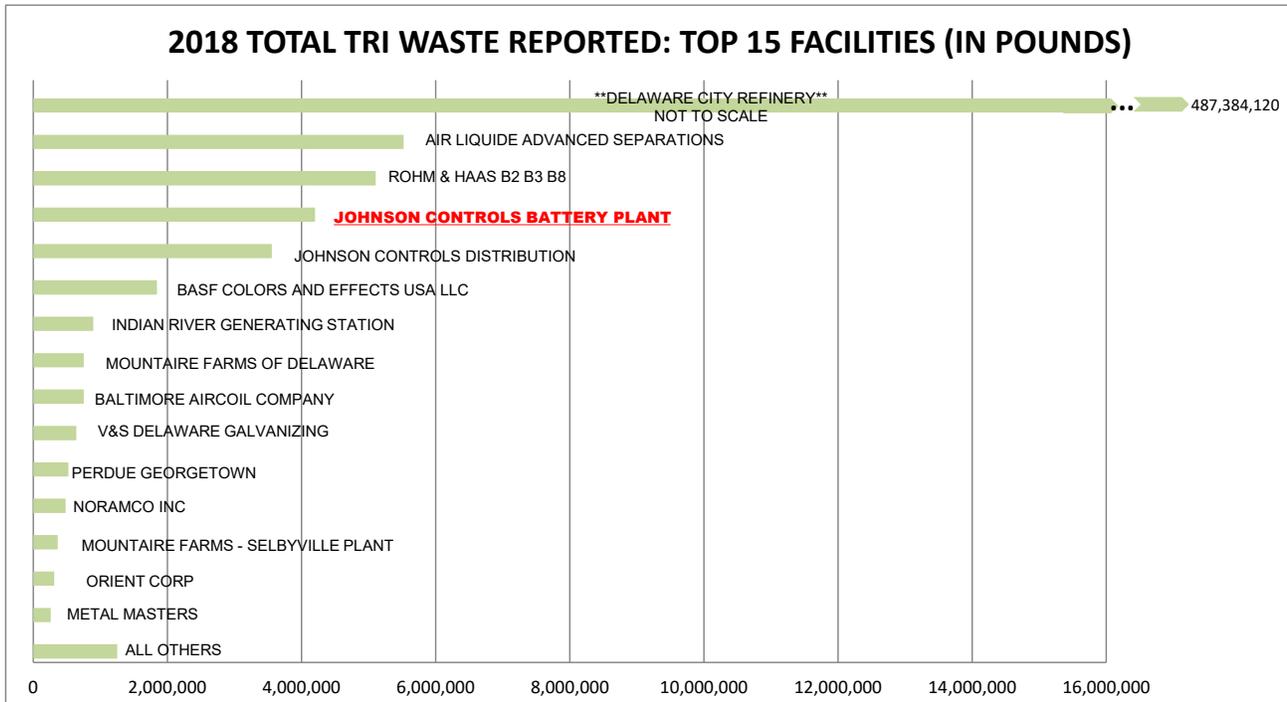
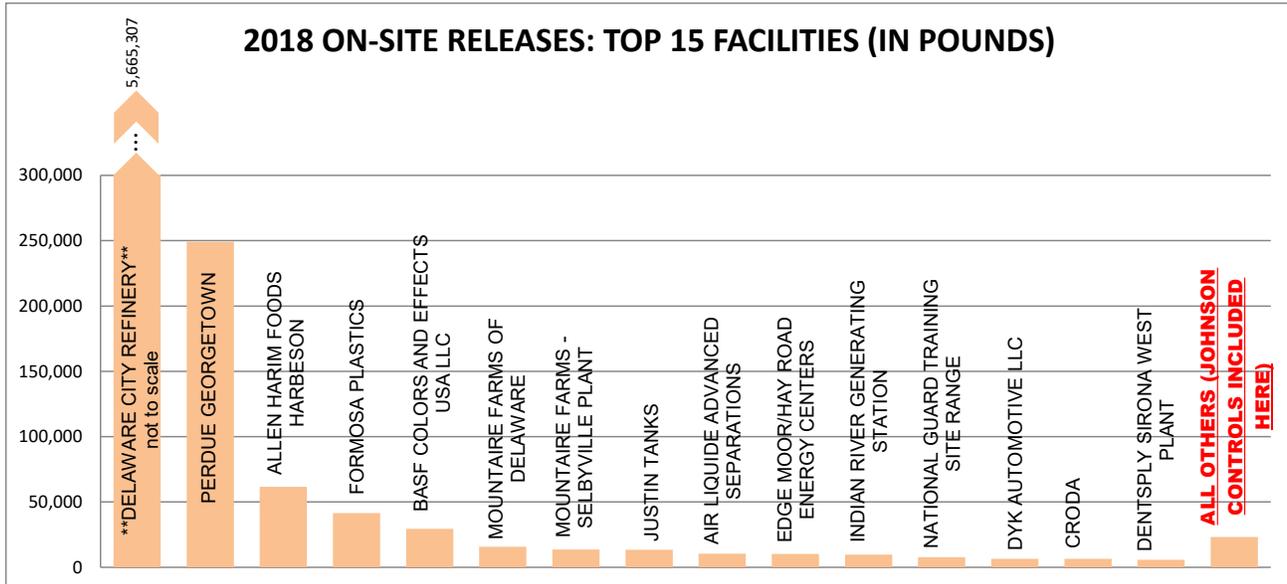
## JOHNSON CONTROLS BATTERY PLANT, CONT.

### GRAPHICAL INFORMATION:



## JOHNSON CONTROLS BATTERY PLANT, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

The Johnson Controls Battery Plant ranks 13th in the nation for off-site transfers of lead compounds (out of 3,789 facilities).



# TRI FACILITY PROFILES

## JOHNSON CONTROLS DISTRIBUTION CENTER

### LOCATION/CONTACT:

Address: 50 Patriot Drive  
 Middletown, DE 19709

Phone: (302)-696-3209



### FACILITY OVERVIEW:

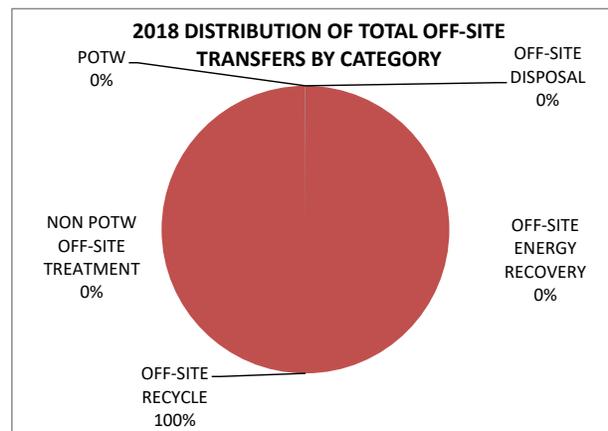
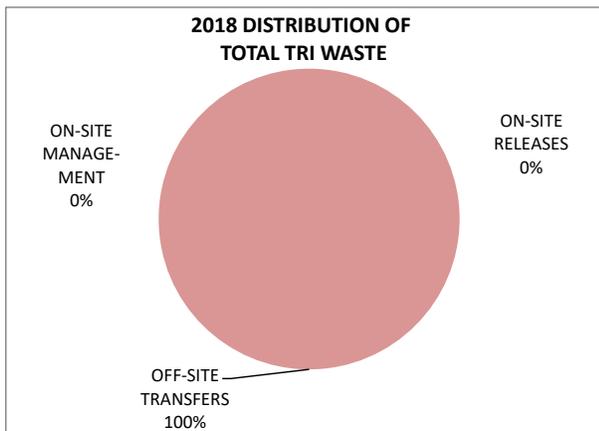
Johnson Controls Distribution Center forms and fills batteries, then prior to shipping; the batteries are washed and then labeled with the decal specified by the customer. From their battery plant, that is located 1.5 miles away in Middletown, the batteries are mostly shipped to customers within the Northeast. These batteries are used in a wide variety of vehicle types including passenger, commercial, agricultural, golf carts, and boats. In addition to many types of batteries Johnson Controls Middletown Distribution Center ships, there are just as many brands that leave the facility each day as well.

Johnson Controls Distribution Center has reported since 2011. The facility reported on three chemicals in 2018, lead compounds, antimony compounds, and arsenic compounds. These metal compounds are utilized in the construction of (primarily lead) batteries, and over 99.9% of the amounts reported are sent off-site for recycling. The metal compounds that are shipped off-site for recycling are from the in-plant junks and warranty returns from customers.

### 2018 TRI DATA (REPORTED IN POUNDS):

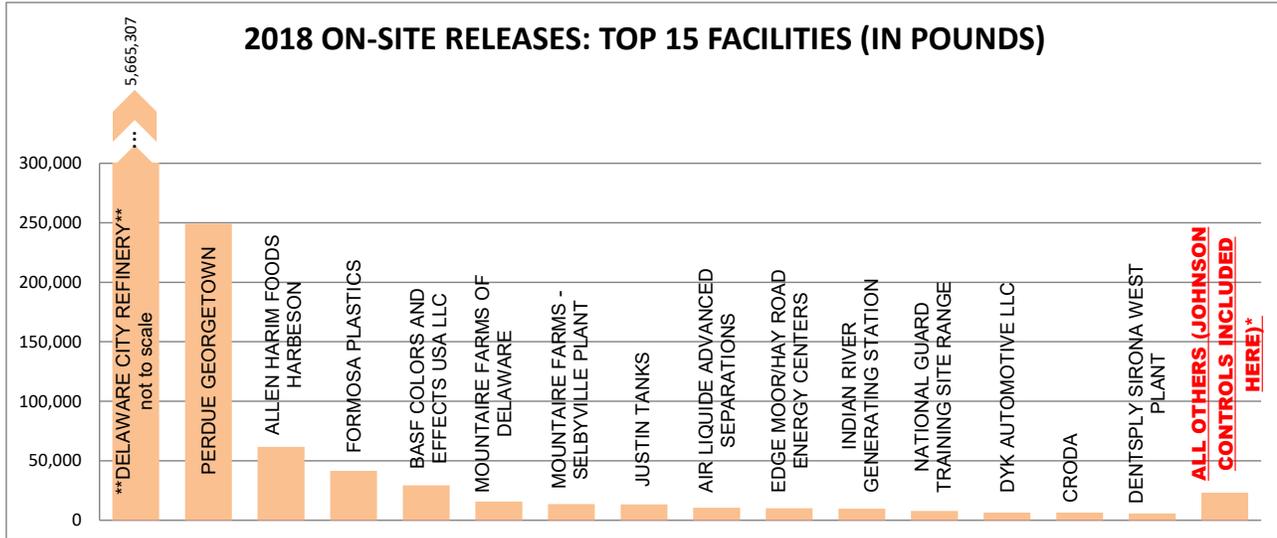
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ANTIMONY COMPOUNDS	0	0	0	0	14,505	0	NO	NO
ARSENIC COMPOUNDS	0	0	0	0	893	0	NO	YES
LEAD COMPOUNDS	0	0	0	0	3,540,173	0	YES	YES
TOTAL	0	0	0	0	3,555,571	0		

### GRAPHICAL INFORMATION:

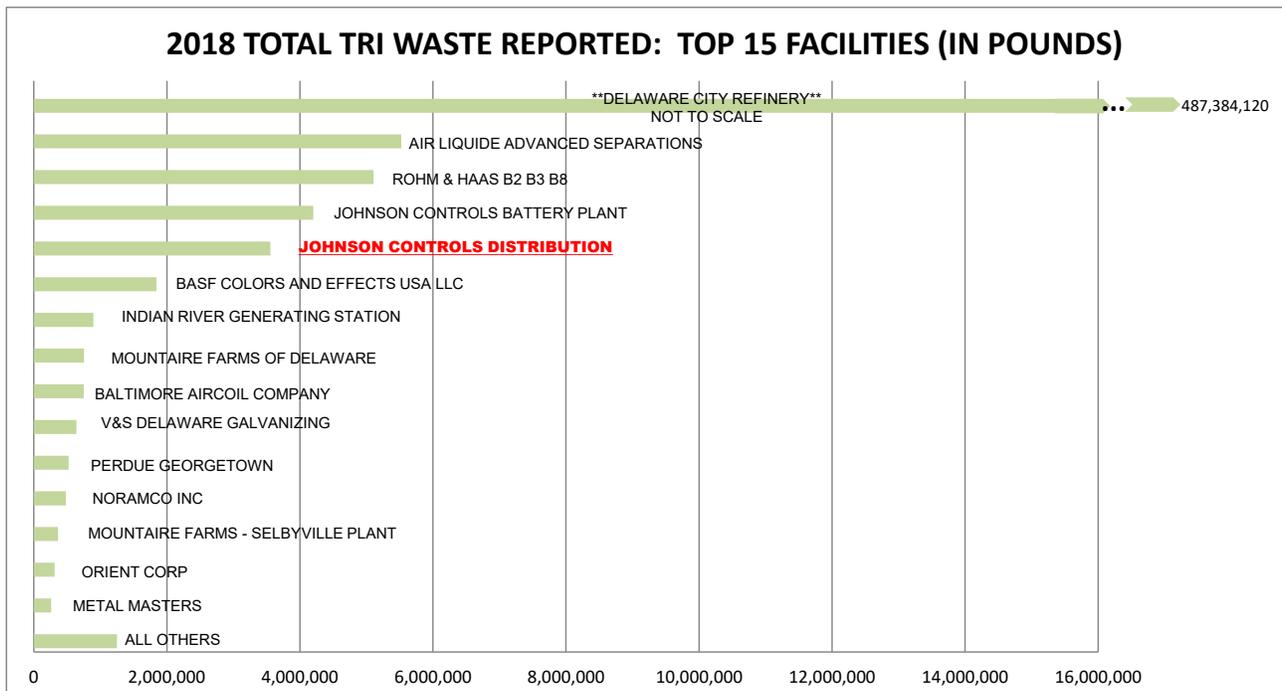


**JOHNSON CONTROLS  
DISTRIBUTION CENTER, CONT.**

**COMPARISON TO OTHER DELAWARE TRI FACILITIES:**



\*The Johnson Controls Distribution Center ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site. Comparisons only include facilities reporting on Form R.



**NOTABLE 2018 NATIONAL RANKINGS:**

The Johnson Controls Distribution Center ranks 15th in off-site transfers of lead compounds (out of 3,789 facilities).

## JUSTIN TANKS

### LOCATION/CONTACT:

Address: 21413 Cedar Creek Ave.  
Georgetown, DE 19947

Phone: (302)-856-3521



### FACILITY OVERVIEW:

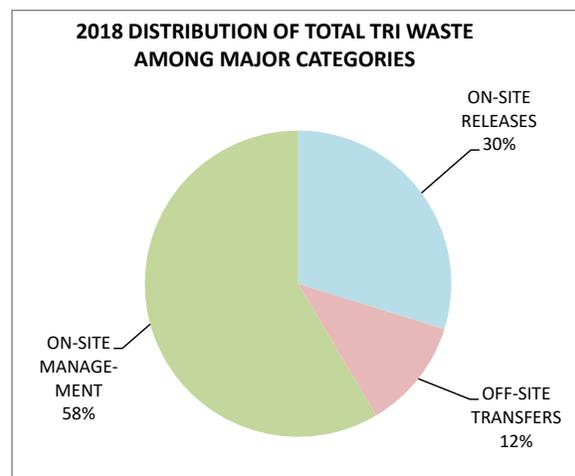
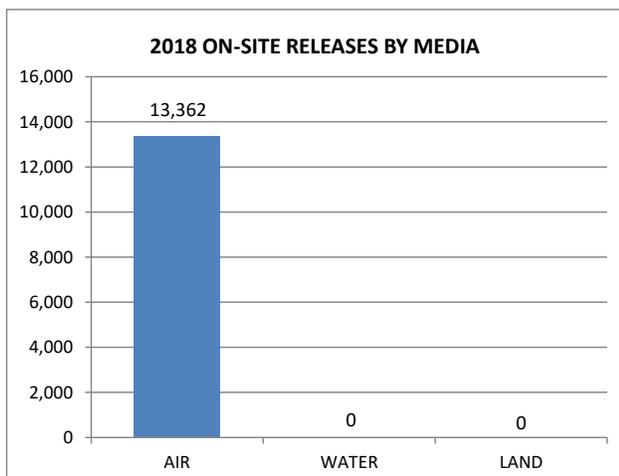
Justin Tanks, located in Georgetown, manufactures a wide variety of Fiberglass Reinforced Plastic (FRP) tanks for use in the chemical, agricultural, and food industries.

Justin Tanks has reported since 1987. The facility reported on one TRI chemical, styrene, for 2018. Styrene is used as a monomer in the polymerization of fiberglass resin. The majority of the styrene is released to the air during the process of applying fiberglass reinforcement 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 release of styrene was up 49% for 2018, compared to 2017, due to an increase in production (see *Total On-site Releases Per Year Graph* on the next page).

### 2018 TRI DATA (REPORTED IN POUNDS):

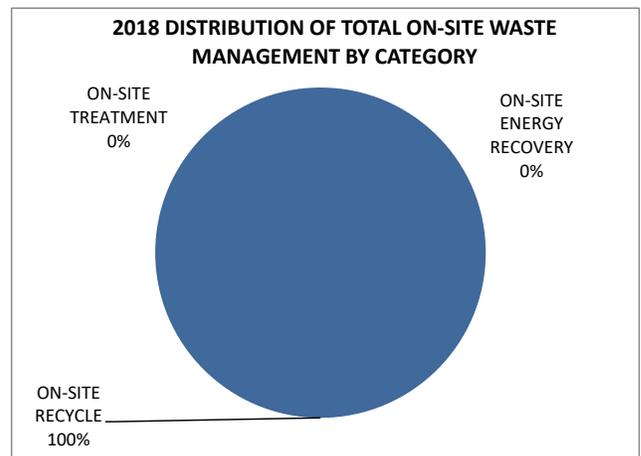
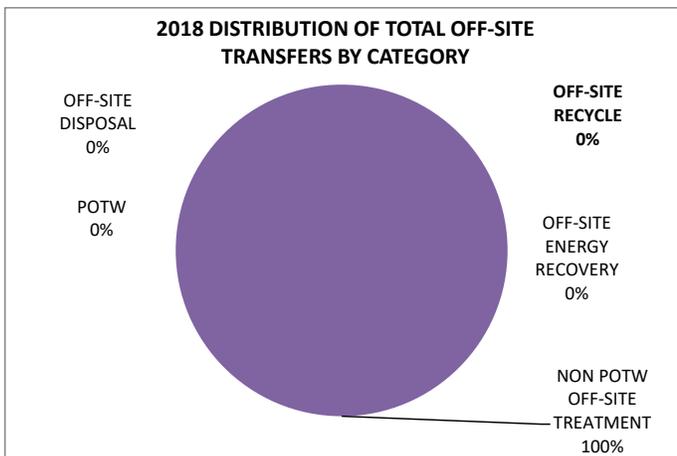
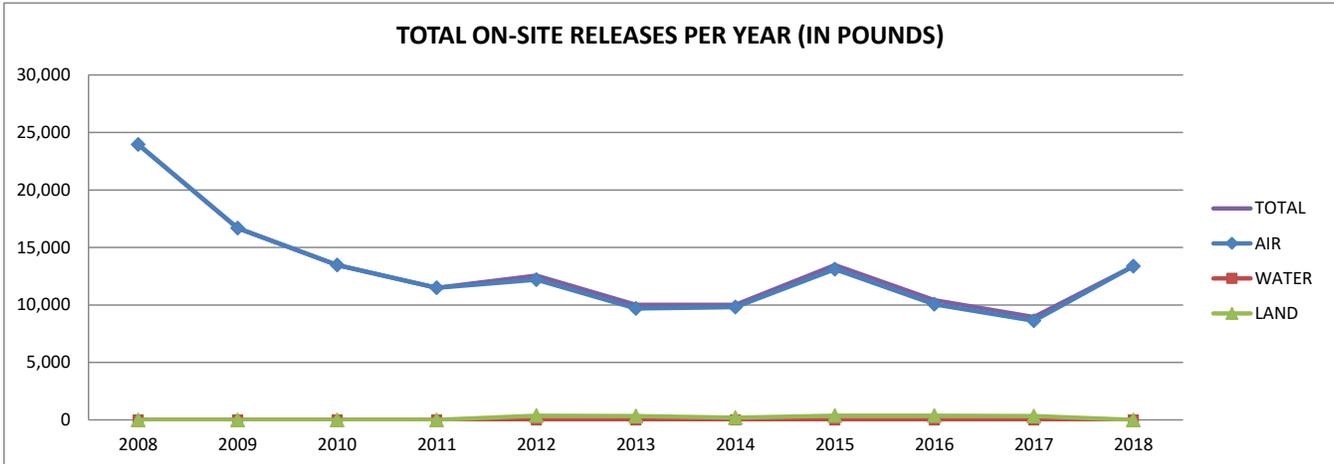
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
STYRENE	13,362	0	0	13,362	5,240	26,226	NO	YES
TOTAL	13,362	0	0	13,362	5,240	26,226		

### GRAPHICAL INFORMATION:

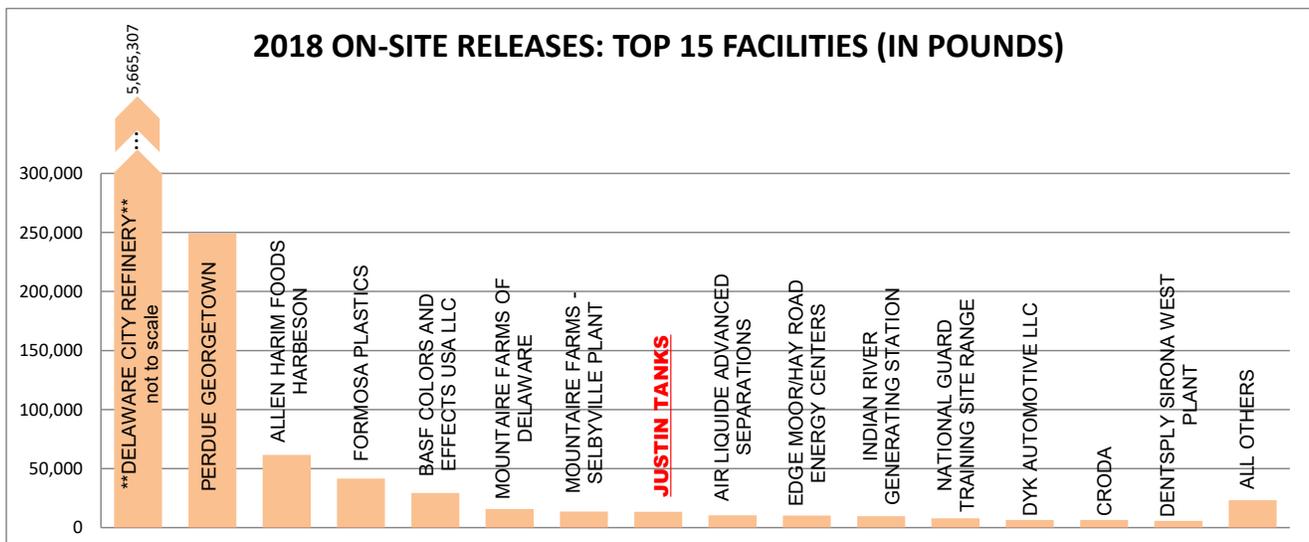


JUSTIN TANKS, CONT.

GRAPHICAL INFORMATION CONT.:



COMPARISON TO OTHER DELAWARE TRI FACILITIES:

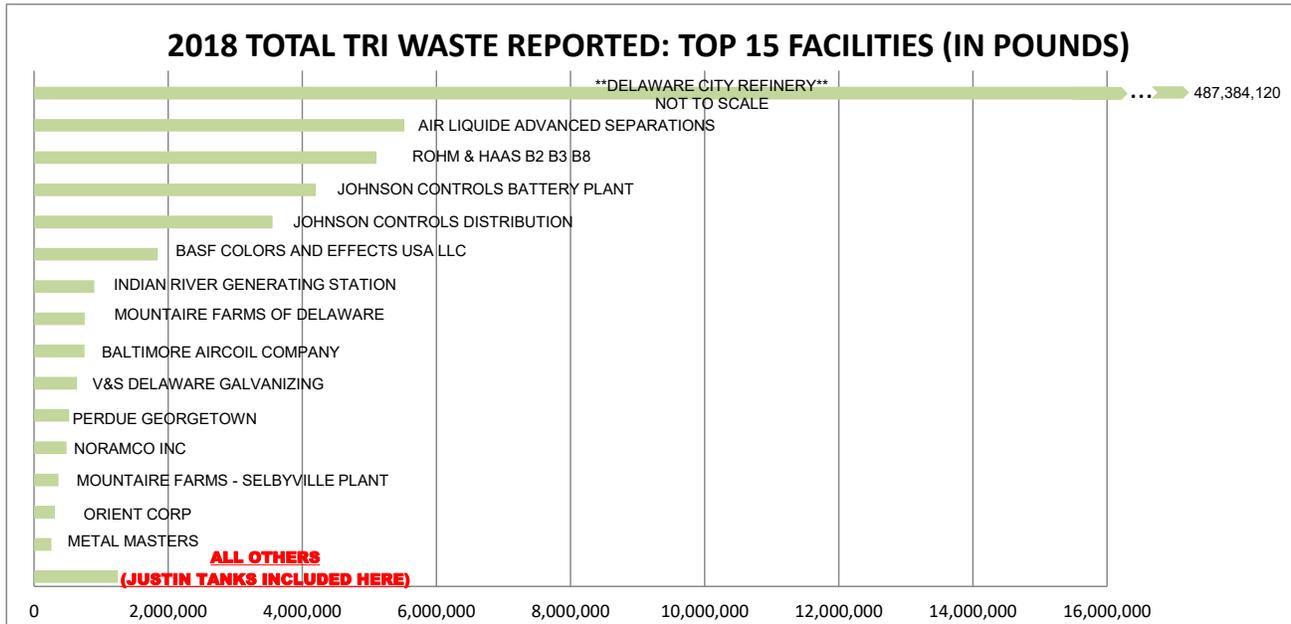




# TRI FACILITY PROFILES

## JUSTIN TANKS, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT:



### NOTABLE 2018 NATIONAL RANKINGS:

Justin Tanks ranks 10th in on-site recycling of styrene (out of 1,161 facilities).

**KUEHNE**

**LOCATION/CONTACT:**

Address: 1645 River Road  
Delaware City, DE 19706

Phone: (302)-834-4557

Contact: Alan Rogers



**FACILITY OVERVIEW:**

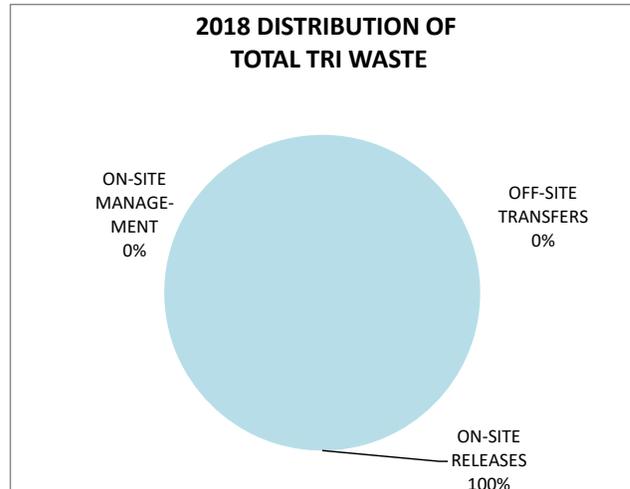
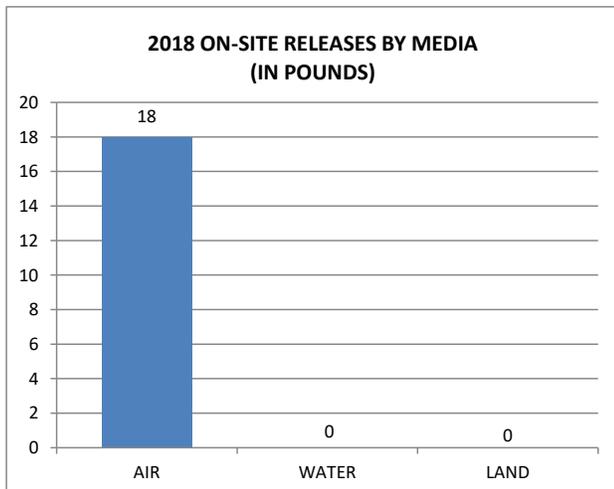
Kuehne reports under the North American Industrial Classification System (NAICS) as 325181, which covers the manufacturing of basic inorganic chemicals. Material produced at the facility is used primarily for municipal water and wastewater treatment.

Kuehne has reported since 1987, previously reporting under the company Chloramone. For 2018, the facility reported on one chemical, chlorine, with all on-site releases being made to air. Chlorine releases have decreased by 97% compared to 2014, due to the installation of a higher efficiency scrubber. Chlorine is repackaged for sale and also used in the production of sodium hypochlorite (bleach).

**2018 TRI DATA (REPORTED IN POUNDS):**

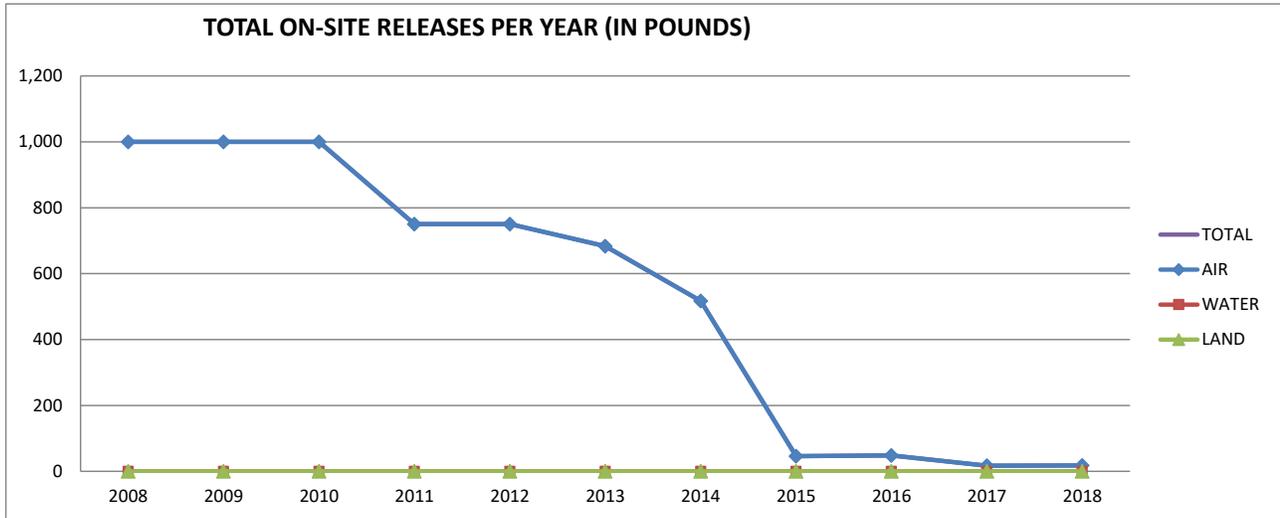
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHLORINE	18	0	0	18	0	0	NO	NO
TOTAL	18	0	0	18	0	0		

**GRAPHICAL INFORMATION:**

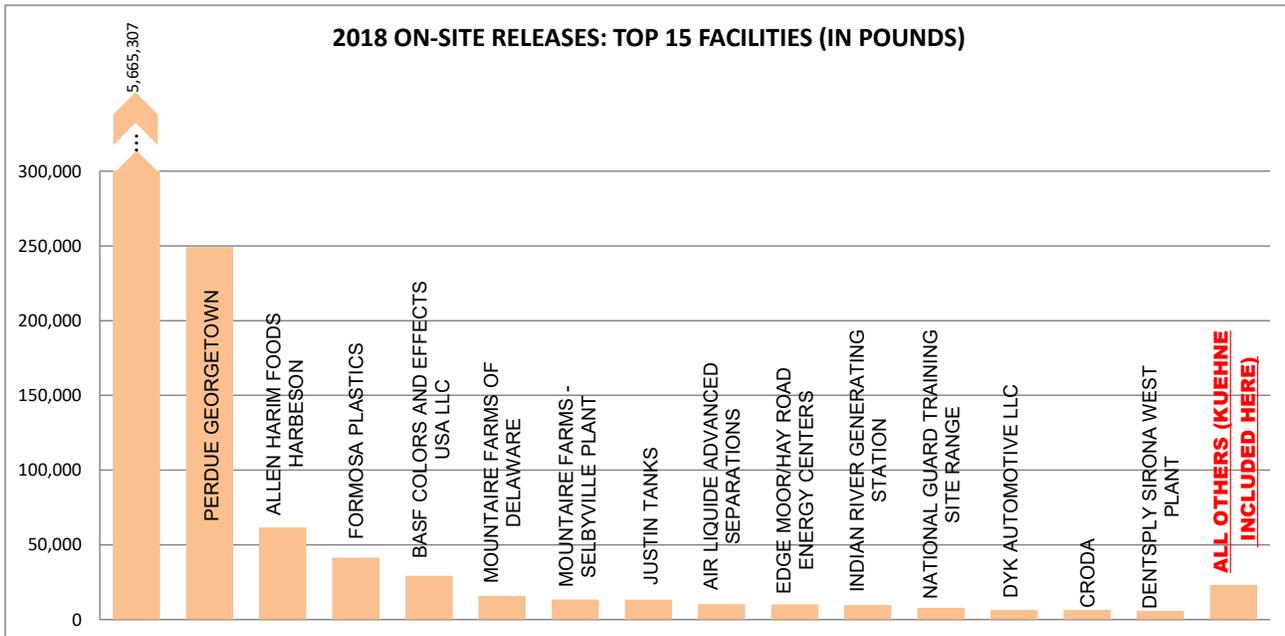


## KUEHNE, CONT.

### GRAPHICAL INFORMATION:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



Kuehne ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

**MESSER LLC**

**LOCATION/CONTACT:**

Address: 6000 Philadelphia Pike  
Claymont, DE 19703

Phone: (610) 570-1098

Contact: Jeffrey Chavanne



**FACILITY OVERVIEW:**

Messer LLC produces industrial gases.

A facility located at this site previously reported from 1989-1993 as BOC Gases and Airco Industrial Gases. In 2018 Messer reported for the first time at this location on one chemical, chlorodifluoromethane, on short Form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.)

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHLORODIFLUOROMETHANE*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

**GRAPHICAL INFORMATION:**

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.



## TRI FACILITY PROFILES

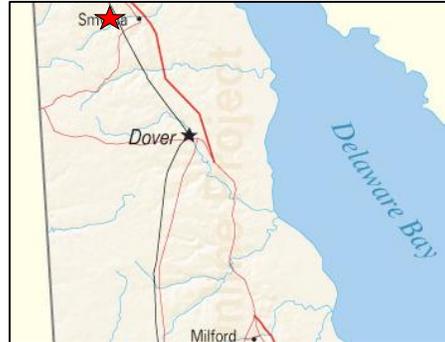
### METAL MASTERS

**LOCATION/CONTACT:**

Address: 100 Industrial Blvd.  
Clayton, DE 19938

Phone: (302)-653-3087

Contact: Richard Murphy



**FACILITY OVERVIEW:**

Eagle Group manufactures commercial stainless steel foodservice equipment. Their Metal Masters product line includes sinks, tables, food warming equipment, serving equipment, shelving of both solid and wire design, and custom fabrications. The raw metals are purchased in sheet or wire form and then sheared, punched, formed, welded, spot welded, ground and finished to produce an end product.

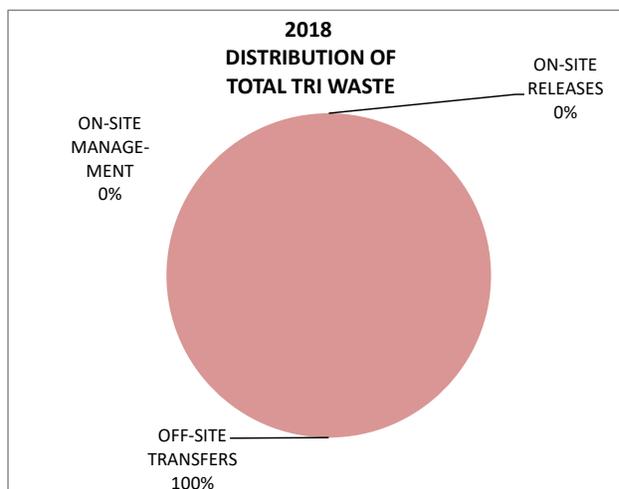
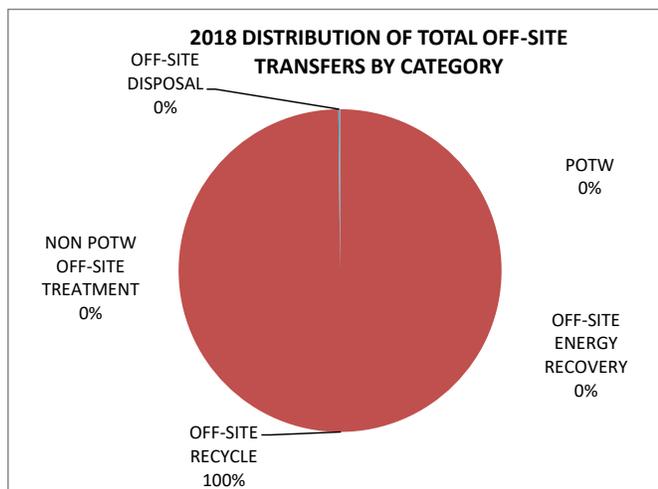
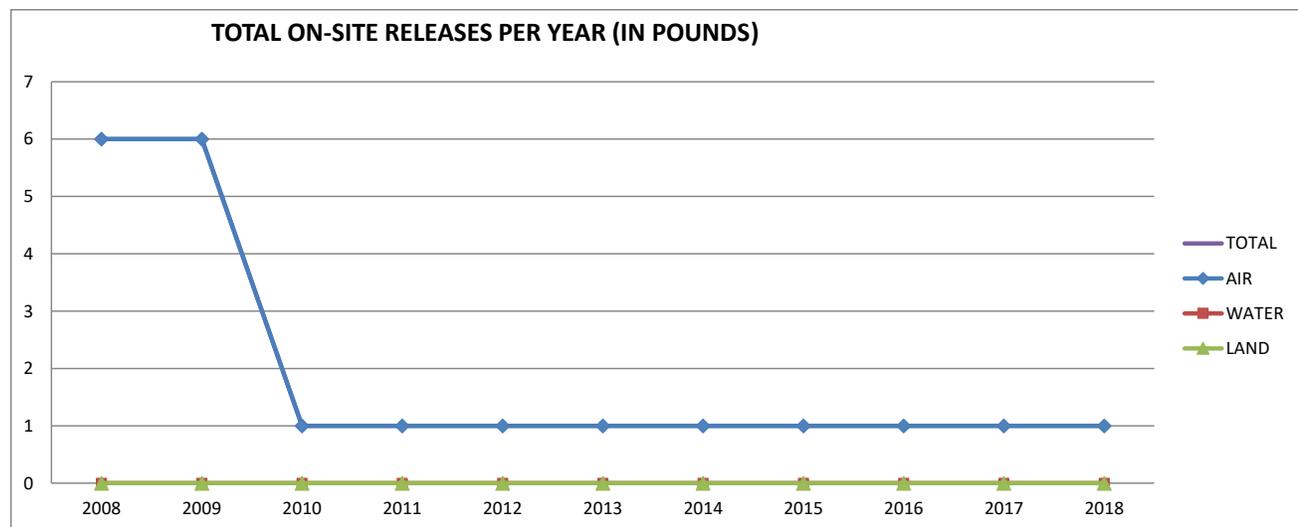
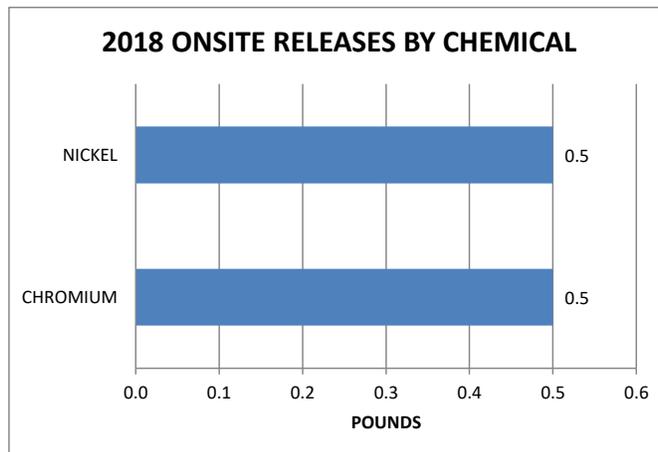
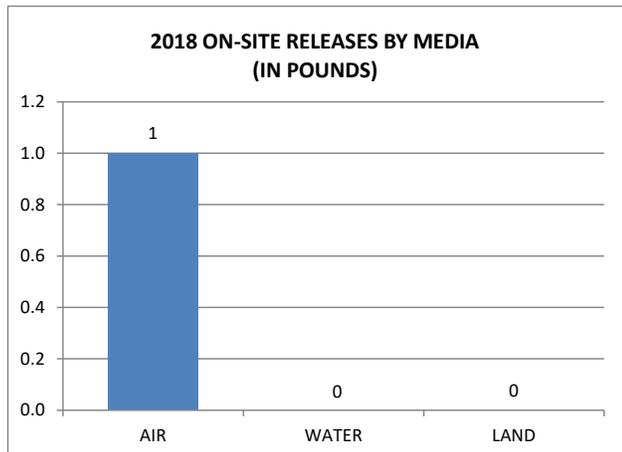
Metal Masters has reported since 2001. The facility reported on 2 chemicals in 2018, nickel and chromium, with on-site releases being only to air. These chemicals are component parts of the stainless steel and are released to air during the welding phase. These releases to air account for less than 0.01% of the total waste management. All scrap metal which is not able to be used for finished product is recycled off-site. A smaller portion of the waste that is generated as grinding dust is shipped off-site for disposal.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHROMIUM	0.5	0	0	0.5	191,456	0	NO	NO
NICKEL	0.5	0	0	0.5	69,339	0	NO	YES
TOTAL	1	0	0	1	260,795	0		

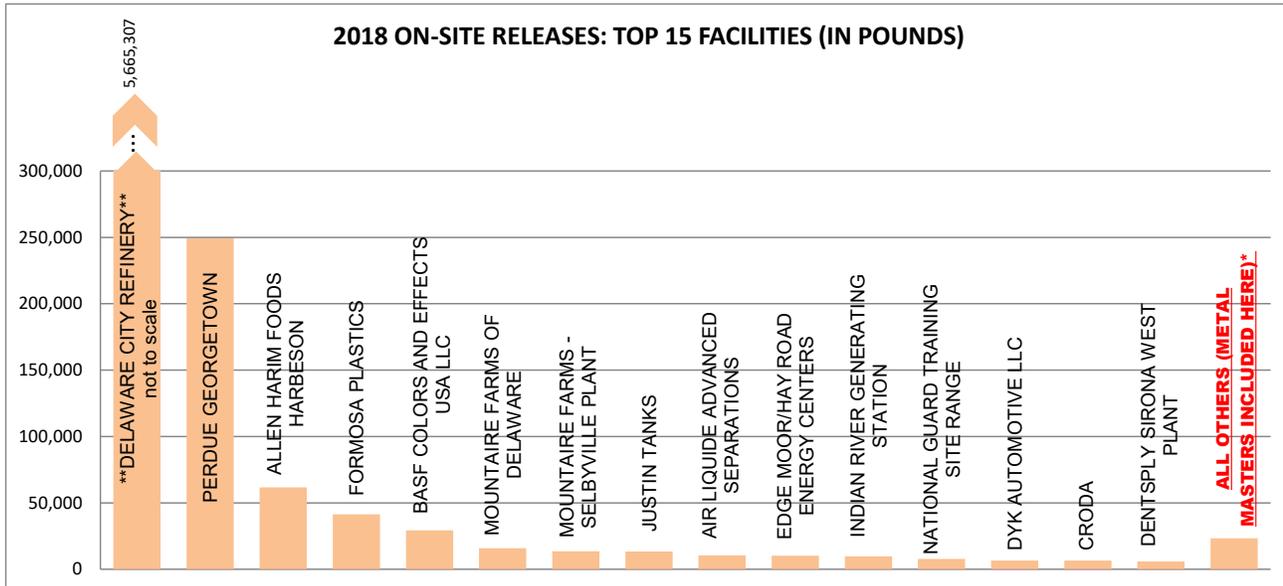
## METAL MASTERS, CONT.

### GRAPHICAL INFORMATION:

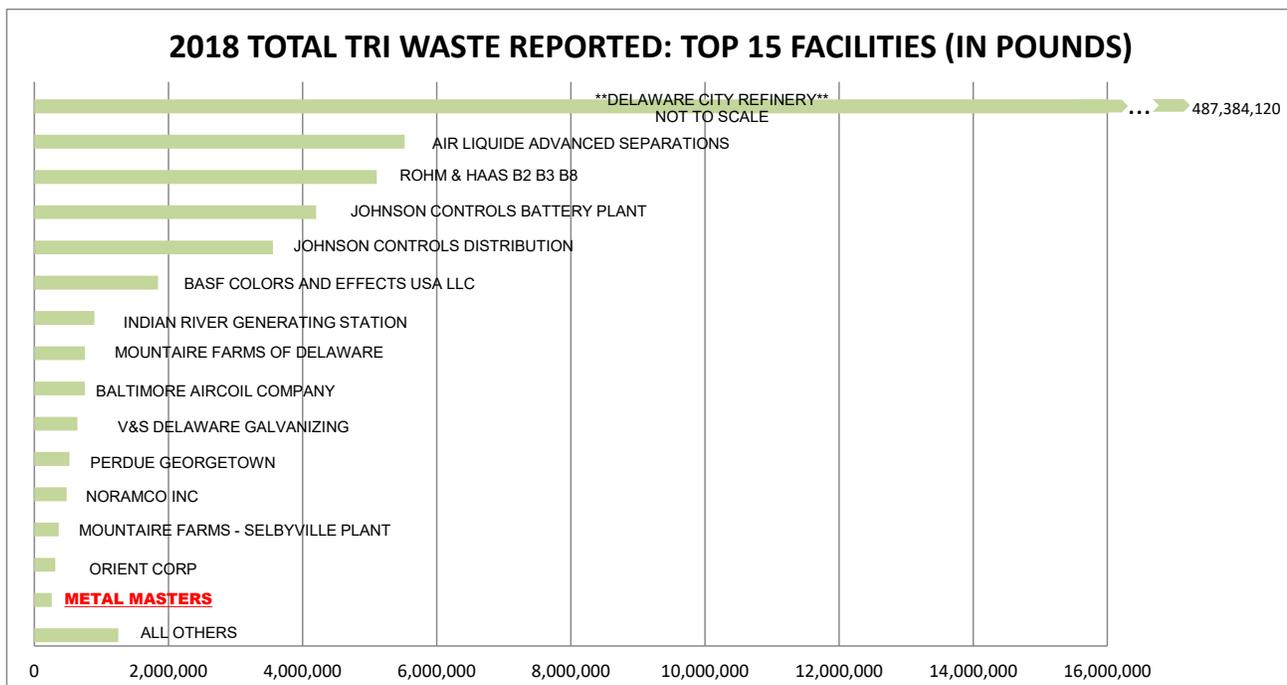


## METAL MASTERS, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



\*Metal Masters ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.



### NOTABLE 2018 NATIONAL RANKINGS:

Metal Masters ranks 76th in off-site recycling of chromium for fabricated metal facilities (NAICS 332) (out of 926 facilities).



## TRI FACILITY PROFILES

### MOUNTAIRE FARMS OF DELAWARE

**LOCATION/CONTACT:**

Address: 29106 John J. Williams Highway  
Millsboro, DE 19966

Phone: (302)-934-3050

Contact: Catherine Bassett



**FACILITY OVERVIEW:**

Mountaire Farms of Delaware is located in Millsboro, and hatches chickens for growers, produces feed for poultry growers, produces poultry byproducts, and produces retail, wholesale and export chicken products.

The facility has reported since 1987, previously as Townends. For 2018, Mountaire Farms of Delaware reported five TRI chemicals, hydrogen sulfide, peracetic acid, and metallic compounds (Copper, Manganese, and Zinc). Hydrogen sulfide is a byproduct of anaerobic wastewater treatment. The metallic compounds are used in poultry feed and are reported on form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.) Persistent Bio-Accumulative Toxic (PBT) Chemicals, such as lead, are ineligible for Form A.

Mountaire Farms in previous years has also reported on ammonia, a byproduct of poultry processing that is treated in the on-site wastewater treatment plant. Since the biological treatment of the wastewater fluctuates, ammonia is sometimes below the reporting threshold, which it was in 2018.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
COPPER COMPOUNDS*	0	0	0	0	0	0	NO	NO
HYDROGEN SULFIDE	15,367	0	0	15,367	0	182,140	NO	NO
MANGANESE COMPOUNDS*	0	0	0	0	0	0	NO	NO
PERACETIC ACID	381	0	0	381	0	555,556	NO	NO
ZINC COMPOUNDS*	0	0	0	0	0	0	NO	NO
TOTAL	15,748	0	0	15,748	0	737,696		

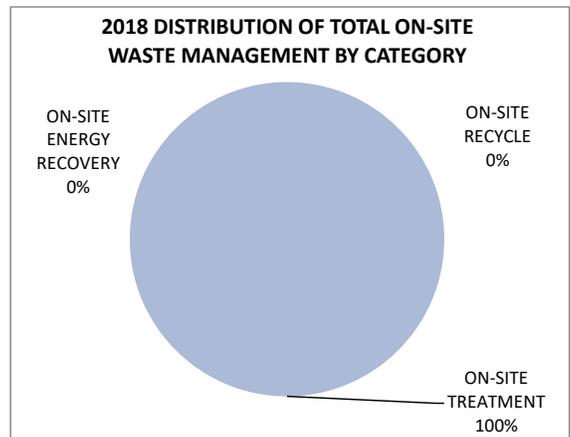
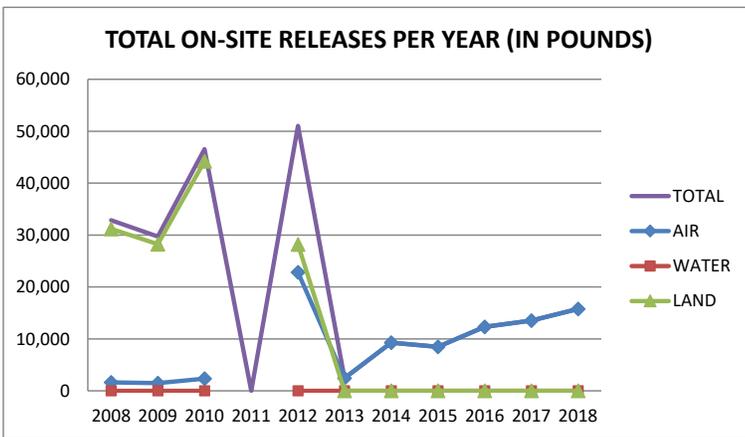
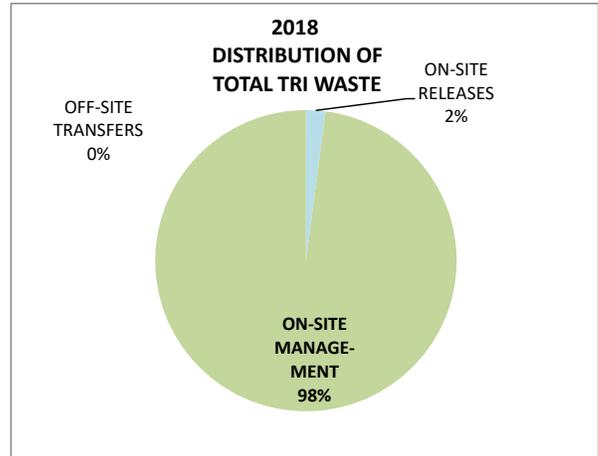
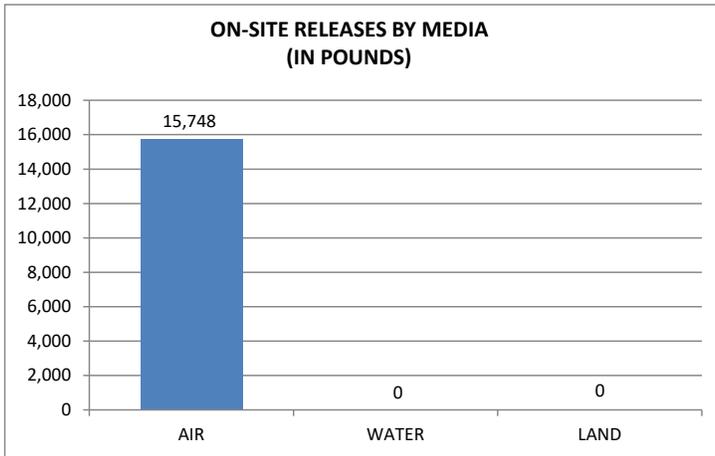
\*Reported on short Form A

# TRI FACILITY PROFILES

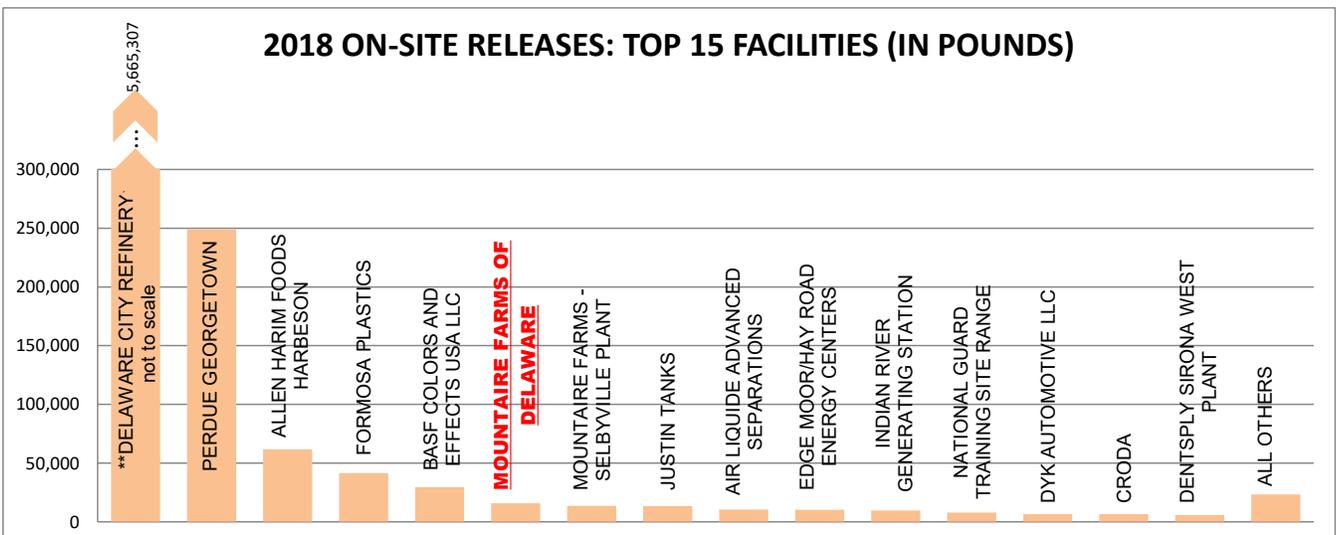


## MOUNTAIRE FARMS OF DELAWARE, CONT.

### GRAPHICAL INFORMATION CONT.:

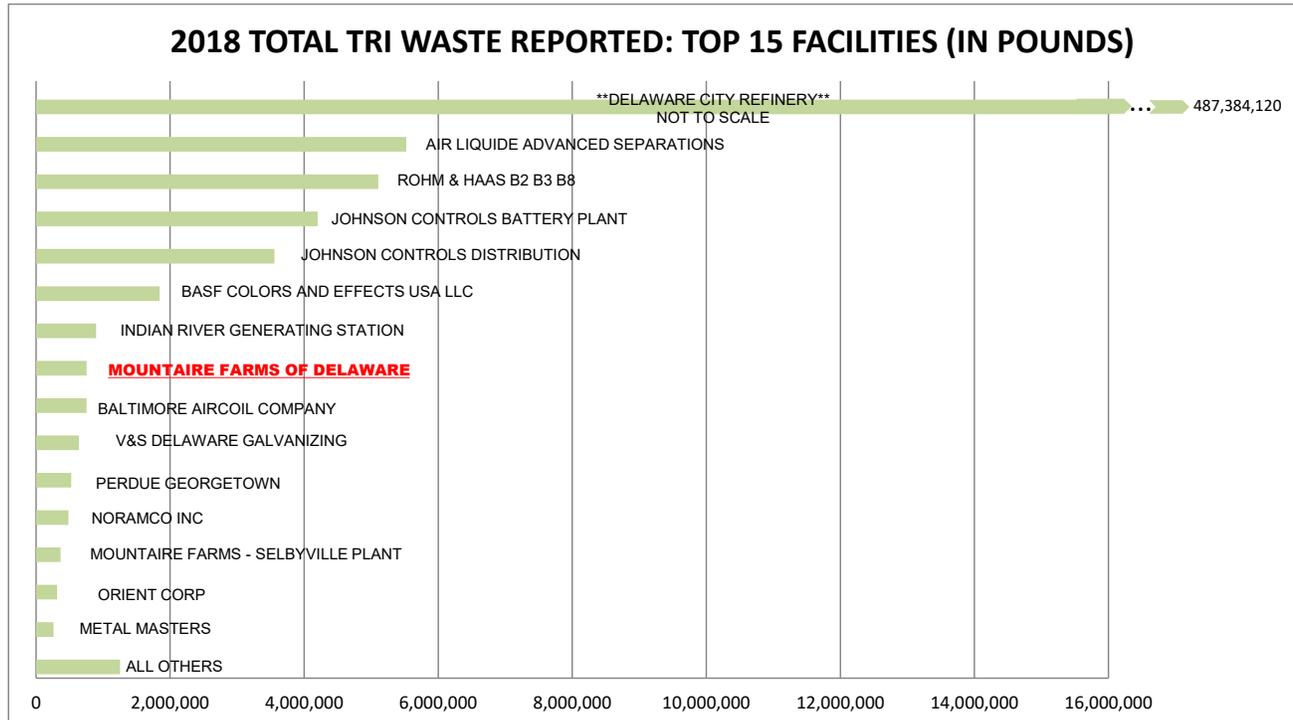


### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



**MOUNTAIRE FARMS OF DELAWARE, CONT.**

**COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:**



**NOTABLE 2018 NATIONAL RANKINGS:**

Mountaire Farms of Delaware ranks 10th in the on-site treatment of hydrogen sulfide by food/beverage facilities (NAICS 311) (out of 87 facilities).

Mountaire Farms of Delaware ranks 4th in the on-site treatment of peracetic acid by food/beverage facilities (NAICS 311) (out of 248 facilities).

**MOUNTAIRE FARMS- FRANKFORD**

**LOCATION/CONTACT:**

Address: 11 Daisey Street  
Frankford, DE 19945

Phone: (302)-934-3050

Contact: Catherine Bassett



**FACILITY OVERVIEW:**

Mountaire Farms-Frankford reported under the North American Industrial Classification System (NAICS) as 311119, which covers animal food manufacturing, except facilities primarily engaged in custom grain grinding for animal feed. This location manufactures chicken feed.

Mountaire Farms-Frankford has reported since 1996. The facility reported on 3 chemicals in 2018, all on the short Form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.) Persistent Bio-Accumulative Toxic (PBT) Chemicals, such as polycyclic aromatic compounds (PACs), are ineligible for Form A.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
COPPER COMPOUNDS*	0	0	0	0	0	0	NO	NO
MANGANESE COMPOUNDS*	0	0	0	0	0	0	NO	NO
ZINC COMPOUNDS*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

**GRAPHICAL INFORMATION:**

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.

## MOUNTAIRE SELBYVILLE

**LOCATION/CONTACT:**

Address: Hoosier Street & Railroad Avenue  
Selbyville, DE 19975

Phone: (302)-934-3050

Contact: Catherine Bassett



**FACILITY OVERVIEW:**

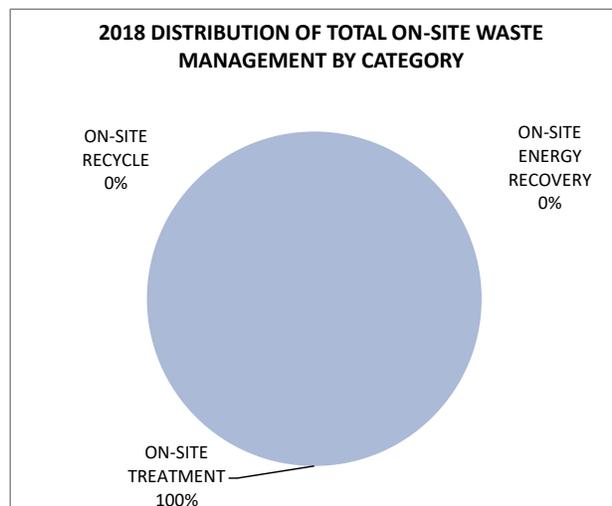
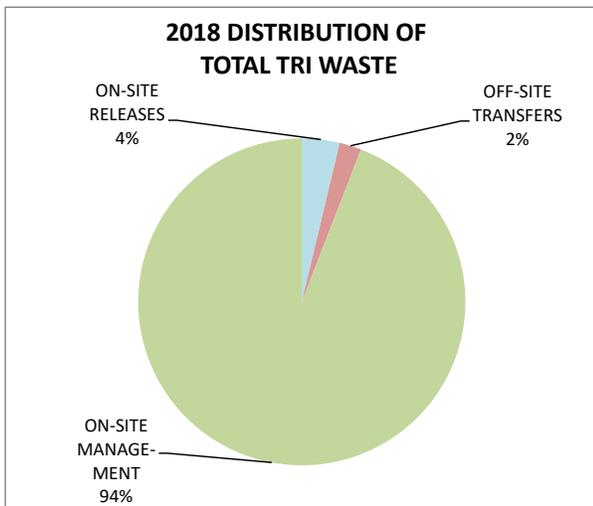
Mountaire Farms in Selbyville is a producer of poultry products. The facility processes chickens for sale to the retail market.

Mountaire Farms-Selbyville has reported since 1989, previously as Mountaire Farms of Delmarva; but was below the reporting threshold for about half of the years since 1989, so TRI Reports were not filed for those years. For 2018, the facility reported on one chemical, peracetic acid. Peracetic acid is found in a FDA-approved antimicrobial food treatment for pathogen reduction in poultry processing. The product is used in chilling and carcass washing equipment in the plant.

**2018 TRI DATA (REPORTED IN POUNDS):**

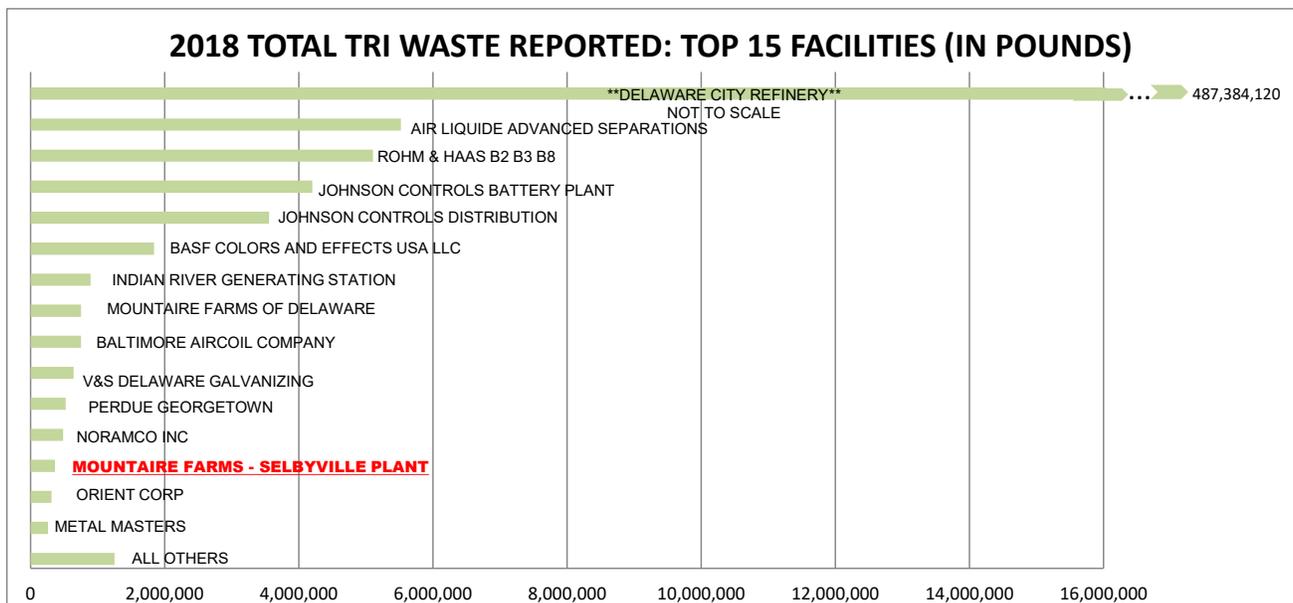
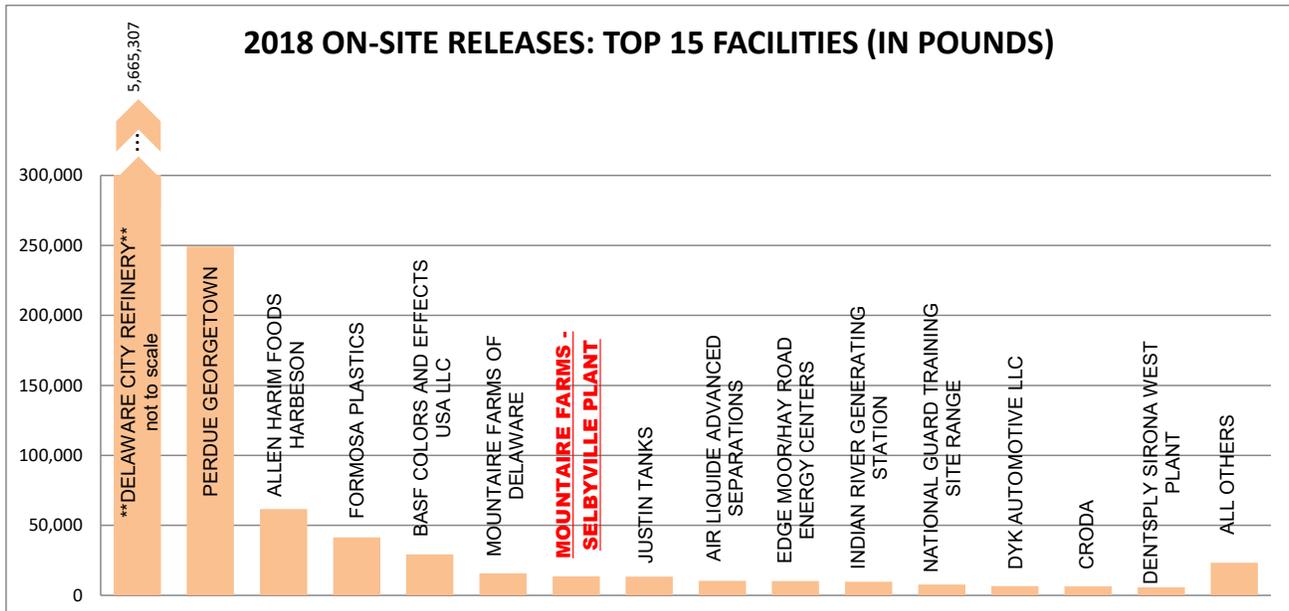
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	12,928	6	0	12,934	7,888	17,200	NO	NO
PERACETIC ACID	596	0	0	596	0	324,671	NO	NO
<b>TOTAL</b>	<b>13,524</b>	<b>6</b>	<b>0</b>	<b>13,530</b>	<b>7,888</b>	<b>341,871</b>		

**GRAPHICAL INFORMATION:**



## MOUNTAIRE SELBYVILLE, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Mountaire Selbyville ranks 11th for on-site treatment of peracetic acid (out of 290 facilities).

## NATIONAL GUARD TRAINING RANGE

### LOCATION/CONTACT:

Address: 1197 River Road  
New Castle, DE 19720

Phone: (302)-326-7488

Contact: Michael Zappaterinni



### FACILITY OVERVIEW:

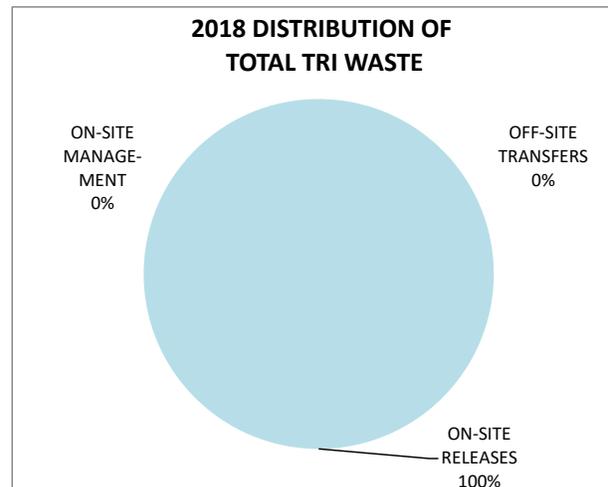
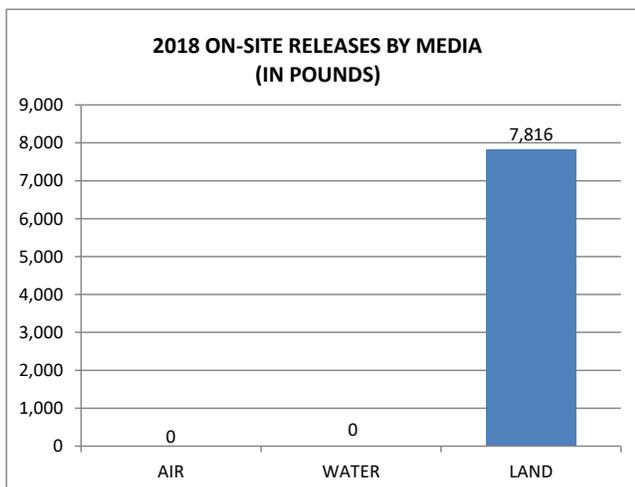
The U.S. Army's National Guard Training Site Range is a military installation that reports under the Federal Facility reporting requirements.

The National Guard Training Site Range reported for the first time in 2015, because they fell below the reporting threshold in prior years. Lead from ammunition is deposited in the earth berm at the site's firing range. Releases for 2018 have increased by 109% since 2017. The National Guard Training Site Range is also used by local law enforcement agencies.

### 2018 TRI DATA (REPORTED IN POUNDS):

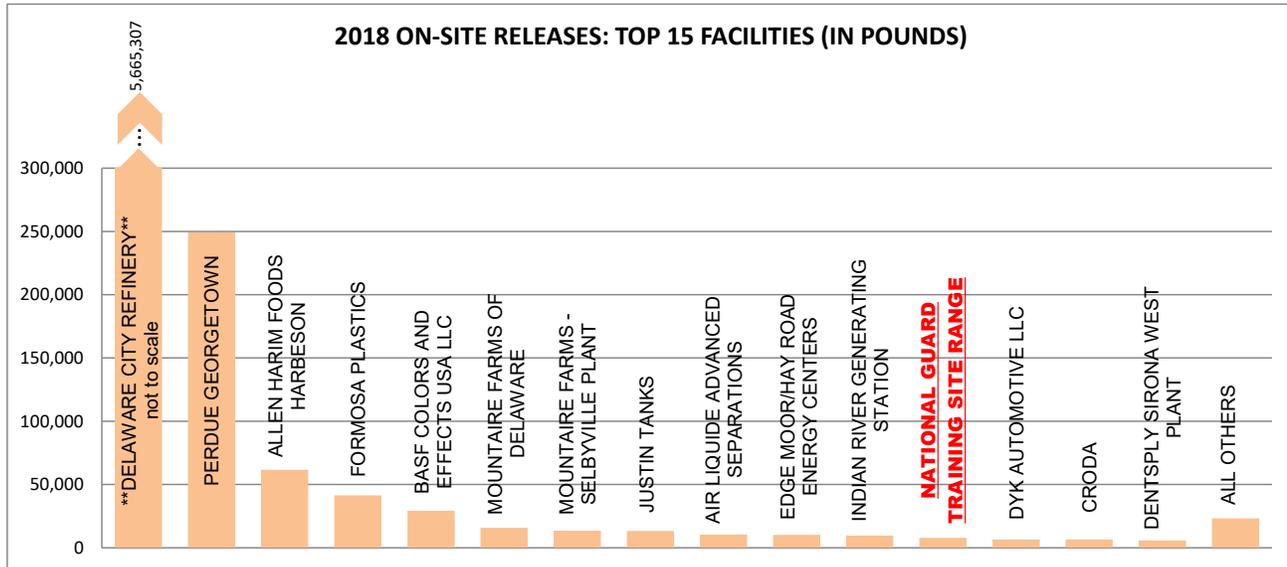
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	0	0	7,816	7,816	0	0	YES	YES
TOTAL	0	0	7,816	7,816	0	0		

### GRAPHICAL INFORMATION:



**NATIONAL GUARD TRAINING RANGE, CONT.**

**COMPARISON TO OTHER DELAWARE TRI FACILITIES:**



The U.S. Army's National Guard Training Range ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

## NORAMCO

### LOCATION/CONTACT:

Address: 500 Swedes Landing Road  
Wilmington, DE 19801

Phone: (302)-888-4477

Contact: Eric Hacherl



### FACILITY OVERVIEW:

Noramco, Inc. is currently owned by SK Capital. Noramco manufactures and markets Active Pharmaceutical Ingredients (APIs) and fine chemicals for other affiliated companies and for distribution to third-party trade customers. The majority of such trade sales consist of controlled substance pain management active pharmaceutical ingredients (APIs).

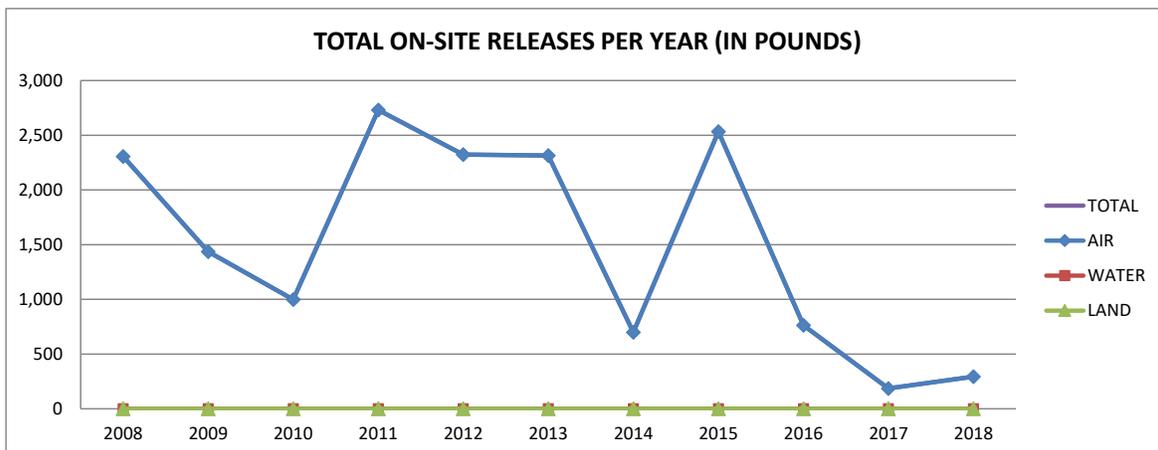
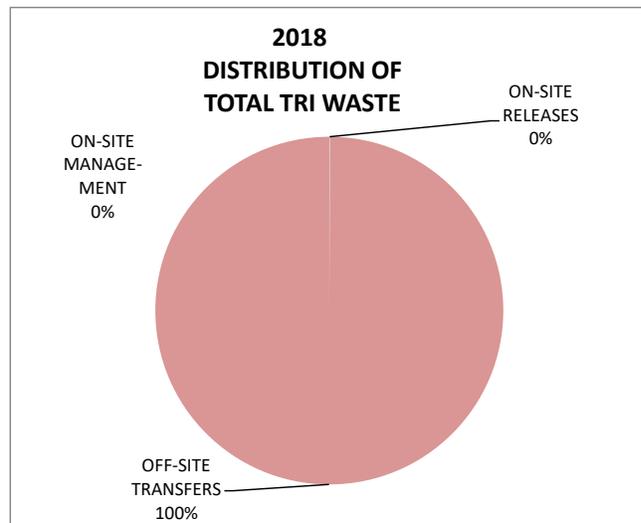
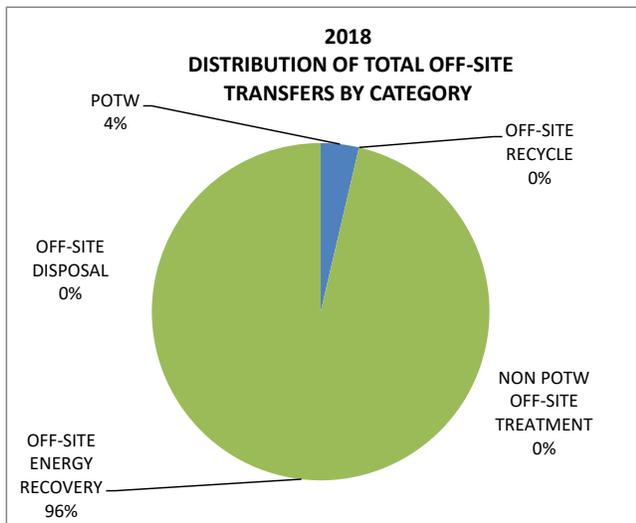
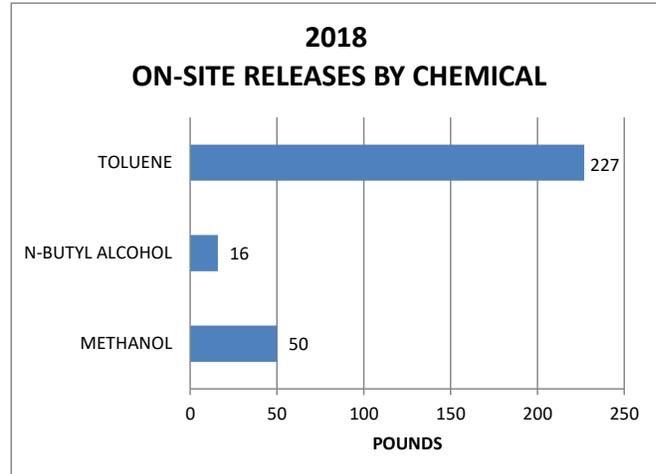
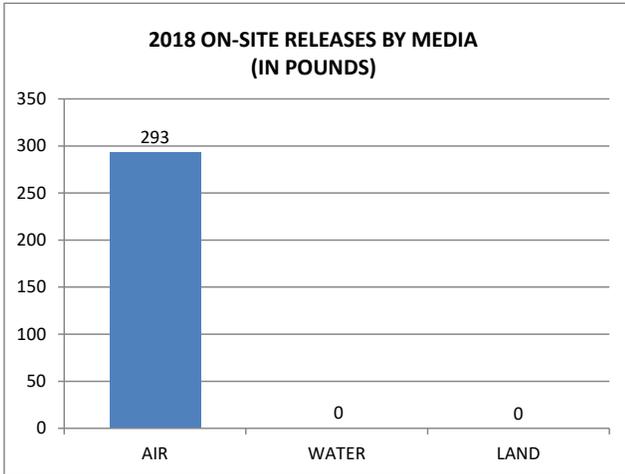
The facility has reported since 1987. Noramco reported three chemicals in 2018, and all on-site releases of these chemicals were to the air. The chemicals reported are comprised mainly of solvents that are used in the separation, synthesis, and purification of small molecule APIs made from natural plant materials. For this reason, the usage and release quantities of these chemicals are primarily tied to Noramco's production volumes. On-site releases for Noramco have increased by 57.5% since 2017; and decreased by 87% since 2008 (see *Total On-site Releases Per Year Graph* on the next page).

### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
METHANOL	50	0	0	50	63,614	0	NO	NO
N-BUTYL ALCOHOL	16	0	0	16	256,181	0	NO	NO
TOLUENE	227	0	0	227	163,129	0	NO	NO
<b>TOTAL</b>	<b>293</b>	<b>0</b>	<b>0</b>	<b>293</b>	<b>482,924</b>	<b>0</b>		

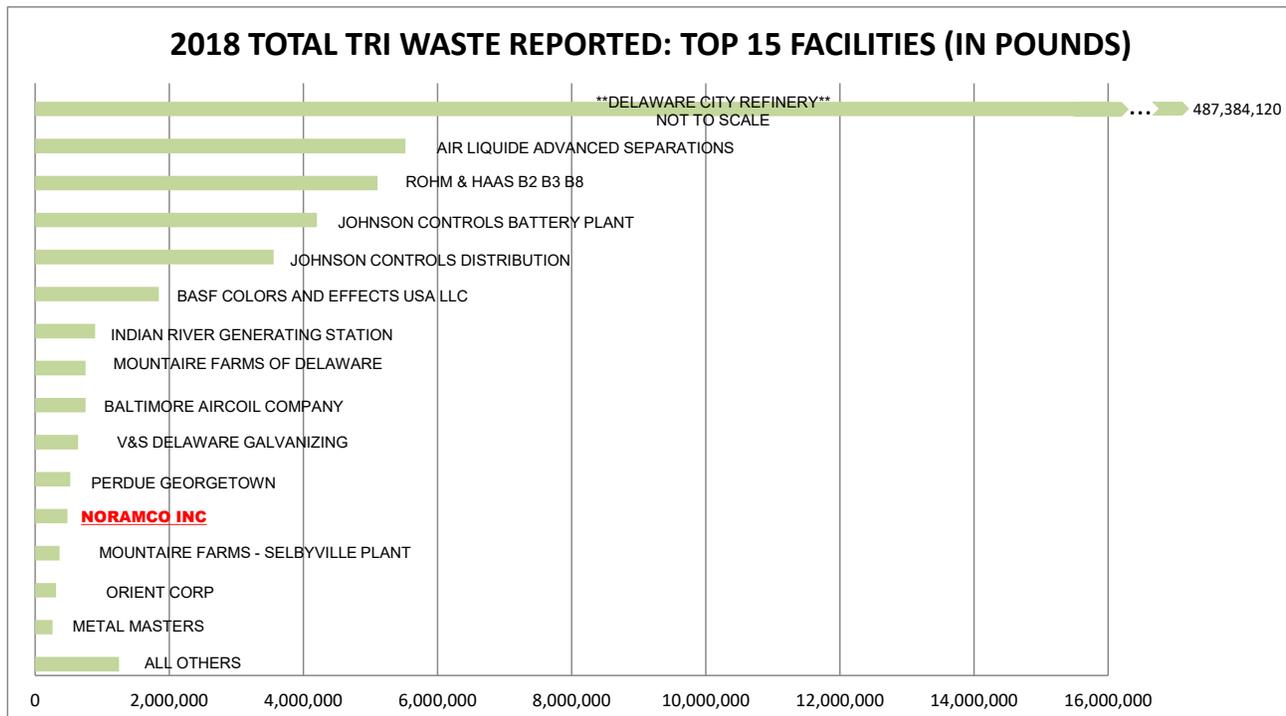
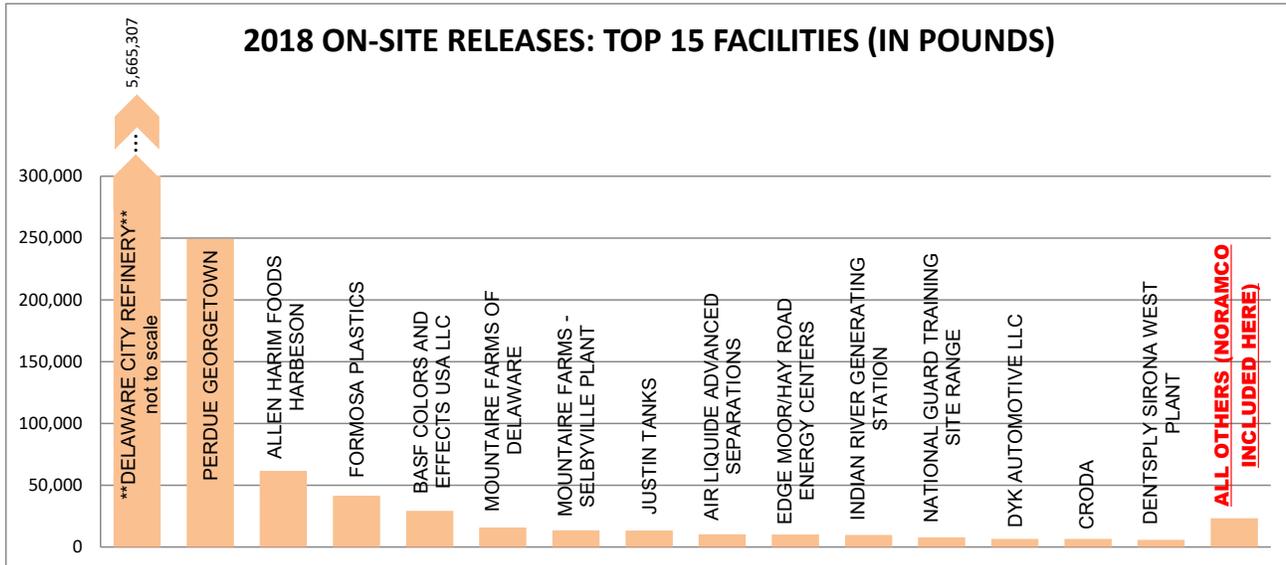
## NORAMCO, CONT.

### GRAPHICAL INFORMATION:



## NORAMCO, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Noramco ranks 14th in the nation for off-site transfers of n-butyl alcohol (out of 684 facilities).

Noramco ranks 98th in the nation for off-site transfer of toluene (out of 2,015 facilities).



## TRI FACILITY PROFILES

### ORIENT CORPORATION

**LOCATION/CONTACT:**

Address: 111 Park Ave  
Seaford, DE 19973

Phone: (302)-628-1300

Contact: Dave Curry



**FACILITY OVERVIEW:**

Orient Corporation distributes various dyes, pigment dispersions, and charge control agents. The Seaford plant produces nigrosine dye, a product used in phenolic and polyamide resins and specialty paints. Orient supplies a large share of domestic demand for this type of dye.

Orient has reported since 1992. The facility reported on three chemicals in 2018, with less than 100 pounds of on-site releases only to air. Aniline is the predominant on-site release, accounting for 98% of the total, with remaining 2% attributable to nitrobenzene. Aniline and nitrobenzene are both used in the production of dyes.

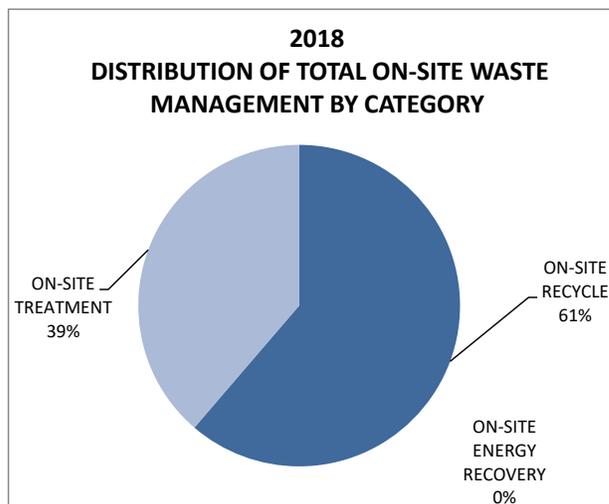
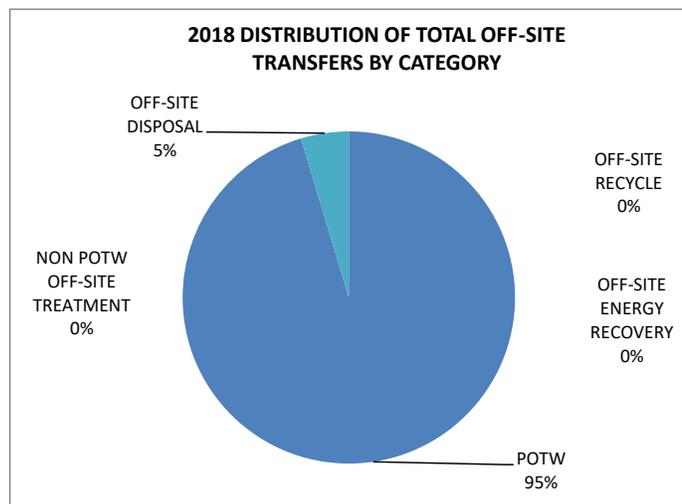
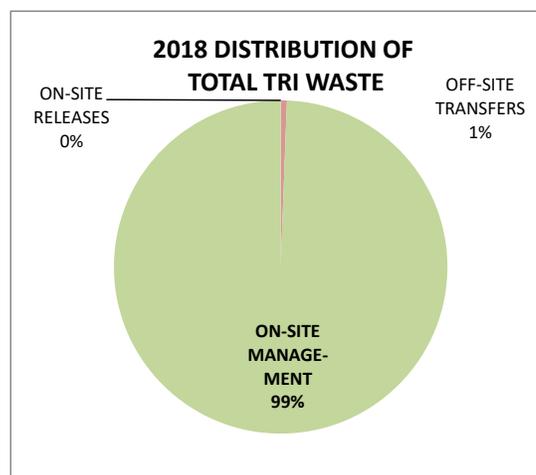
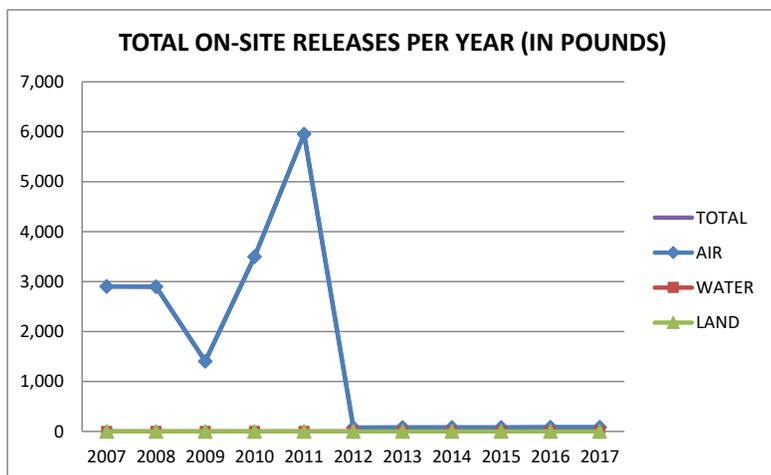
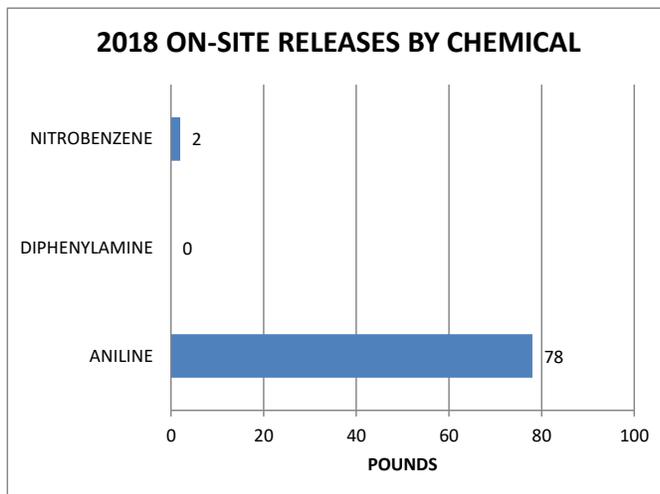
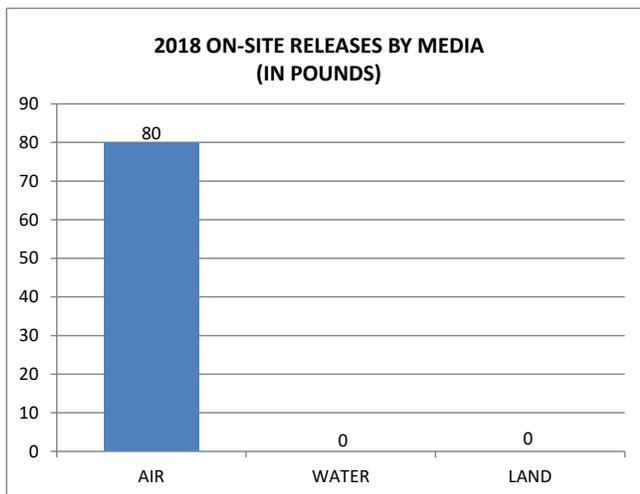
In 2011, TRI reports included more detailed calculations and analytical testing that were not used in previous years, resulting in higher releases reported. For the 2012 reporting year, a thermal oxidizer (installed in June 2011) was used for the calendar year for the destruction of aniline, which resulted in a decrease in on-site releases of 99% compared to 2011. (see *Total On-site Releases Per Year Graph* on the next page).

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ANILINE	78	0	0	78	1,783	310,000	NO	NO
DIPHENYLAMINE	0	0	0	0	0	0	NO	NO
NITROBENZENE	2	0	0	2	0	0	NO	YES
TOTAL	80	0	0	80	1,783	310,000		

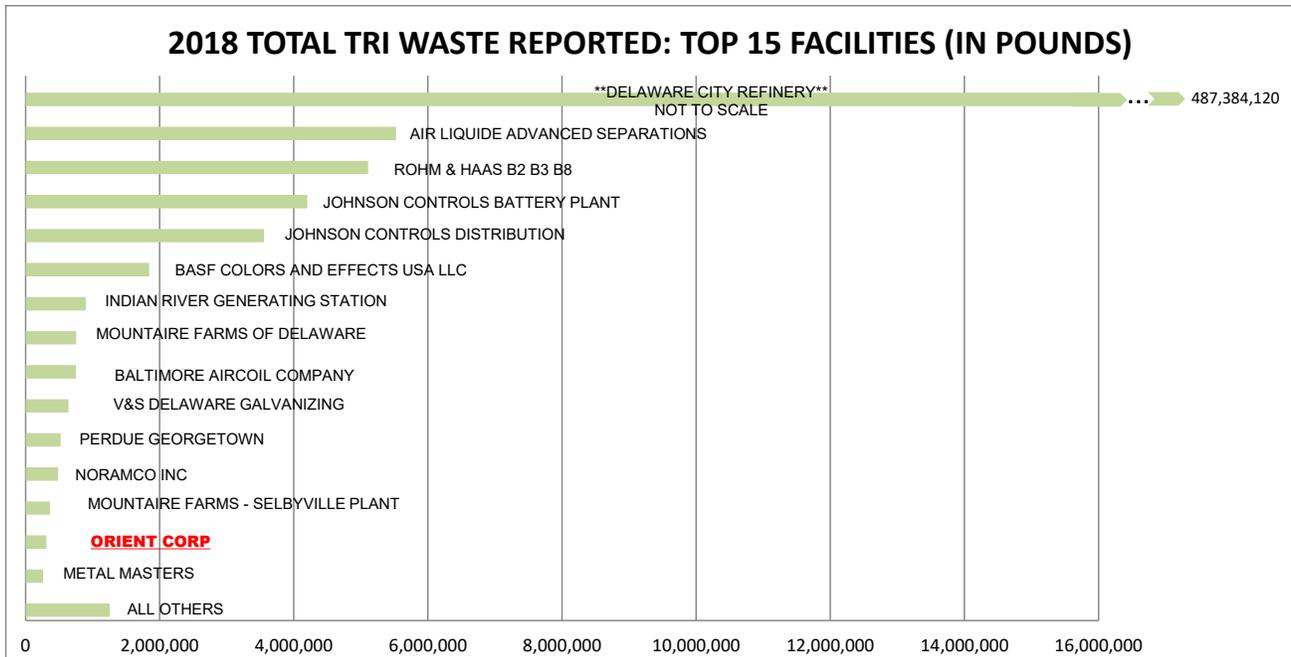
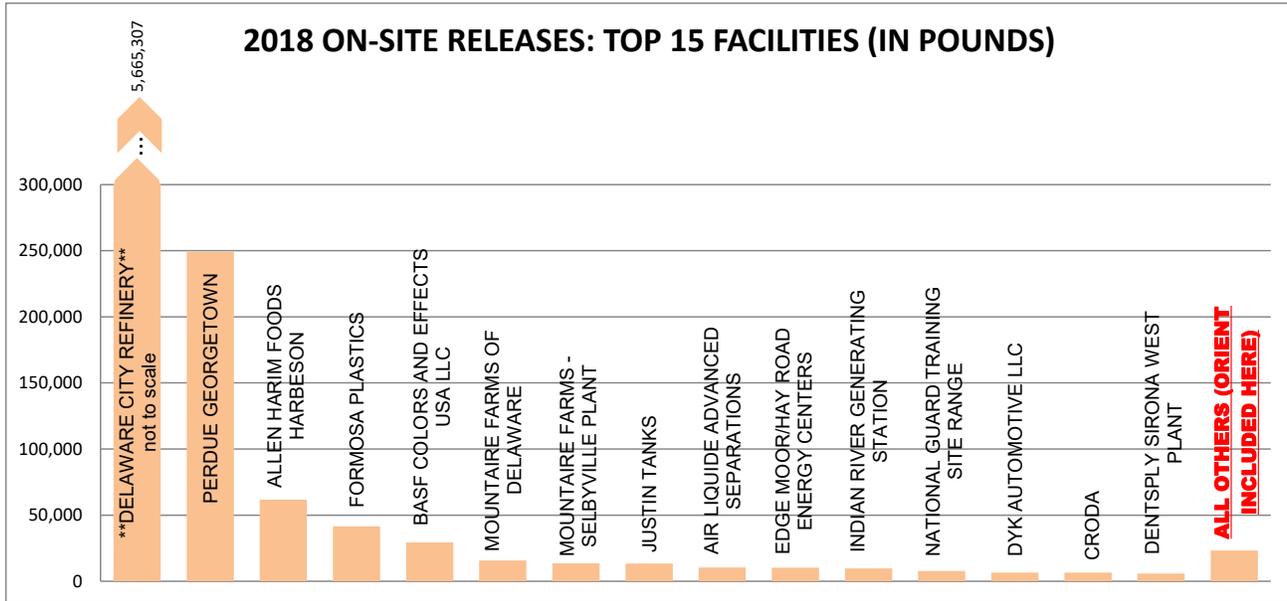
## ORIENT CORPORATION, CONT.

### GRAPHICAL INFORMATION:



## ORIENT, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES



### NOTABLE 2018 NATIONAL RANKINGS:

Orient ranks 3rd in the nation for on-site recycling of aniline (out of 43 facilities).



# TRI FACILITY PROFILES

## OWEN STEEL COMPANY

### LOCATION/CONTACT:

Address: 813 South Market Street  
Wilmington, DE 19801

Phone: (803)-251-7565

Contact: David Zalesne



### FACILITY OVERVIEW:

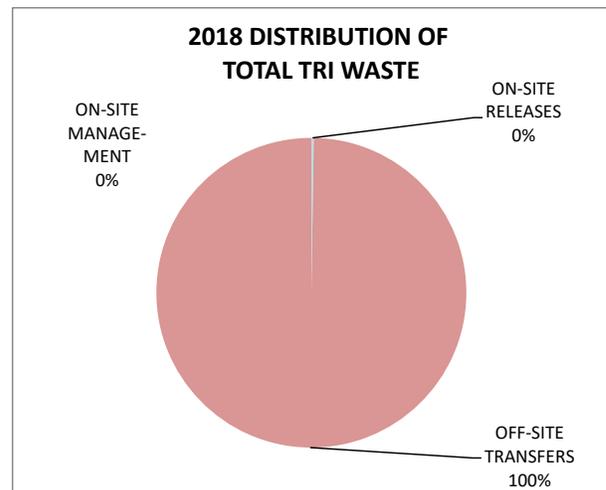
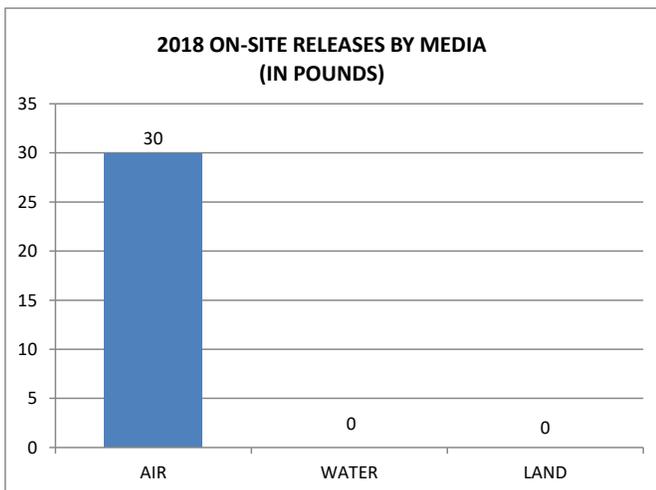
Owen Steel Company reported under the North American Industrial Classification System (NAICS) as 332312, which covers fabricated structural metal manufacturing.

Owen Steel Company, located in Wilmington, reported to TRI for the first time for 2015. The facility reported on three chemicals in 2018, lead compounds, manganese compounds, and nickel compounds. Off-site transfers for recycling accounted for more than 99% of the facility's total reportable waste, with on-site releases to air making up less than 1%.

### 2018 TRI DATA (REPORTED IN POUNDS):

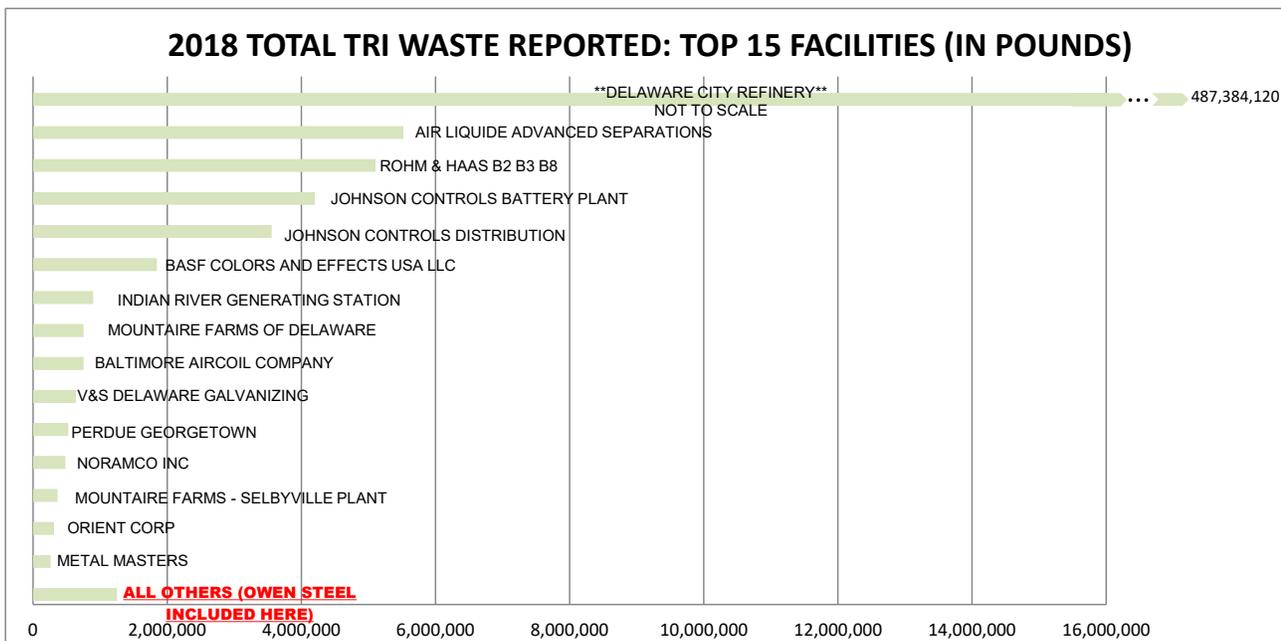
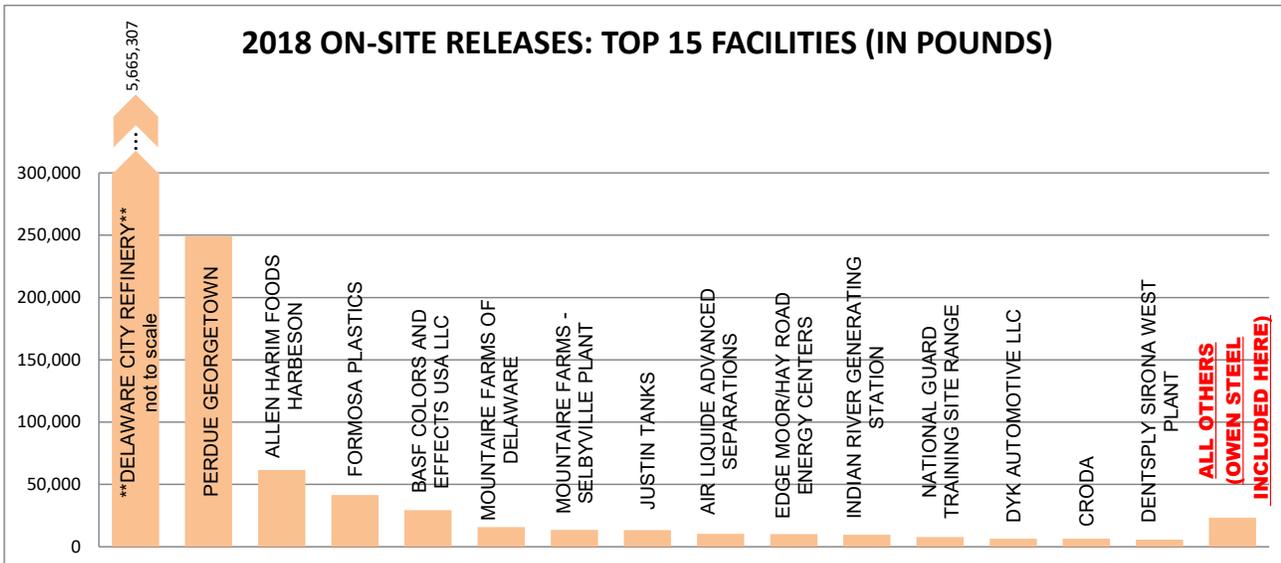
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD COMPOUNDS	0	0	0	0	321	0	YES	YES
MANGANESE COMPOUNDS	29	0	0	29	3,710	0	NO	NO
NICKEL COMPOUNDS	1	0	0	1	8,120	0	NO	YES
<b>TOTAL</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>12,151</b>	<b>0</b>		

### GRAPHICAL INFORMATION:



## OWEN STEEL COMPANY, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



**PERDUE BRIDGEVILLE**

**LOCATION/CONTACT:**

Address: 16447 Adams Road  
Bridgeville, DE 19933

Phone: (410)-341-2755

Contact: Andrea Staub



**FACILITY OVERVIEW:**

Perdue Farms is a producer of poultry products. The Bridgeville facility is a feed mill that produces poultry feed.

Perdue Bridgeville has reported since 1995. The facility reported on three chemicals in 2018, all on short Form A. Form A reports do not include waste management activities. The chemicals reported are metal compounds that are used in poultry feed as nutritional ingredients. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.)

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHROMIUM COMPOUNDS*	0	0	0	0	0	0	NO	YES
COPPER COMPOUNDS*	0	0	0	0	0	0	NO	NO
SELENIUM COMPOUNDS*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

**GRAPHICAL INFORMATION:**

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.



## TRI FACILITY PROFILES

### PERDUE GEORGETOWN

**LOCATION/CONTACT:**

Address: 20621 Savannah Road  
Georgetown, DE 19947

Phone: (410)-341-2755

Contact: Andrea Staub



**FACILITY OVERVIEW:**

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

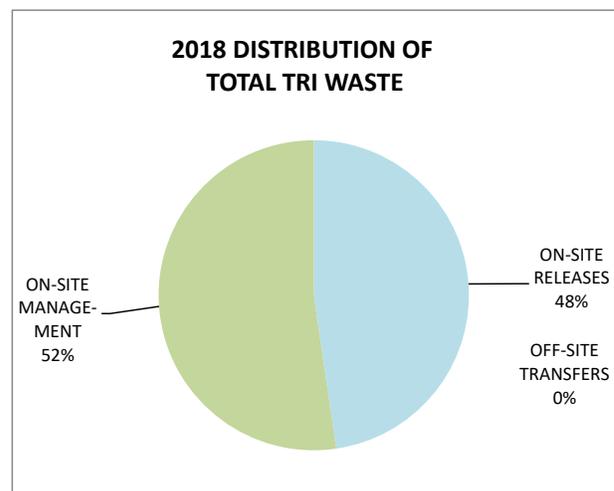
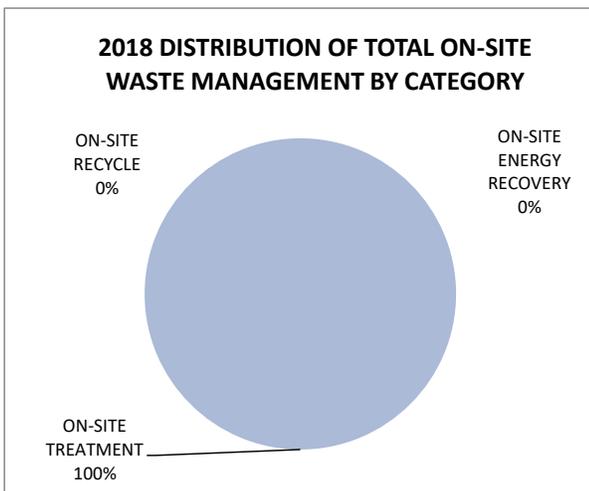
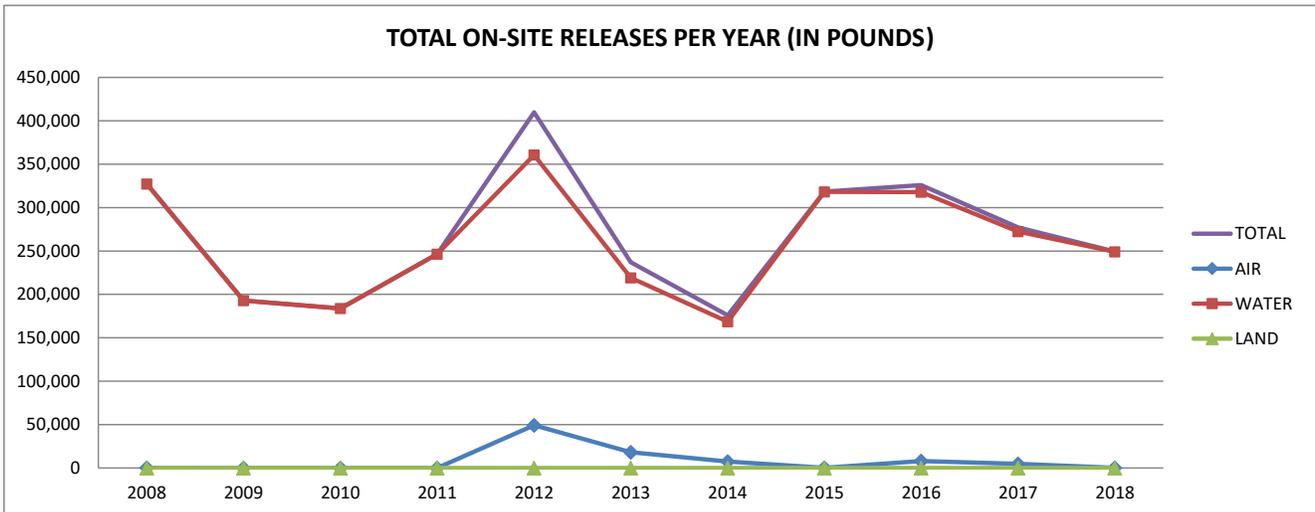
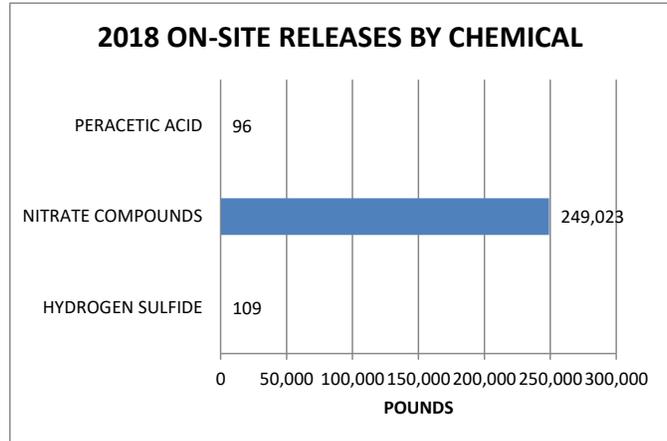
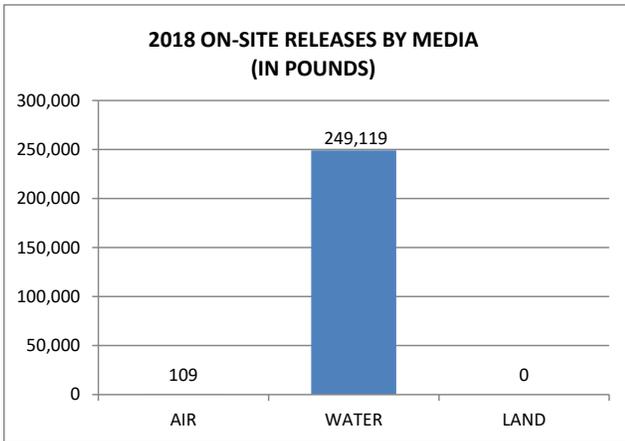
Perdue Georgetown reported on three TRI chemicals for 2018, nitrate compounds, peracetic acid, and hydrogen sulfide. Perdue’s wastewater treatment plant digests production wastewater from the poultry processing plant and converts some of this waste into nitrate compounds, which are discharged into a local stream. Hydrogen sulfide is a byproduct from anaerobic treatment of the organic wastes in the wastewater and is released to air.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
HYDROGEN SULFIDE	109	0	0	109	0	82,354	NO	NO
NITRATE COMPOUNDS	0	249,023	0	249,023	88	0	NO	NO
PERACETIC ACID	0	96	0	96	0	191,058	NO	NO
TOTAL	109	249,119	0	249,228	88	273,412		

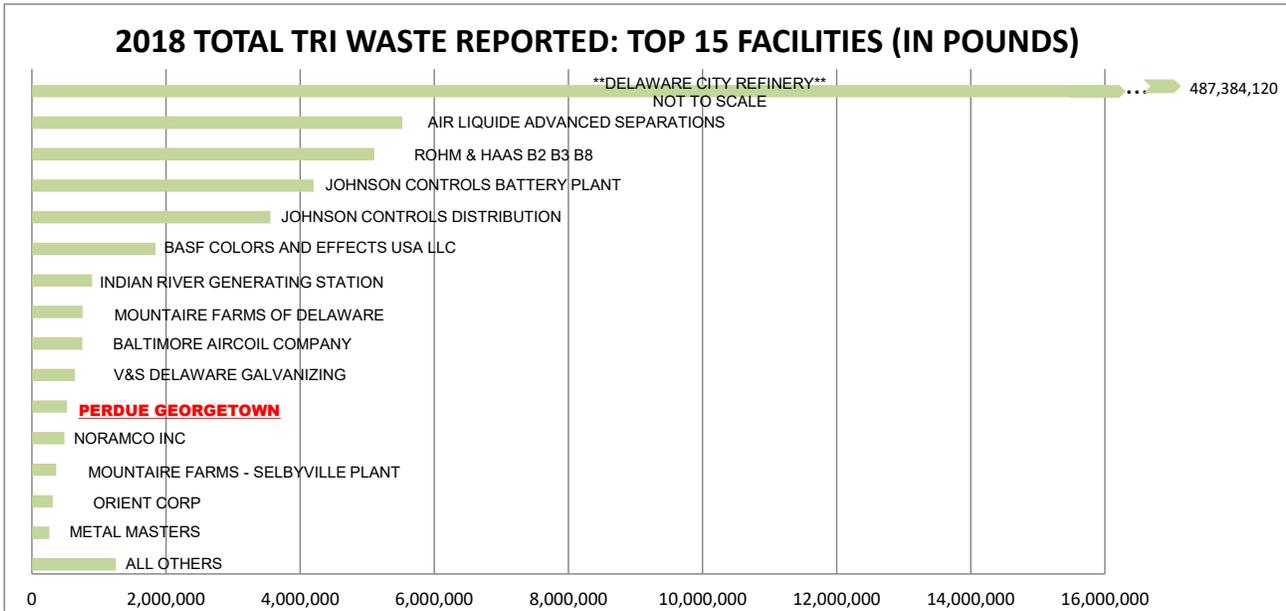
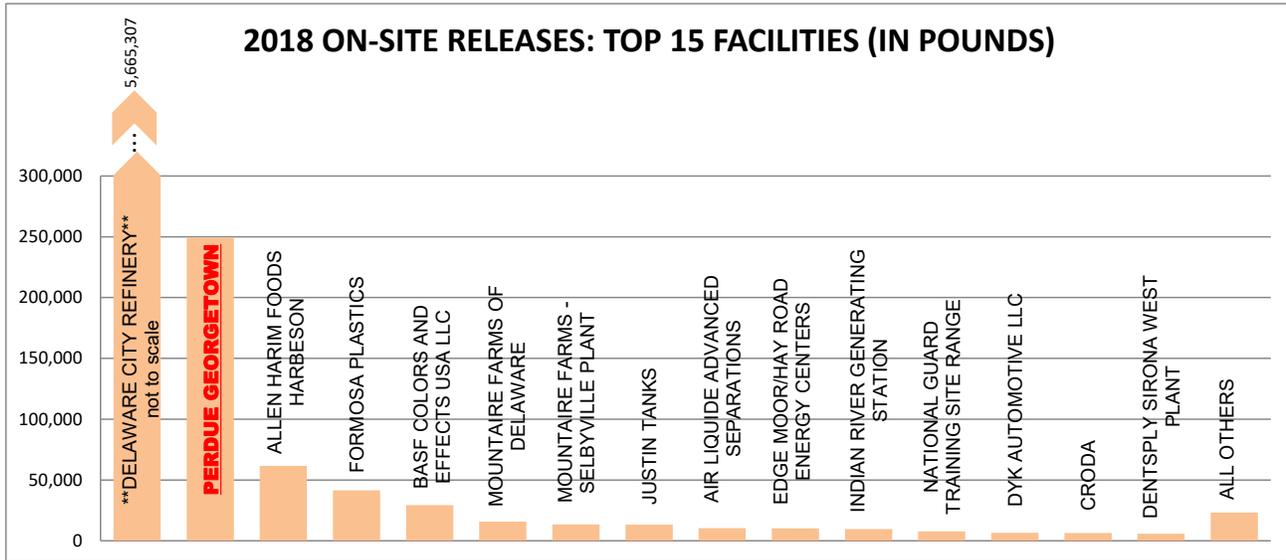
## PERDUE GEORGETOWN, CONT.

### GRAPHICAL INFORMATION:



## PERDUE GEORGETOWN, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Perdue Georgetown ranks 71st in on-site release of nitrate compounds by food/beverage facilities (NAICS 311) (out of 582 facilities).

Perdue Georgetown ranks 28th in the on-site treatment of hydrogen sulfide by food/beverage facilities (NAICS 311) (out of 87 facilities).

**PERDUE MILFORD**

**LOCATION/CONTACT:**

Address: 255 N. Rehoboth Blvd.  
Milford, DE 19963

Phone: (410)-341-2755

Contact: Andrea Staub



**FACILITY OVERVIEW:**

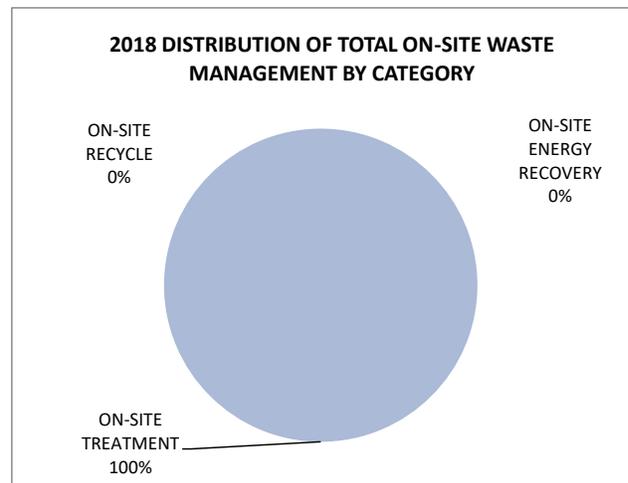
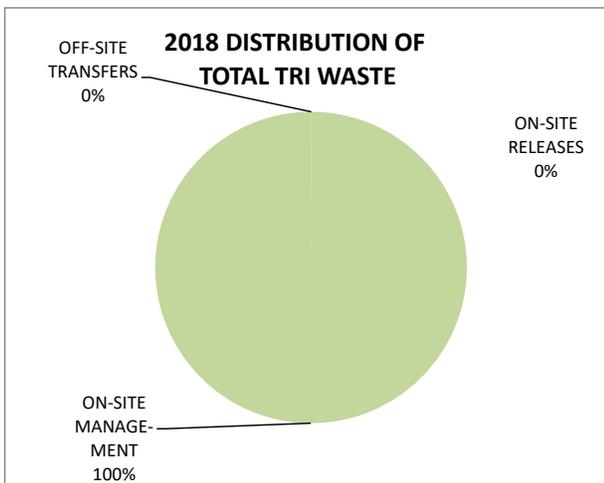
Perdue Farms is a producer of poultry products. The Milford facility processes chickens for sale to the retail market, and is an organic certified plant.

Perdue Milford has reported since 1991, previously as Conagra Broiler. From 1999 through 2006, the facility was below the reporting threshold, and no TRI reports were filed. For 2018, the facility reported on one chemical, peracetic acid, which is almost completely managed on-site. Peracetic acid is found in a FDA-approved antimicrobial food treatment for pathogen reduction in poultry processing. The product is used in chilling and carcass washing equipment in the plant. According to the manufacturer, the product is environmentally responsible as it is compatible with water treatment systems, and rapidly breaks down after use.

**2018 TRI DATA (REPORTED IN POUNDS):**

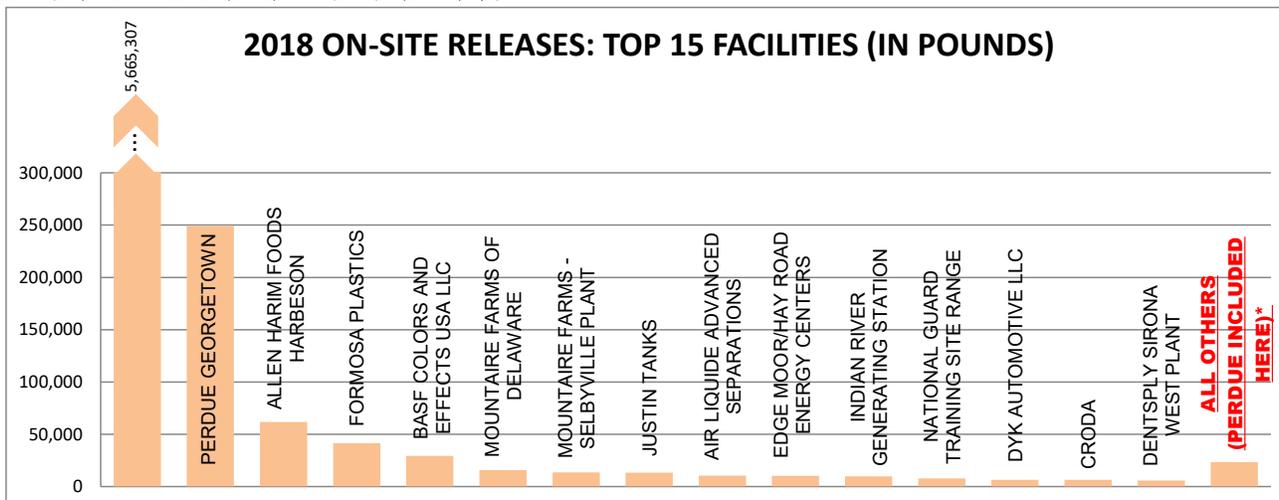
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
PERACETIC ACID	0	0	0	0	62	124,901	NO	NO
TOTAL	0	0	0	0	62	124,901		

**GRAPHICAL INFORMATION:**

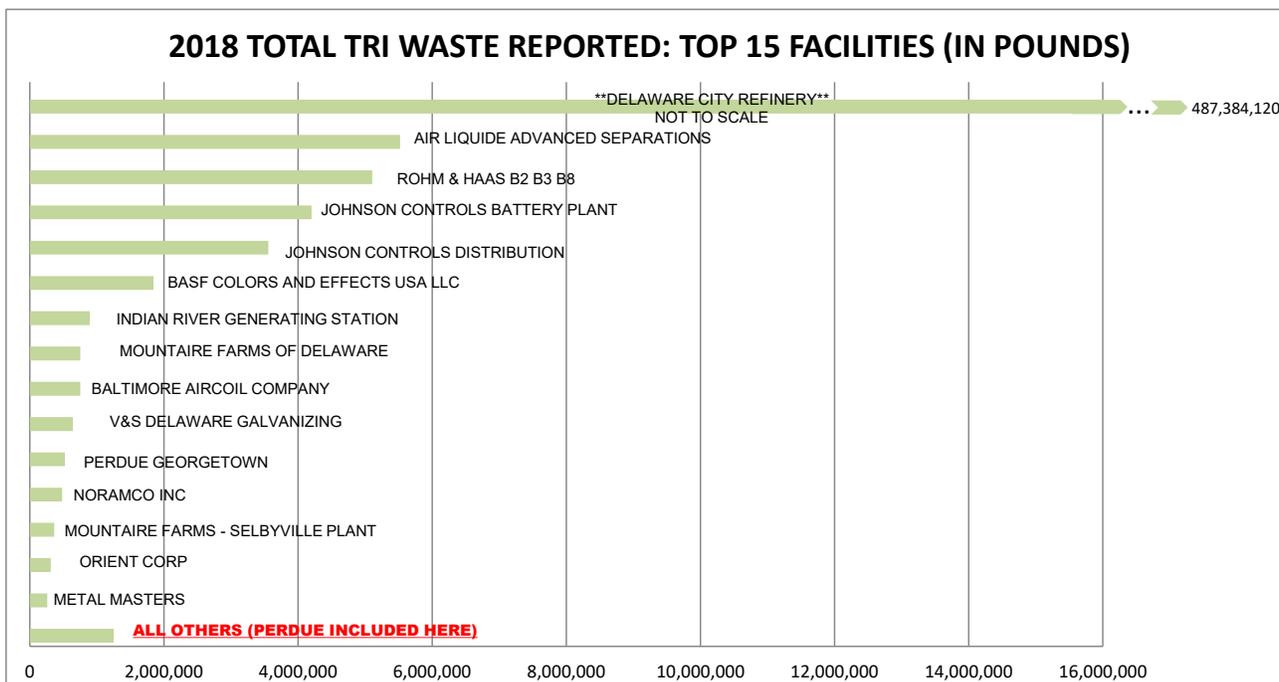


## PERDUE MILFORD, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



\* Perdue Milford ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.



### NOTABLE 2018 NATIONAL RANKINGS:

Perdue Milford ranks 82nd for on-site treatment of peracetic acid (out of 248 facilities).

### PICTSWEET

**LOCATION/CONTACT:**

Address: 18215 Wesley Church Road  
Bridgeville, DE 19933

Phone: (731)-663-7600

Contact: Allen Watts



**FACILITY OVERVIEW:**

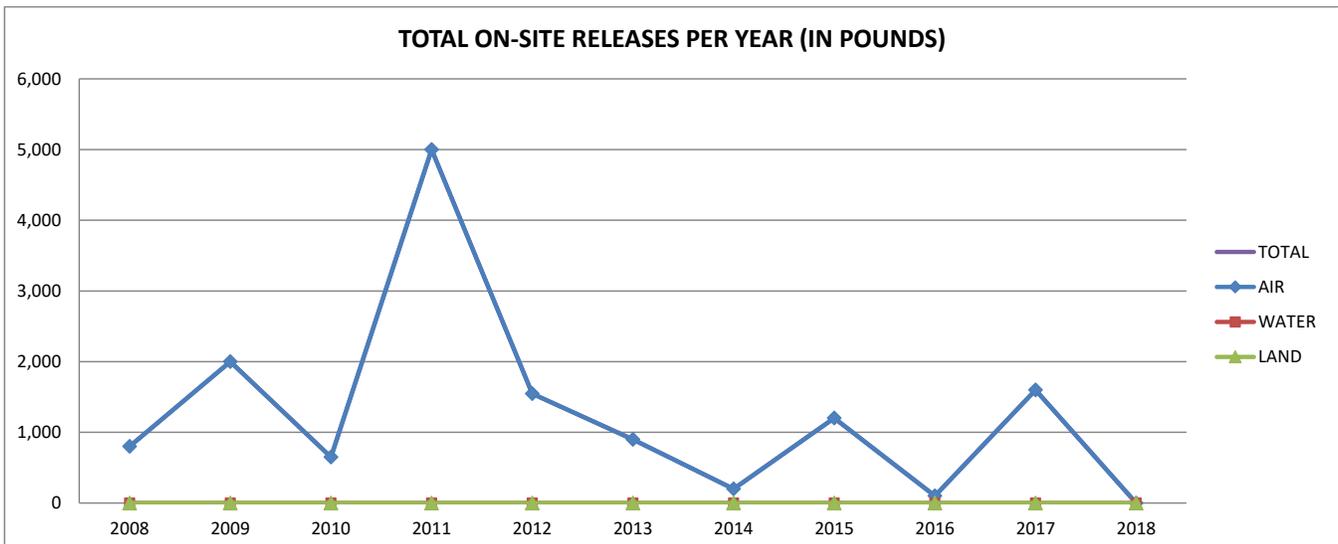
Pictsweet reports under the North American Industrial Classification System (NAICS) as 311411, which covers the manufacturing of frozen fruit, juice and vegetables.

The facility has reported since 1989, previously as Birds Eye Foods and Agrilink Foods. Pictsweet reported one TRI chemical in 2018, ammonia, with no on-site releases. Ammonia is used in refrigeration equipment, and releases are typical through normal service maintenance, leaks, and other losses that occur in the system. On-site release amounts of ammonia have varied year to year (see *Total On-site Releases Per Year Graph*).

**2018 TRI DATA (REPORTED IN POUNDS):**

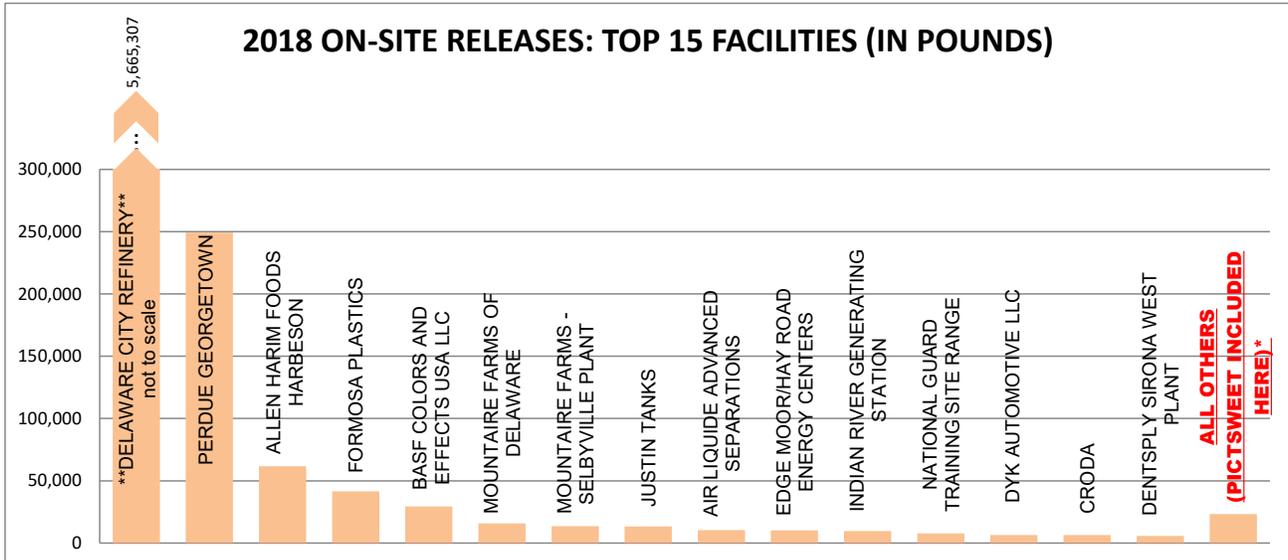
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

**GRAPHICAL INFORMATION:**



**PICTSWEET, CONT.**

**COMPARISON TO OTHER DELAWARE TRI FACILITIES:**



\*Pictsweet ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.

Pictsweet ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

## PPG INDUSTRIES

### LOCATION/CONTACT:

Address: 1886 Lynnbury Woods Road  
Dover, DE 19904

Phone: (502)-802-5012

Contact: Kimberly Vance



### FACILITY OVERVIEW:

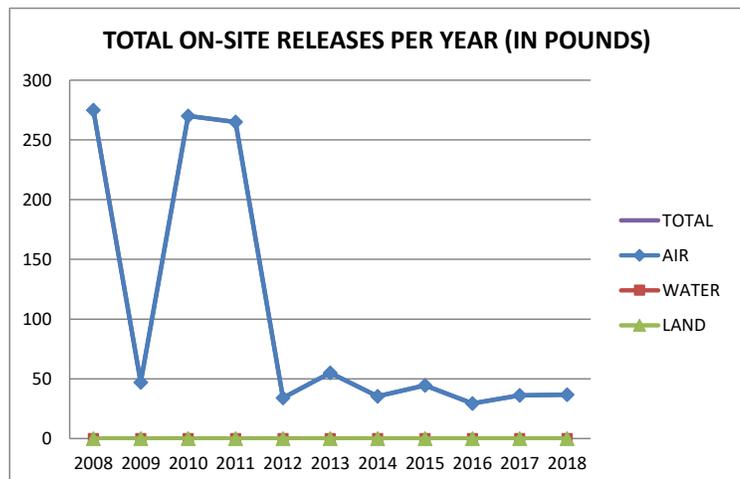
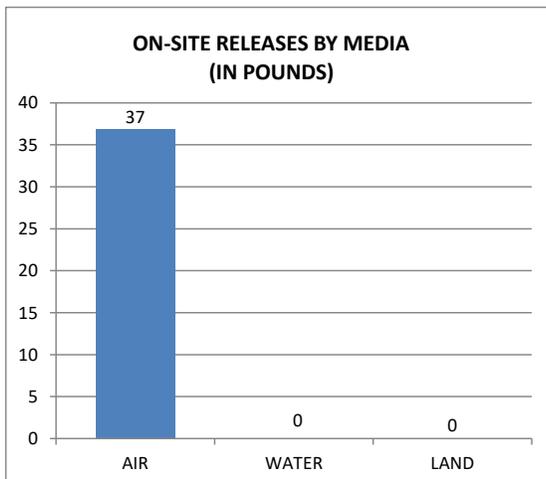
PPG Industries reported under the North American Industrial Classification System (NAICS) as 325510, which covers paint and coating manufacturing.

PPG Industries has reported since 1987, and they ceased operations in 2018. The facility reported on three chemicals in 2018, with on-site releases only to air. The chemicals reported are utilized as raw materials in the paint making process. The raw materials are mixed together to make architectural paint. On-site releases accounted for less than 1% of all waste activities in 2018. Releases for 2008 and from 2010 and 2011 were higher than other years, with increased releases of zinc compounds on-site (see *Total On-site Releases Per Year Graph* on the next page).

### 2018 TRI DATA (REPORTED IN POUNDS):

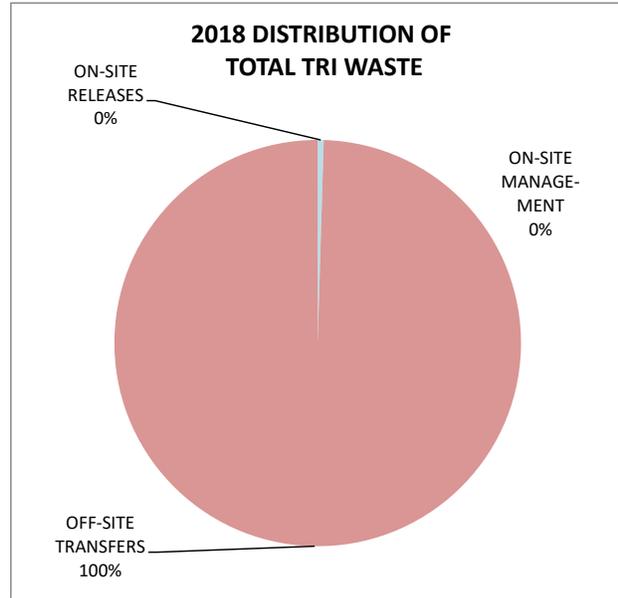
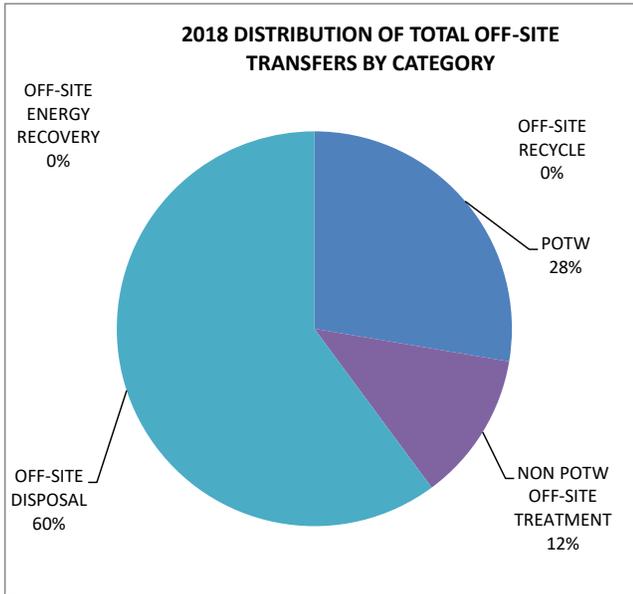
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CERTAIN GLYCOL ETHERS	1	0	0	1	1,340	0	NO	NO
ETHYLENE GLYCOL	0	0	0	0	2,860	0	NO	NO
N-METHYL-2-PYRROLIDONE	0	0	0	0	570	0	NO	NO
ZINC COMPOUNDS	35	0	0	35	2,950	0	NO	NO
<b>TOTAL</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>7,720</b>	<b>0</b>		

### GRAPHICAL INFORMATION:

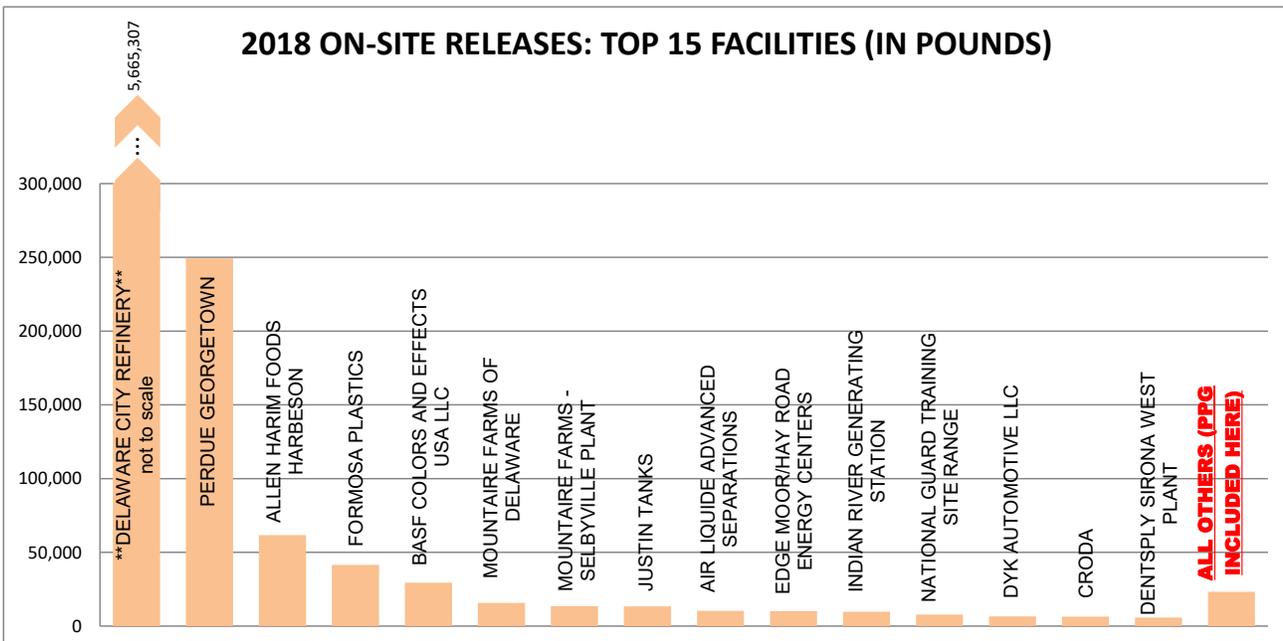


PPG INDUSTRIES, CONT.

GRAPHICAL INFORMATION CONT.:



COMPARISON TO OTHER DELAWARE TRI FACILITIES:

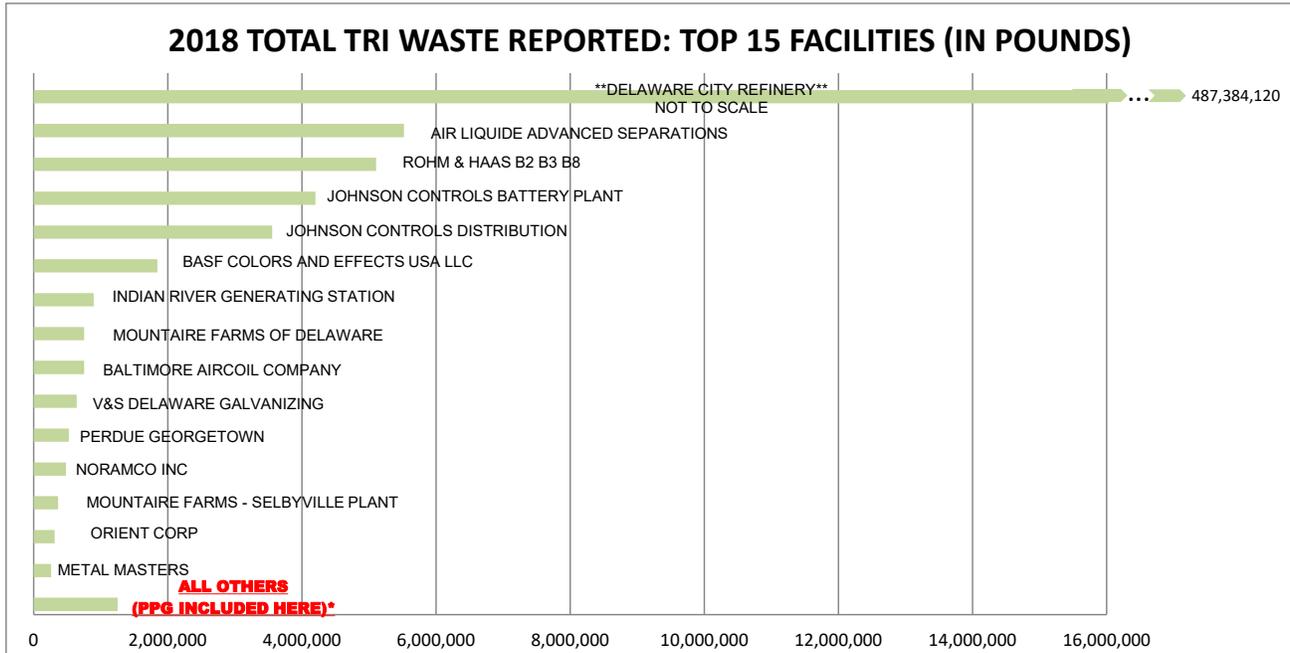




# TRI FACILITY PROFILES

## PPG INDUSTRIES, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:



\*PPG ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred



## TRI FACILITY PROFILES

### PRINCE MINERALS LLC

#### LOCATION/CONTACT:

Address: 301 Pigeon Point Road  
New Castle, DE 19720

Phone: (646)-747-4176

Contact: Mary Simpler



#### FACILITY OVERVIEW:

Prince Minerals LLC is a supplier of colorants and additives to the North American brick industry as well as complementary products to serve the foundry, glass, and refractory markets.

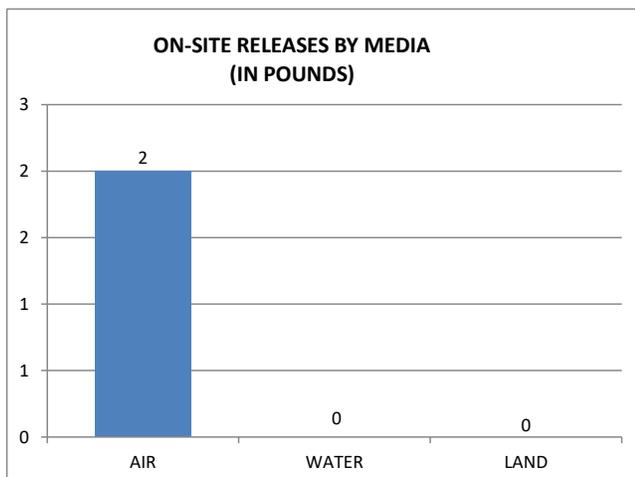
Prince Minerals LLC has reported since 1998, previously as American Minerals. The facility reported on 3 chemicals in 2018, all metal compounds, with on-site releases only to air. In 2018, waste material containing over 94,000 pounds of manganese was beneficially reused at a brownfields site, rather than being disposed of at a landfill. Barium compounds and Nickel compounds were reported on short Form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.) Persistent Bio-Accumulative Toxic (PBT) Chemicals, such as lead, are ineligible for Form A.

#### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
BARIUM COMPOUNDS*	0	0	0	0	0	0	NO	NO
MANGANESE COMPOUNDS	2	0	0	2	0	0	NO	NO
NICKEL COMPOUNDS*	0	0	0	0	0	0	NO	YES
TOTAL	2	0	0	2	0	0		

\* Reported on short form A

#### GRAPHICAL INFORMATION:

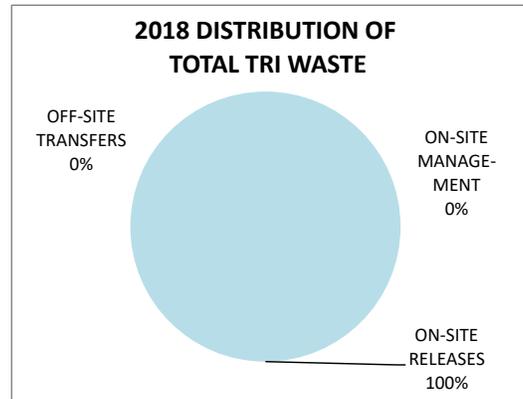
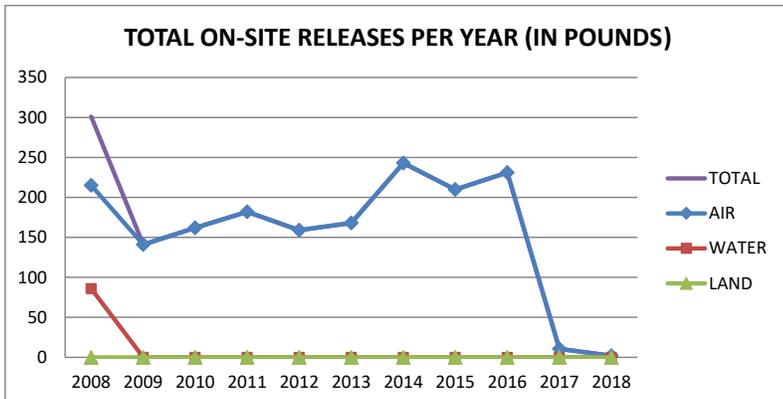


# TRI FACILITY PROFILES

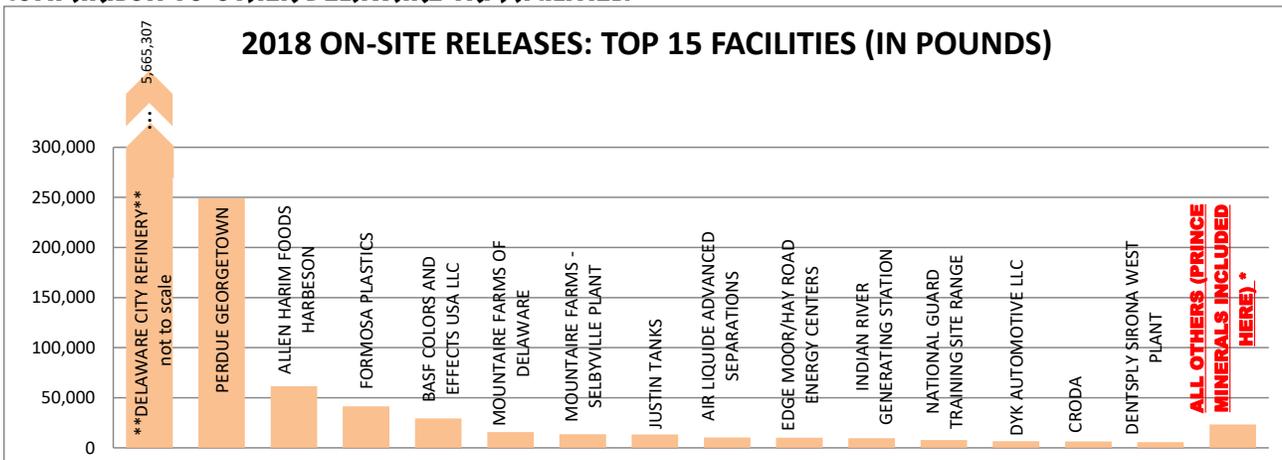


## PRINCE MINERALS LLC, CONT.

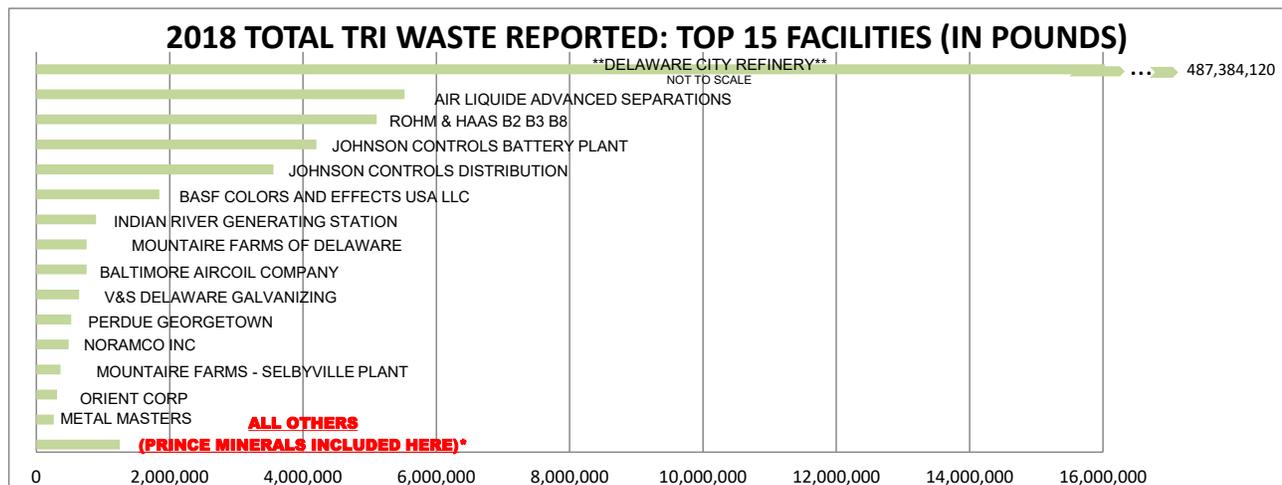
### GRAPHICAL INFORMATION CONT.:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



\*Prince Minerals ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.



\*Prince Minerals ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.



## TRI FACILITY PROFILES

### ROGERS CORP

#### LOCATION/CONTACT:

Address: 1100 Governor Lea Road  
Bear, DE 19701

Phone: (860) 779-5598

Contact: Timothy Gauthier



#### FACILITY OVERVIEW:

Rogers Corp. specializes in the manufacturing of fluoropolymer (PTFE) laminates and ceramic-filled fluoropolymer laminates that are used in frequency-dependent circuit applications such as aircraft radar systems, base station amplifiers and cell tower antennas for wireless telecommunications. Rogers also produces precision calendared silicone rubber coated fabric and specialty extruded self-fusing silicone rubber tapes. These silicone rubber products are used in aerospace, transportation, general industrial, and semiconductor markets more often than not for electrical insulation.

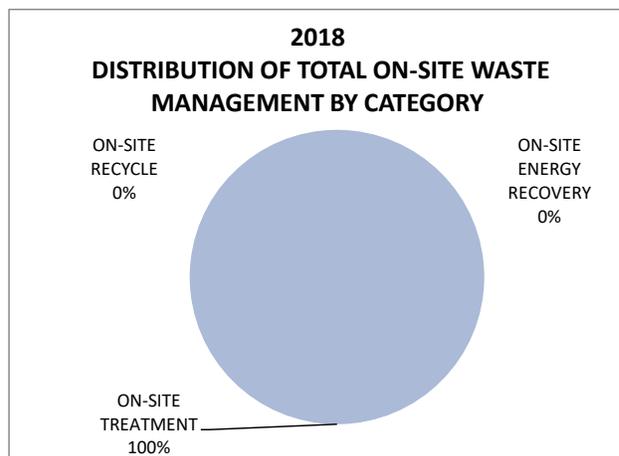
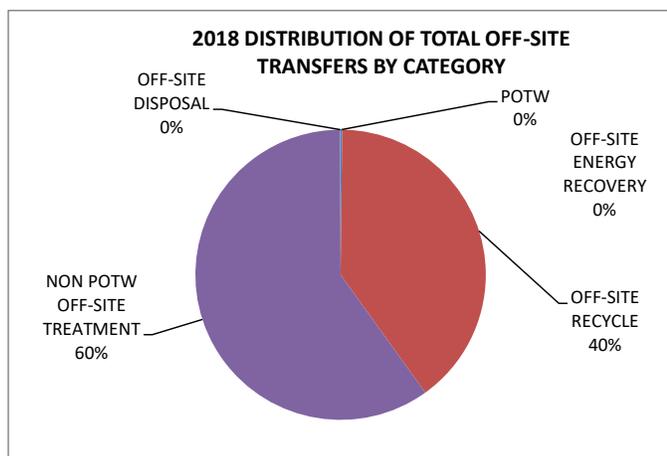
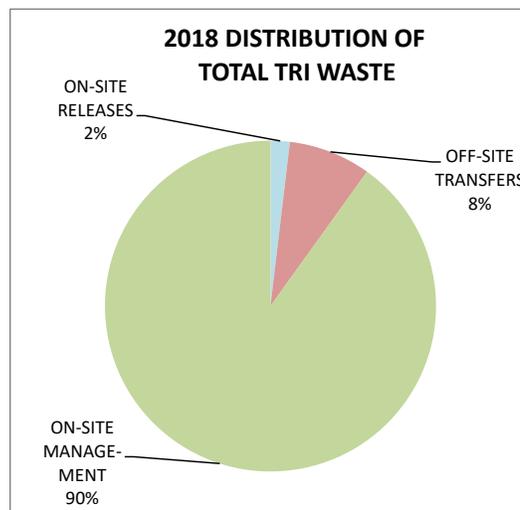
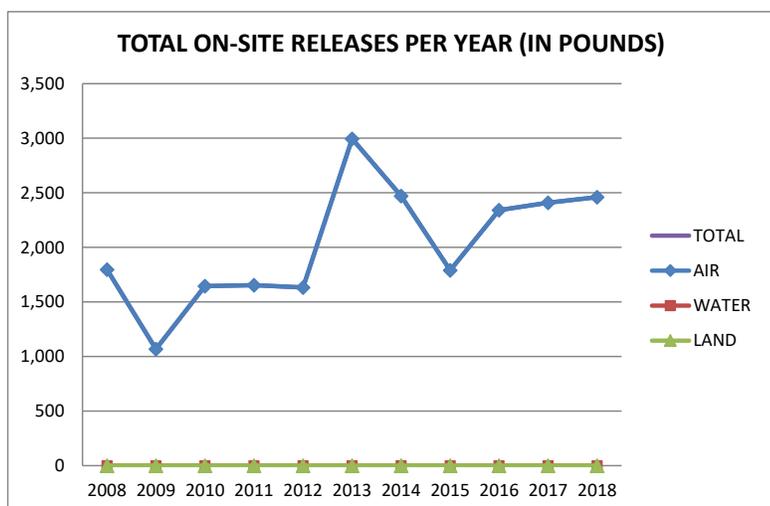
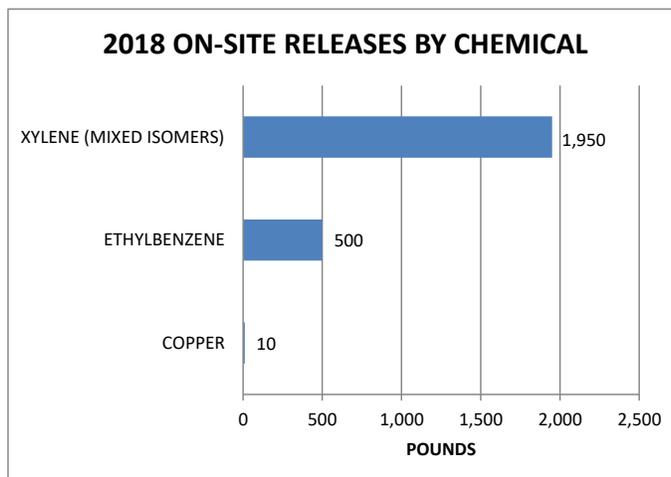
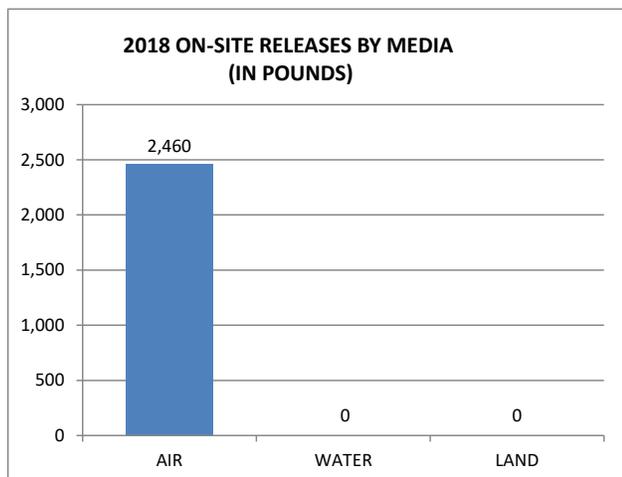
Rogers has reported since 1987, previously as Arlon and Keene. Rogers reported three TRI chemicals, ethylbenzene, xylene and copper, in 2018. Rogers uses xylene as a chemical processing aid in the coating of fiberglass with the silicone rubber dispersion. Ethylbenzene is a component found in many commercial 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.

#### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
COPPER	10	0	0	10	4,223	0	NO	NO
ETHYLBENZENE	500	0	0	500	1,000	19,000	NO	YES
XYLENE (MIXED ISOMERS)	1,950	0	0	1,950	5,300	99,000	NO	NO
<b>TOTAL</b>	<b>2,460</b>	<b>0</b>	<b>0</b>	<b>2,460</b>	<b>10,523</b>	<b>118,000</b>		

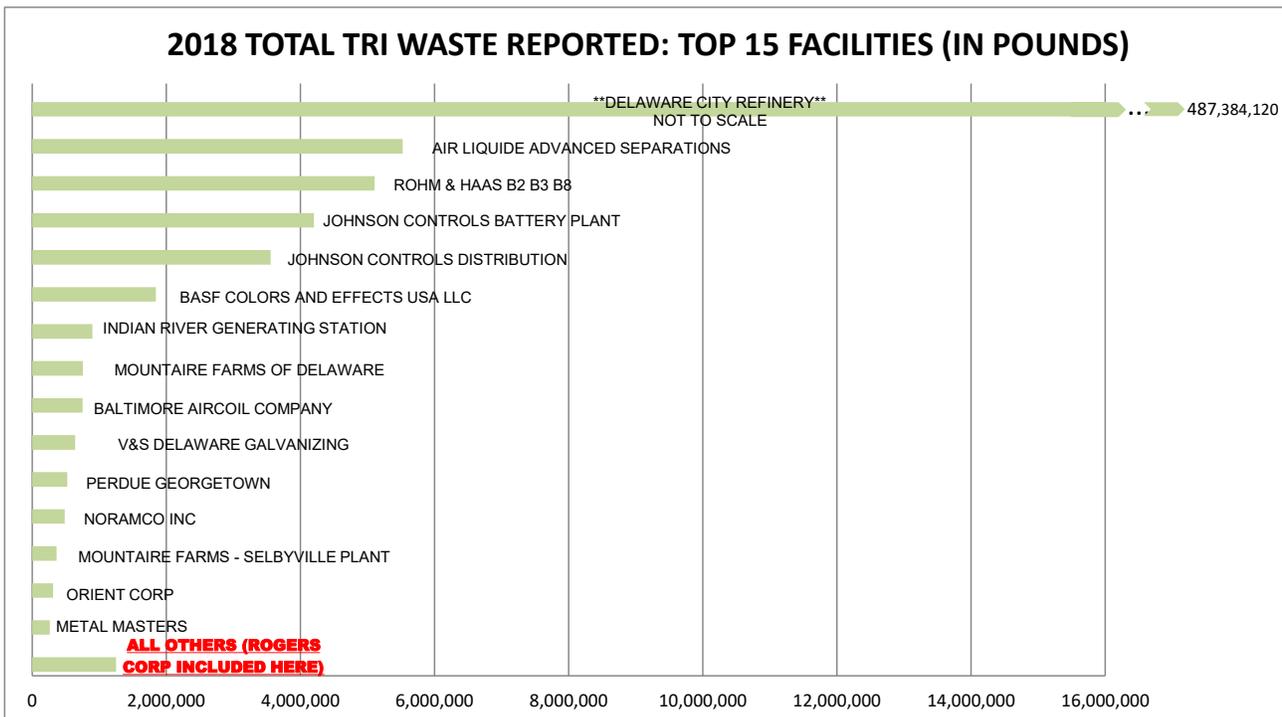
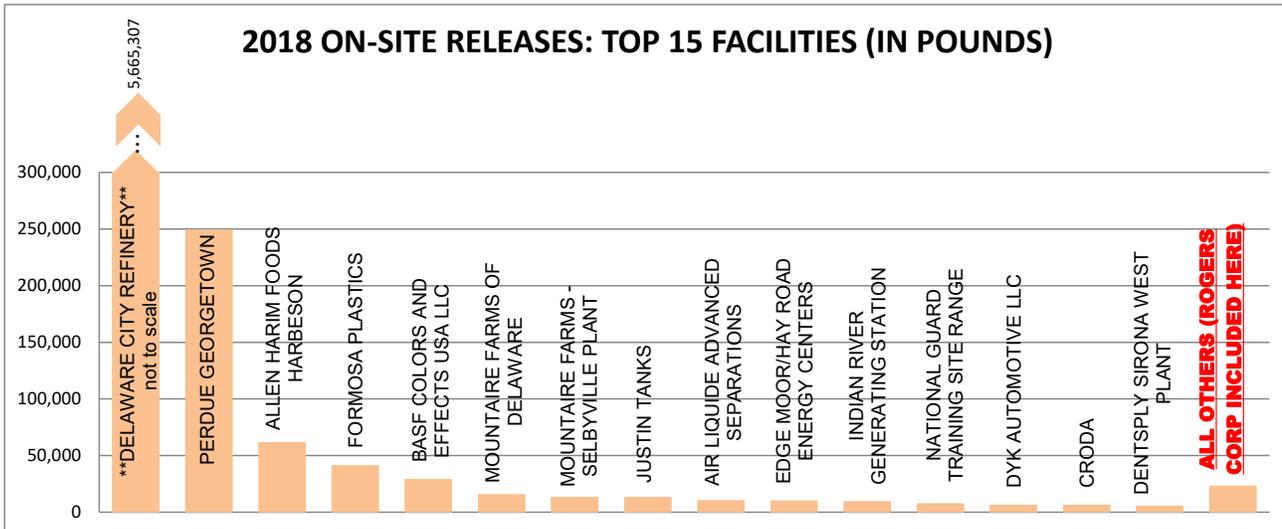
## ROGERS CORP.

### GRAPHICAL INFORMATION:



## ROGERS CORP, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Rogers Corp. ranks 11th in the on-site treatment of xylene (mixed isomers) for plastic and rubber manufacturing facilities (NAICS 326) (out of 64 facilities).

Rogers Corp. ranks 39th in on-site releases of xylene (mixed isomers) for plastic and rubber manufacturing facilities (NAICS 326) (out of 64 facilities).



## TRI FACILITY PROFILES

### ROHM & HAAS B2, B3, B8

#### LOCATION/CONTACT:

Address: 451 Bellevue Road  
Newark, DE 19713

Phone: (302)-366-0500

Contact: Peter Palena



#### FACILITY OVERVIEW:

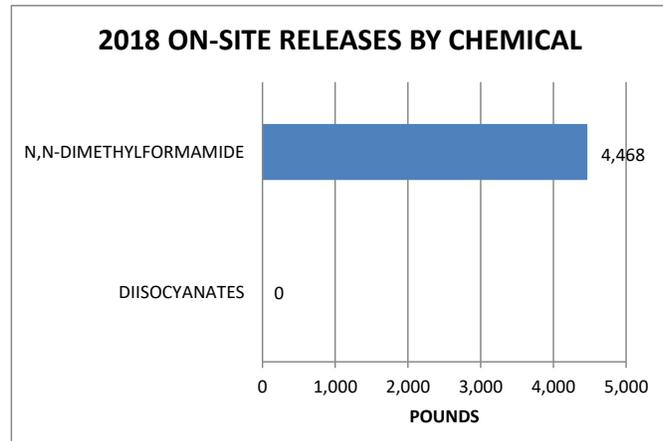
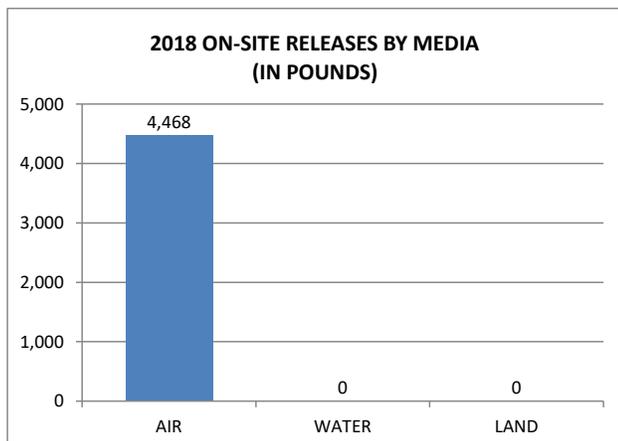
Rohm & Haas (Buildings 2, 3, and 8) manufactures polishing pads and slurries for the semiconductor, electronics, and glass industries.

The facility has reported since 1987, previously as Rodel. Rohm and Haas reported on two TRI chemicals for 2018. N,N-Dimethylformamide (DMF) is used as a solvent carrier in the polishing pad manufacturing process, and accounted for virtually all of their on-site releases. Releases of DMF mostly occur through evaporation from the poromerics coating and washing process. The majority of the DMF used is recycled in 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 (see *Total On-site Releases Per Year Graph* on the next page).

#### 2018 TRI DATA (REPORTED IN POUNDS):

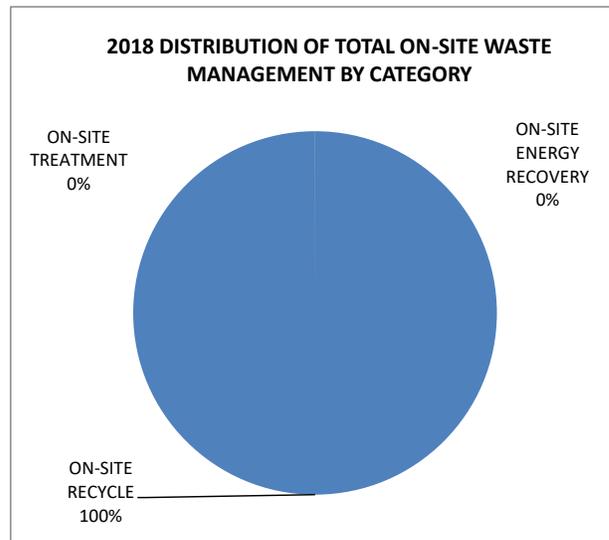
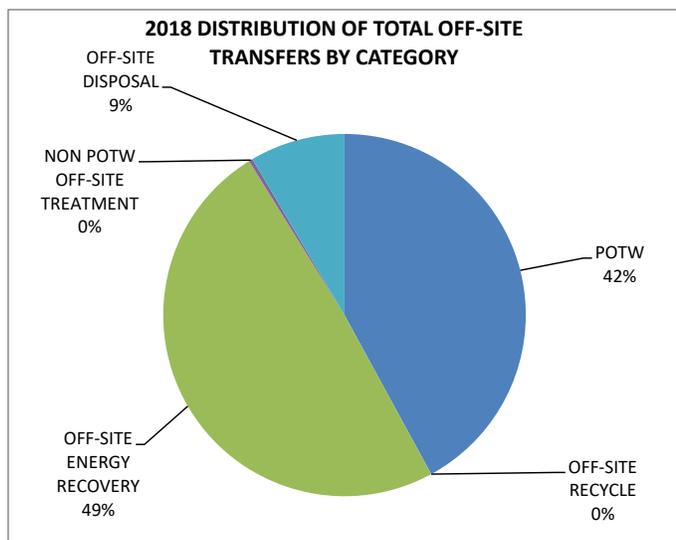
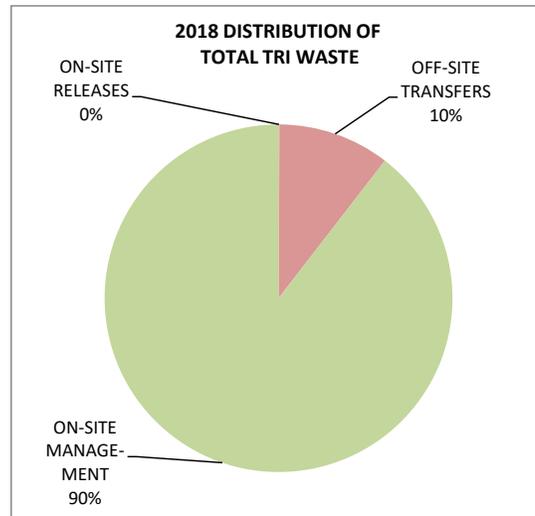
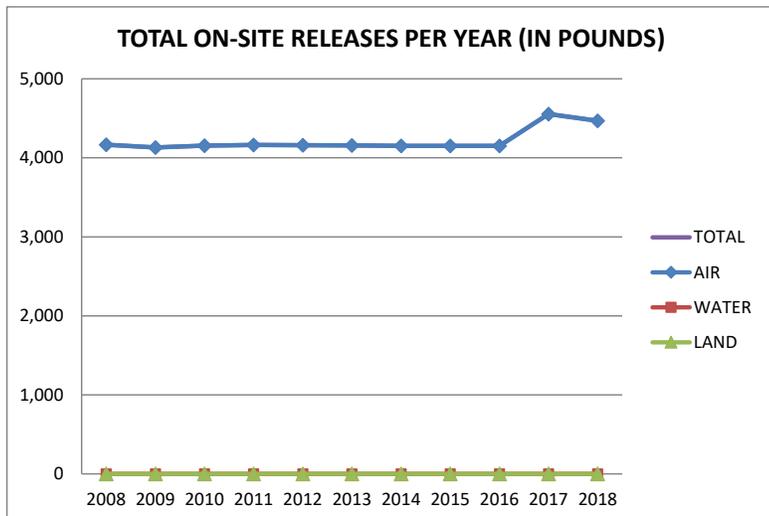
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
DIISOCYANATES	0	0	0	0	1,808	0	NO	NO
N,N-DIMETHYLFORMAMIDE	4,468	0	0	4,468	528,474	4,571,245	NO	NO
TOTAL	4,468	0	0	4,468	530,282	4,571,245		

#### GRAPHICAL INFORMATION:



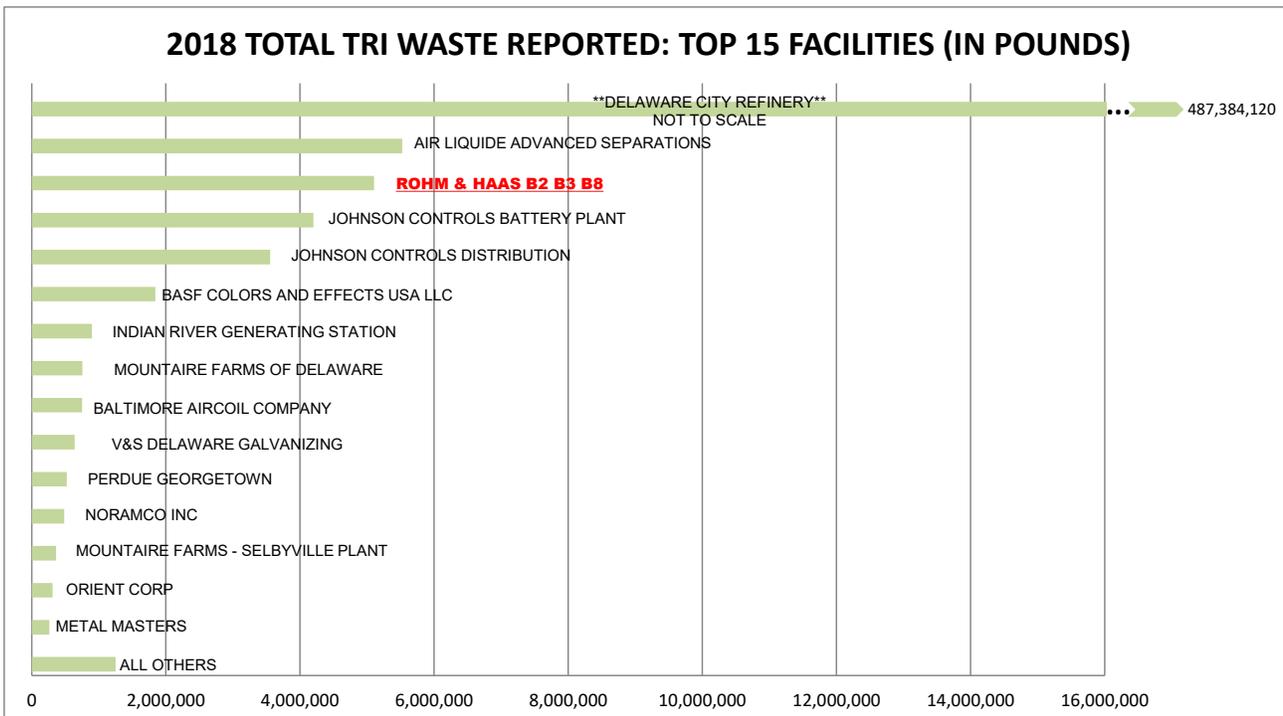
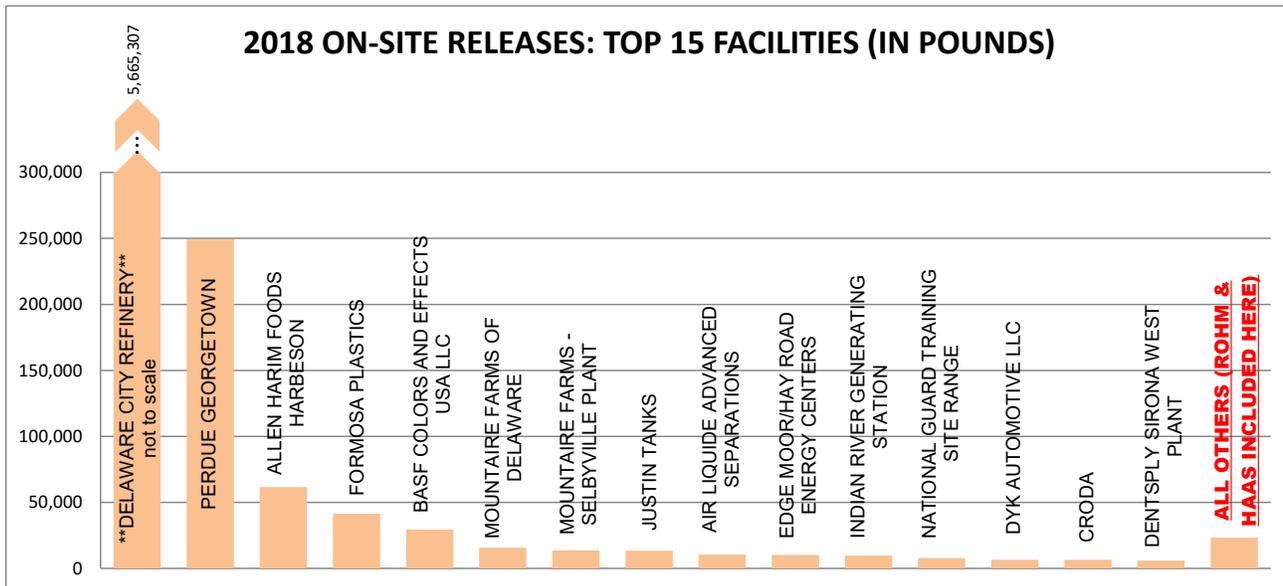
**ROHM & HAAS B2, B3, B8, CONT.**

**GRAPHICAL INFORMATION:**



## ROHM & HAAS B2, B3, B8, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

Rohm & Haas ranks 7th for off-site transfers of n,n-dimethylformamide (out of 152 facilities).

Rohm & Haas ranks 1st for on-site recycling of n,n-dimethylformamide (out of 152 facilities).



# TRI FACILITY PROFILES

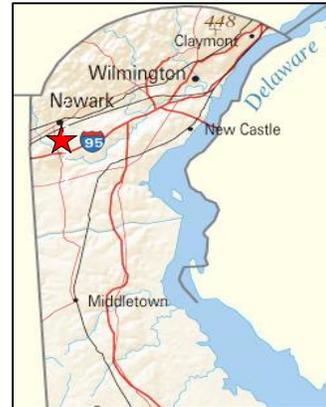
## ROHM & HAAS B5, B6

### LOCATION/CONTACT:

Address: 351 Bellevue Road  
Newark, DE 19713

Phone: (302)-366-0500

Contact: Peter Palena



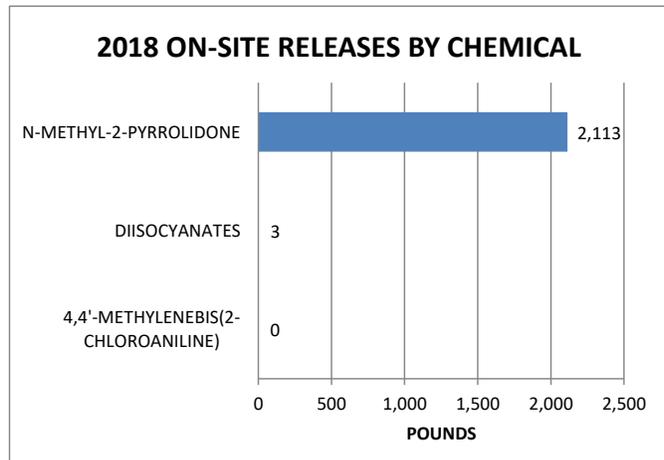
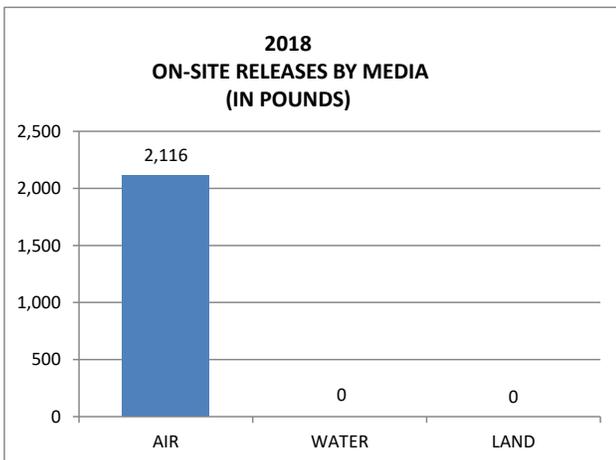
### FACILITY OVERVIEW:

Rohm & Haas (Buildings 5 and 6) manufactures polishing pads for the semiconductor and electronics industries. Rohm & Haas (Buildings 5 and 6) has reported since 1995, formerly as the Rodel Technical Center. For 2018, the facility reported 3 chemicals, with n-methyl-2-pyrrolidone (NMP) accounting for 99.9% of all on-site releases. NMP is utilized in cleaning equipment used in manufacturing. The majority of NMP is managed off-site with only about 5% being released on-site to air.

### 2018 TRI DATA (REPORTED IN POUNDS):

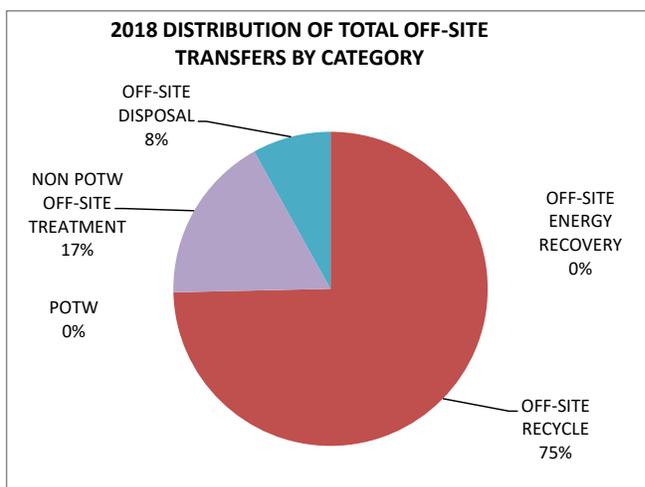
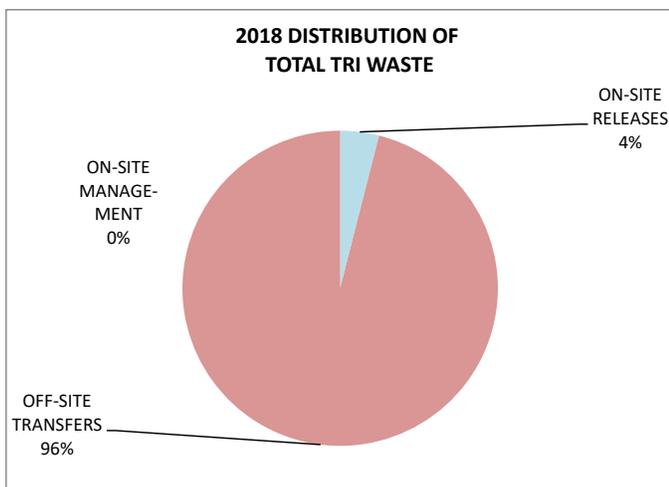
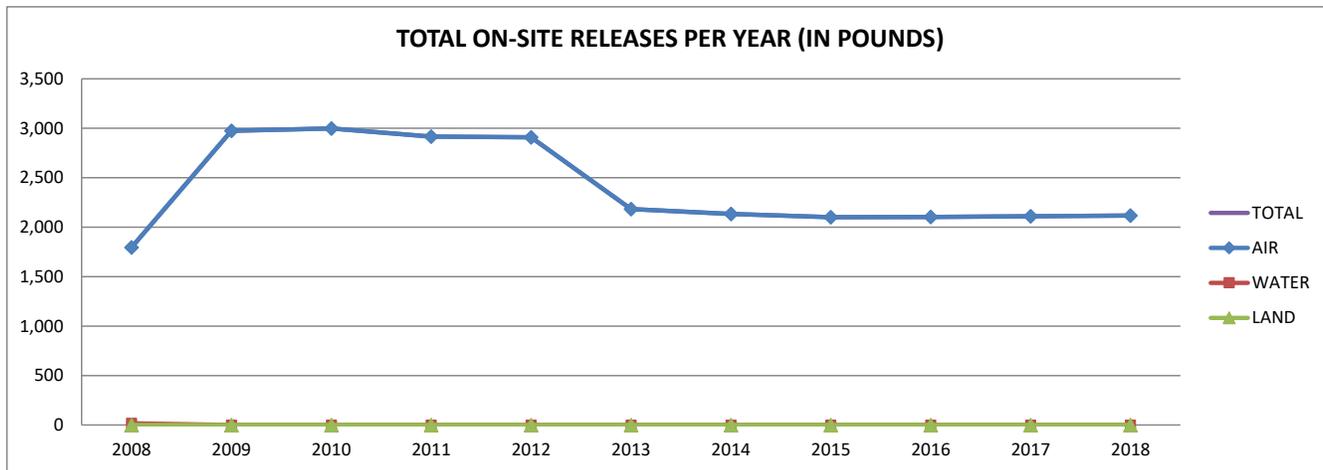
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
4,4'-METHYLENEBIS(2-CHLOROANILINE)	0	0	0	0	1,124	0	NO	YES
DIISOCYANATES	3	0	0	3	6,816	0	NO	NO
N-METHYL-2-PYRROLIDONE	2,113	0	0	2,113	43,191	0	NO	NO
<b>TOTAL</b>	<b>2,116</b>	<b>0</b>	<b>0</b>	<b>2,116</b>	<b>51,131</b>	<b>0</b>		

### GRAPHICAL INFORMATION:

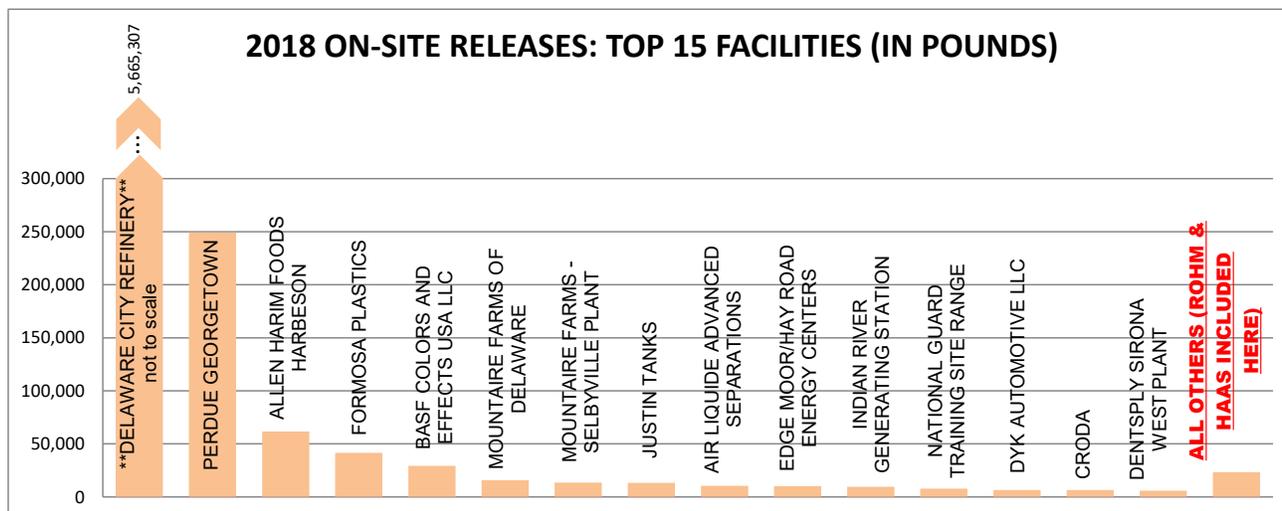


## ROHM & HAAS B5, B6 CONT.

### GRAPHICAL INFORMATION:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:

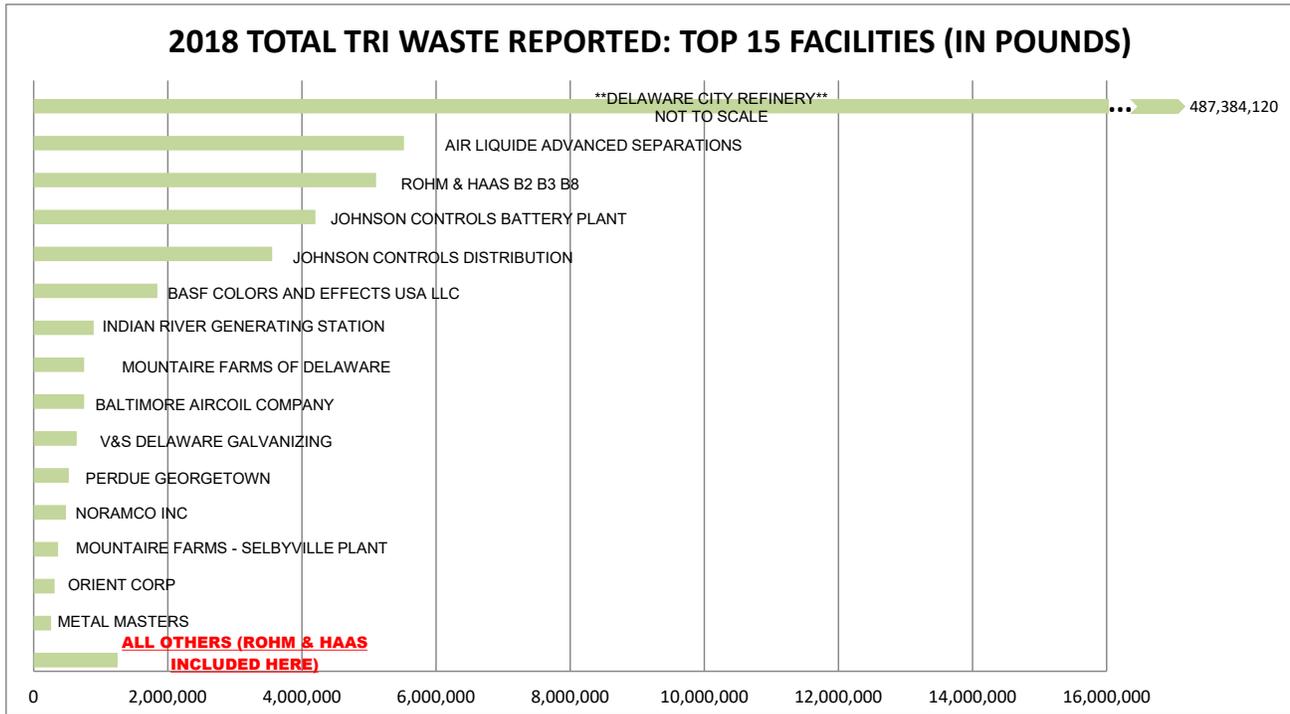




# TRI FACILITY PROFILES

## ROHM & HAAS B5, B6 CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES, CONT.:



### NOTABLE 2018 NATIONAL RANKINGS:

Rohm & Haas B5, B6 ranks 89th for on-site releases of n-methyl-2-pyrrolidone (out of 391 facilities).

Rohm & Haas B5, B6 ranks 83rd for off-site transfers of n-methyl-2-pyrrolidone (out of 391 facilities).



# TRI FACILITY PROFILES

## ROHM & HAAS B7, B15

### LOCATION/CONTACT:

Address: 50 Bellevue Road  
Newark, DE 19713

Phone: (302)-366-0500

Contact: Peter Palena



### FACILITY OVERVIEW:

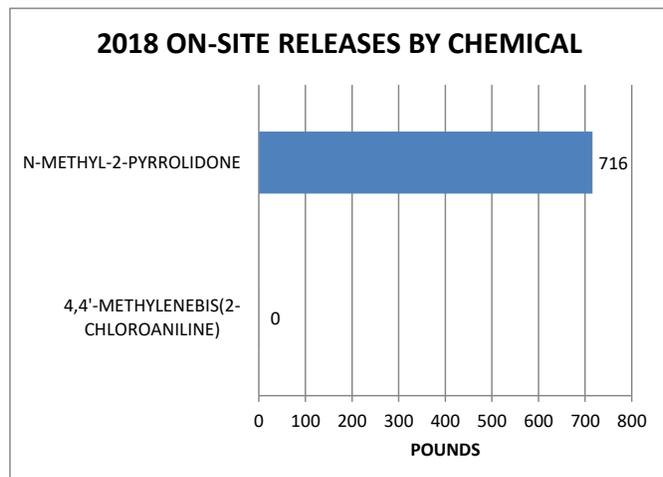
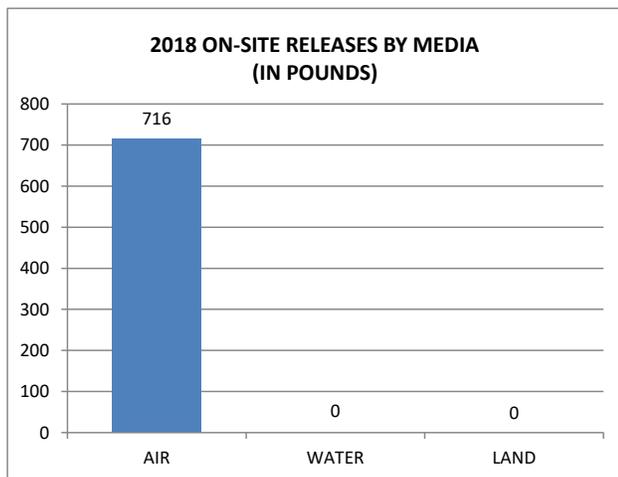
Rohm & Haas (Buildings 7 and 15) manufacture polishing pads for the semiconductor and electronics industries.

Rohm & Haas B7, B15 has reported since 2005, formerly as the Rodel Building 7. For 2018, the facility reported 2 chemicals, with n-methyl-2-pyrrolidone (NMP) accounting for more than 99.9% of all on-site releases. NMP is utilized in cleaning equipment used for manufacturing.

### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
4,4'-METHYLENEBIS(2-CHLOROANILINE)	0	0	0	0	621	0	NO	YES
N-METHYL-2-PYRROLIDONE	716	0	0	716	8,850	0	NO	NO
TOTAL	716	0	0	716	9,471	0		

### GRAPHICAL INFORMATION:

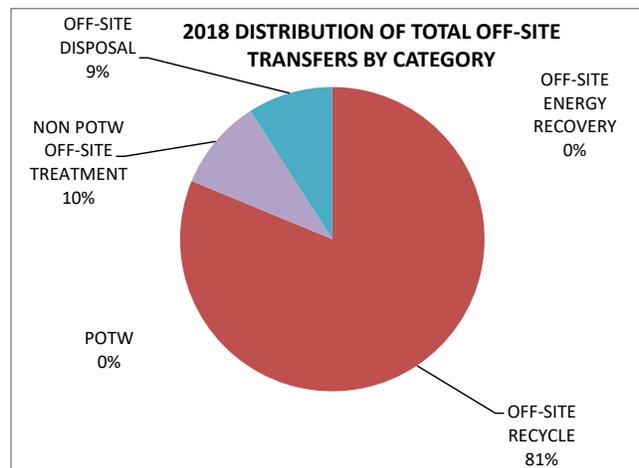
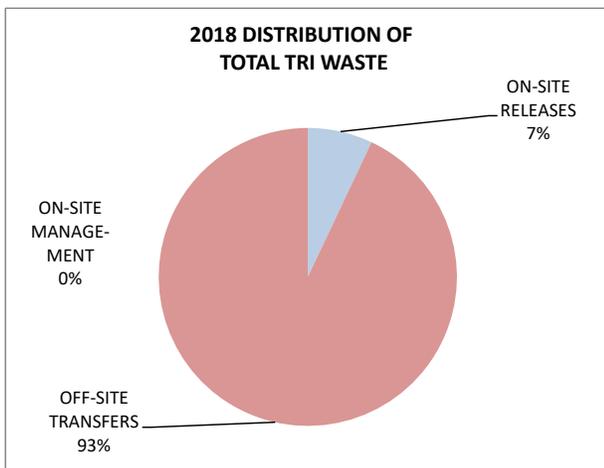
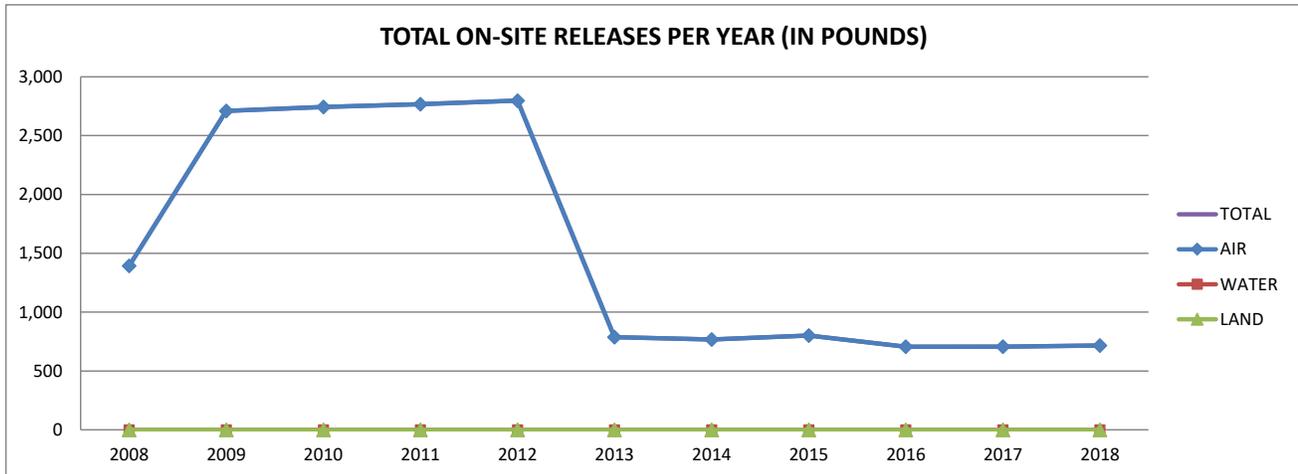


# TRI FACILITY PROFILES

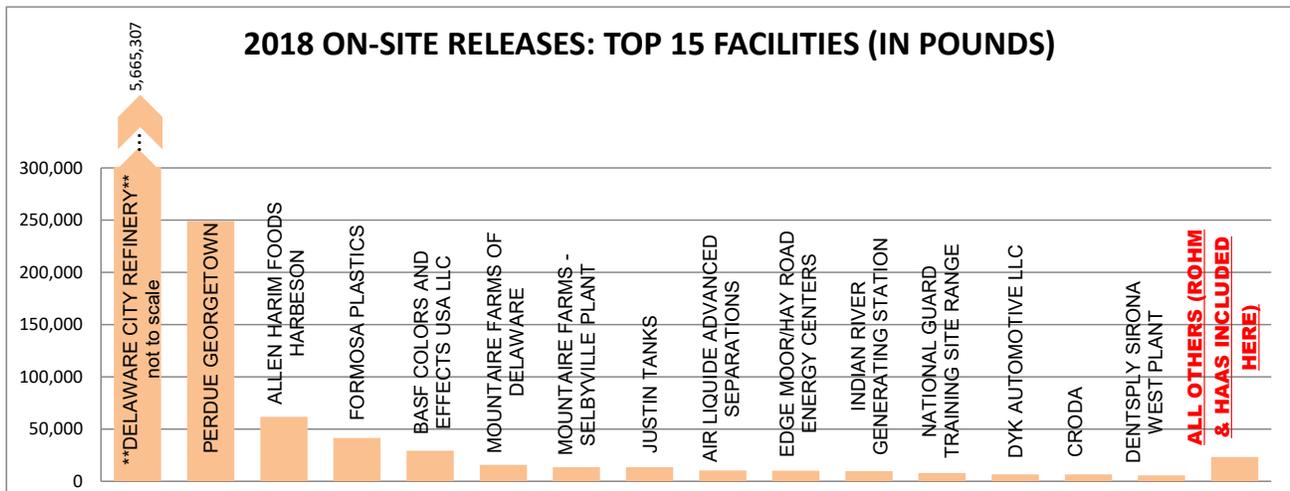


## ROHM & HAAS B7, B15, CONT.

### GRAPHICAL INFORMATION:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES:

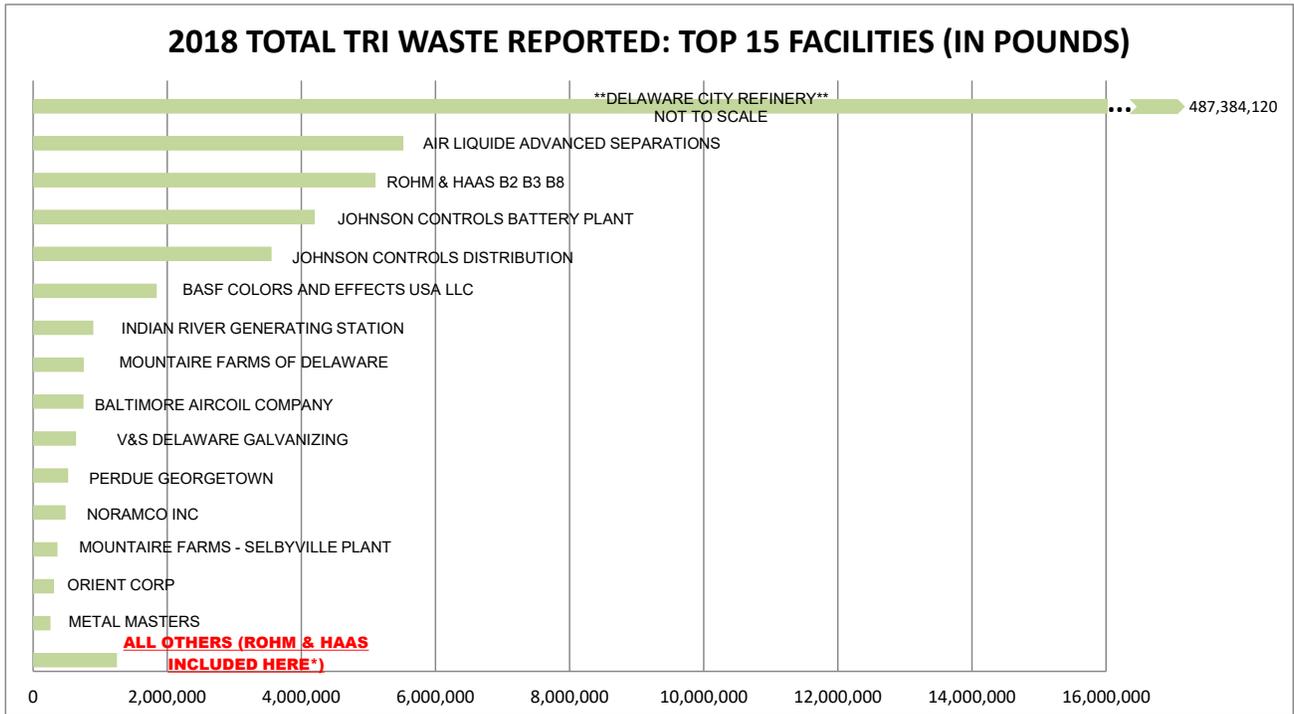




# TRI FACILITY PROFILES

## ROHM & HAAS B7, B15, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES, CONT.:



### NOTABLE 2018 NATIONAL RANKINGS:

Rohm & Haas B7, B15 ranks 59th for off-site recycling of n-methyl-2-pyrrolidone (out of 391 facilities).

## SIMMONS BRIDGEVILLE

**LOCATION/CONTACT:**

Address: 8141 Seashore Highway  
Bridgeville, DE 19933

Phone: (479) 524-8151

Contact: Donny Epp



**FACILITY OVERVIEW:**

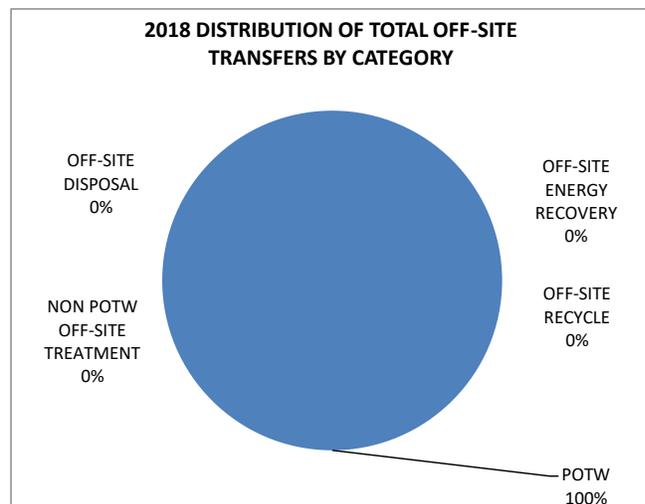
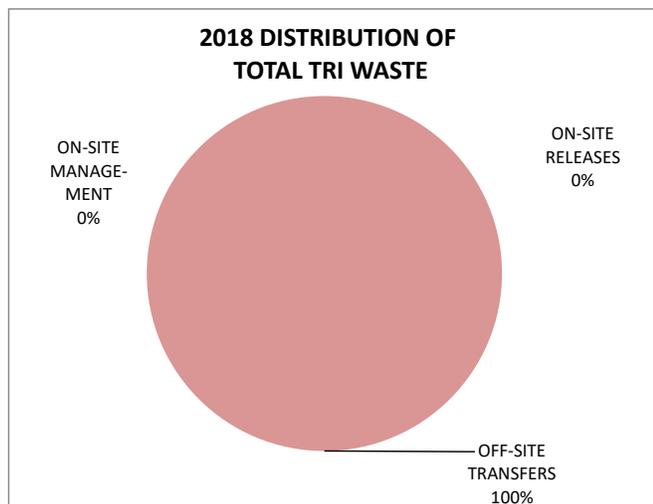
Simmons Bridgeville processes meat ingredients for the pet food industry.

The facility reported to TRI for the first time in 2018. For 2018, Simmons reported on one chemical, nitrate compounds. In the wastewater treatment process, water dissociable nitrate compounds are a by-product of the nitrification process.

**2018 TRI DATA (REPORTED IN POUNDS):**

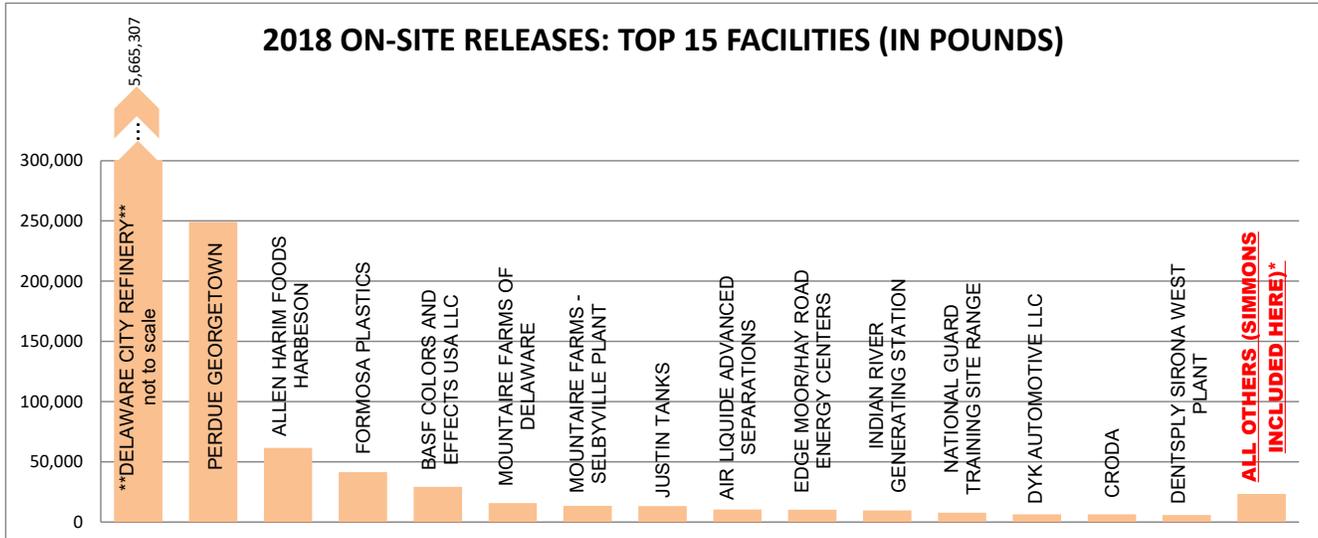
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
NITRATE COMPOUNDS	0	0	0	0	80,372	0	NO	NO
TOTAL	0	0	0	0	80,372	0		

**GRAPHICAL INFORMATION:**

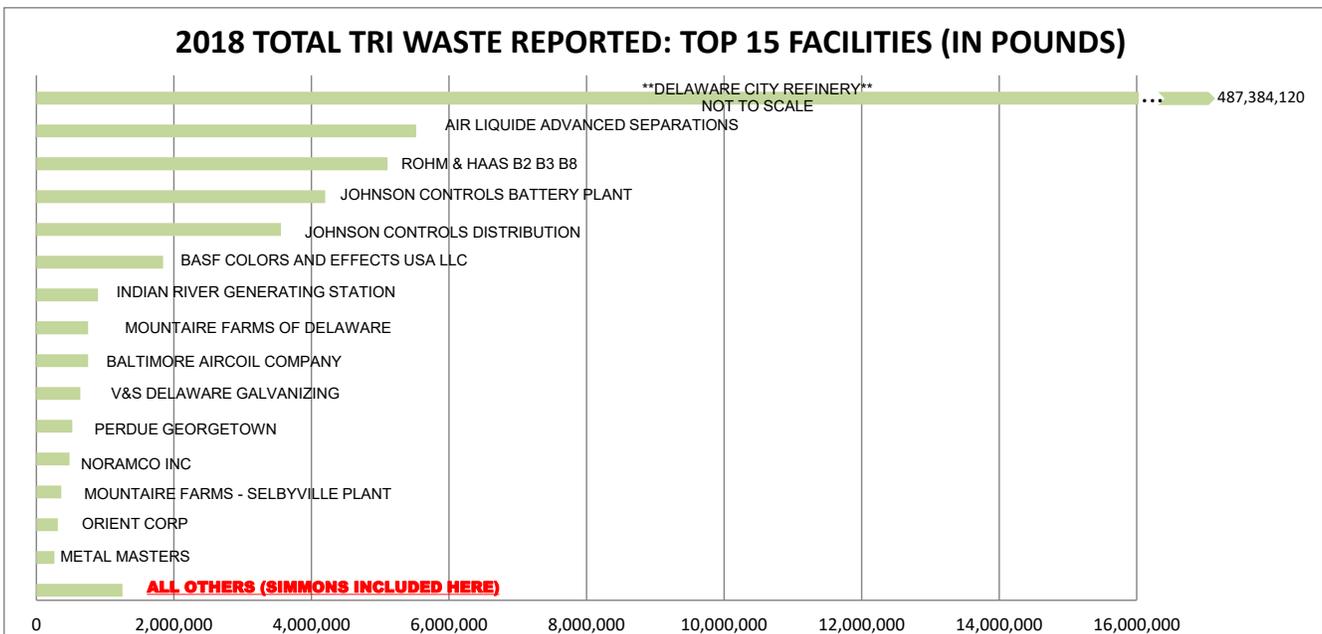


## SIMMONS BRIDGEVILLE, CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



\*Simmons Bridgeville ranks in the bottom third in on-site releases reported by facilities in 2018. The bottom third accounted for less than a total of 45 pounds released on-site.





# FACILITY INFORMATION SHEETS

## SPI PHARMA

### LOCATION/CONTACT:

Address: 40 Cape Henlopen Drive  
Lewes, DE 19958

Phone: (616)-283-8506

Contact: John Creighton



### FACILITY OVERVIEW:

SPI Pharma reported under the North American Industrial Classification System (NAICS) as 325412, which covers pharmaceutical manufacturing.

SPI Pharma has reported since 1987, previously as Barcroft. The facility reported on two chemicals in 2018, chlorine and nitric acid, both on short Form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.)

### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHLORINE*	0	0	0	0	0	0	NO	NO
NITRIC ACID*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

### GRAPHICAL INFORMATION:

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.

**V & S GALVANIZING**

**LOCATION/CONTACT:**

Address: 511 Carroll Drive  
New Castle, DE 19720

Phone: (302) 322-1420



**FACILITY OVERVIEW:**

V&S Galvanizing reported under the North American Industrial Classification System (NAICS) as 332812, which covers metal coating, engraving, and allied services to manufactures.

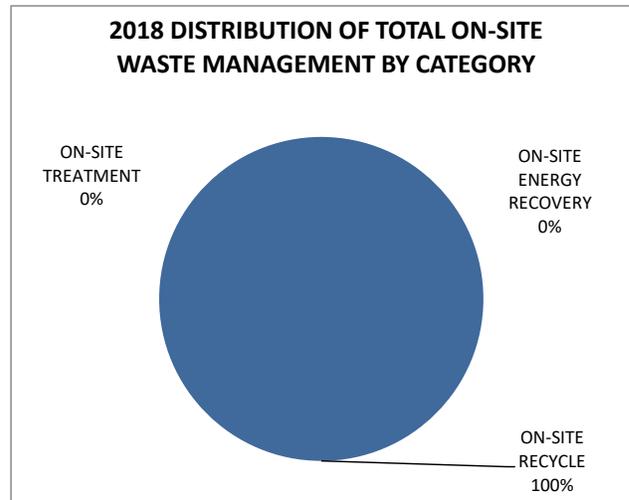
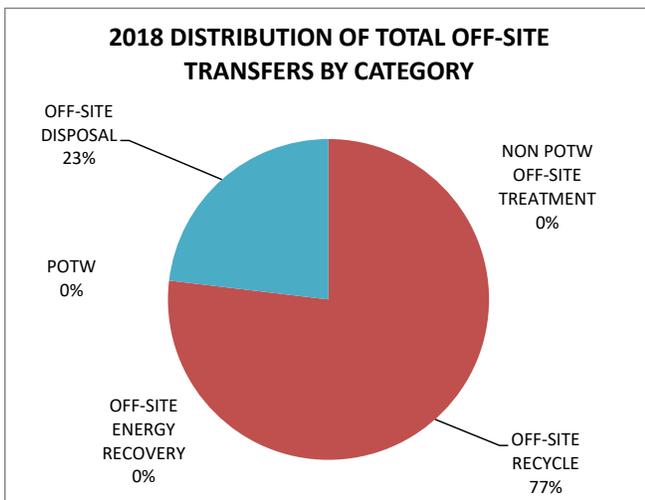
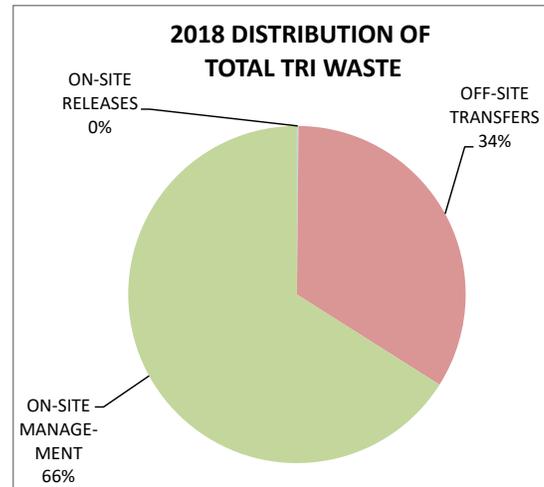
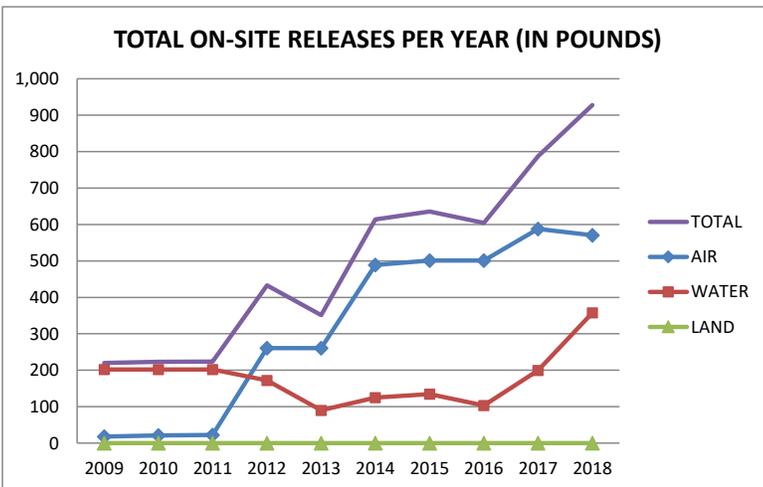
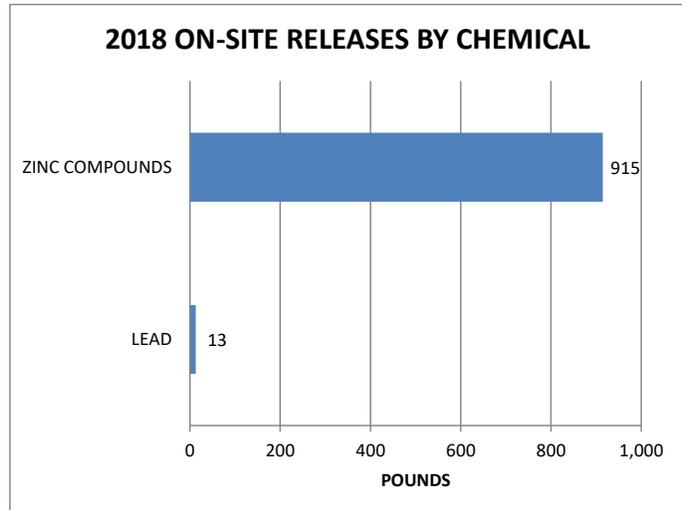
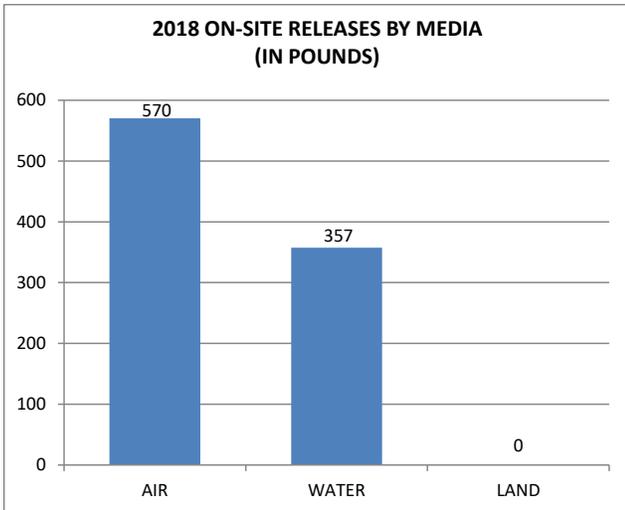
V&S Galvanizing has reported since 2009. The facility reported on two chemicals in 2018, with on-site releases to both air and water. The chemicals that are reported are found in the hot dip galvanizing process and coating. Stormwater data was also revised as more became available, combined with differences in annual precipitation for the various years. This resulted in reduced amount reported in stormwater for the 2013 to 2016 reporting years. Between reporting years 2011 and 2012, V&S Delaware Galvanizing took a more comprehensive look at air concentration data available and revised their method of calculation to include the most conservative data. On-site releases have increased by 322% compared to 2009, but make up about 0.1% of all waste management activities. The resulting increase in releases reported was due to a change in calculations and release assumptions based on more readily available data.

**2018 TRI DATA (REPORTED IN POUNDS):**

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	9	3	0	13	5,627	3,571	YES	YES
ZINC COMPOUNDS	561	354	0	915	210,926	418,960	NO	NO
TOTAL	570	357	0	928	216,553	422,531		

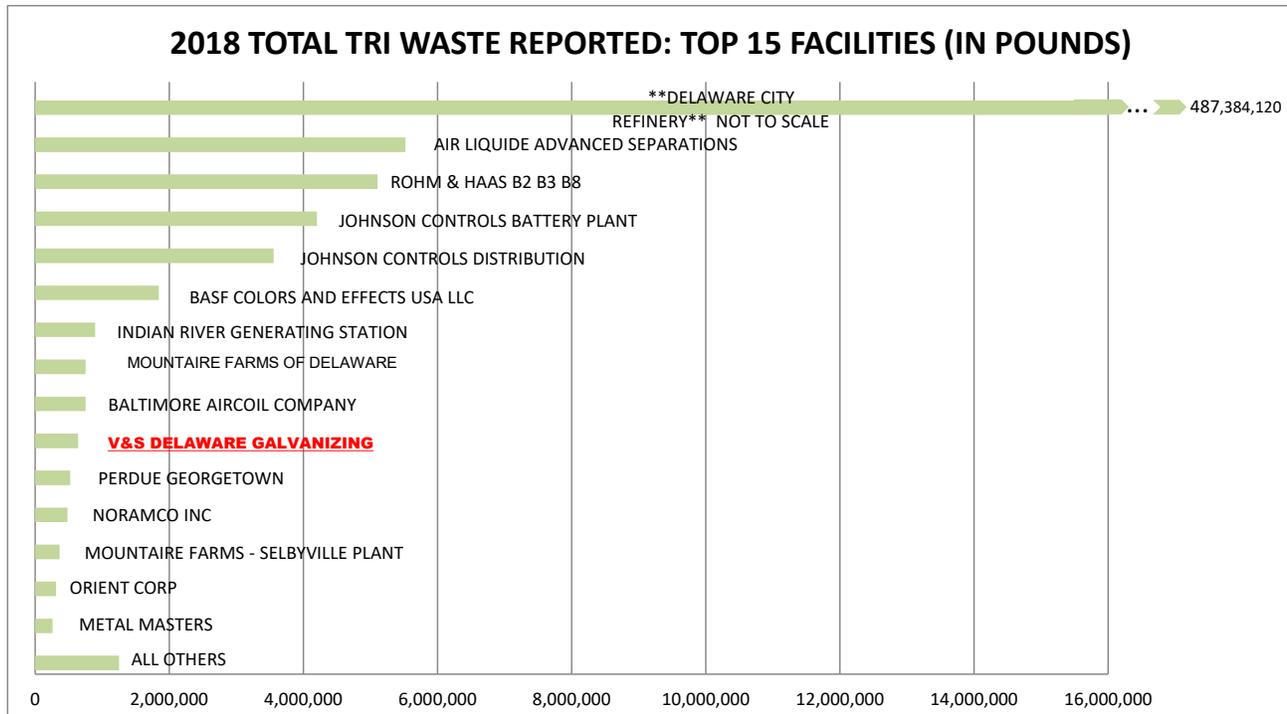
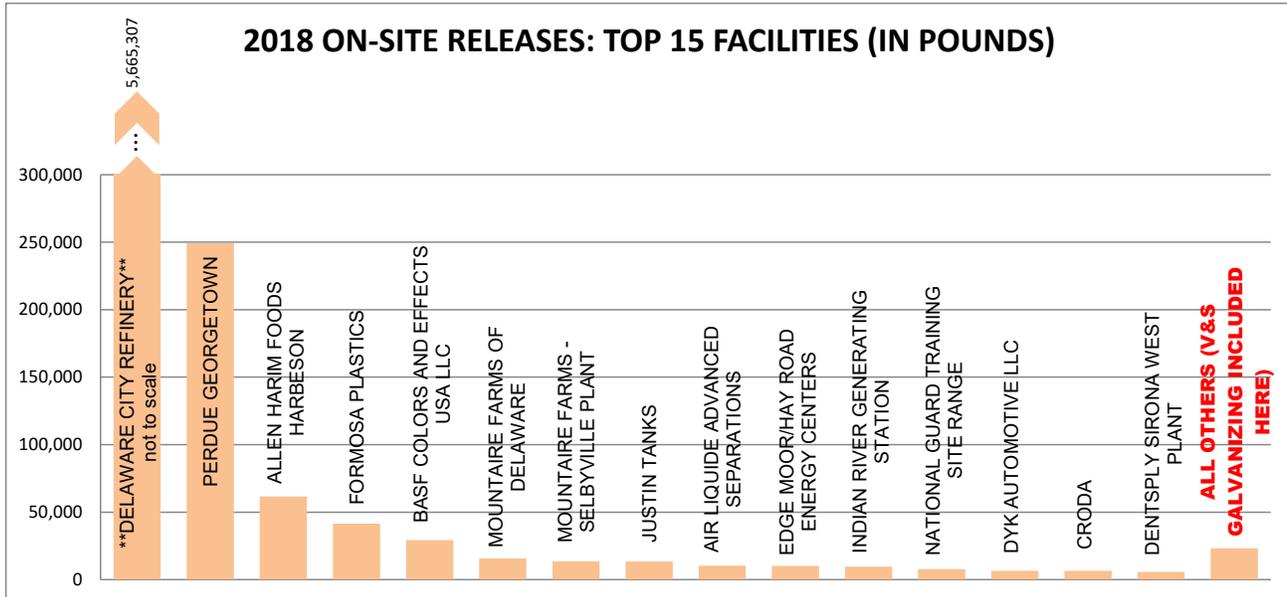
## V & S GALVANIZING, CONT.

### GRAPHICAL INFORMATION:



## V & S GALVANIZING. CONT.

### COMPARISON TO OTHER DELAWARE TRI FACILITIES:



### NOTABLE 2018 NATIONAL RANKINGS:

V&S Galvanizing ranked 94th in the off-site recycle of zinc compounds for fabricated metal facilities (NAICS 373) (out of 363 facilities).



## TRI FACILITY PROFILES

### VEOLIA RED LION

#### LOCATION/CONTACT:

Address: 766 Governor Lea Road  
Delaware City, DE 19706

Phone: (302) 834-5901

Contact: Daniel Frattarelli



#### FACILITY OVERVIEW:

Veolia Red Lion, located north of the Delaware City Refinery (DCR), manufactures sulfuric acid derived from refinery gas received from DCR and spent sulfuric acid received from DCR and other refineries. The refinery gas is received by pipeline. Spent sulfuric acid and fresh sulfuric acid are shipped to and from the Veolia facility via pipeline, tank trucks and tank cars.

Veolia Red Lion has reported since 2005, previously as Chemours Red Lion and DuPont Red Lion. The facility reported on four chemicals in 2018, hydrazine, hydrazine sulfate, hydrogen sulfide, and sulfuric acid. Hydrogen sulfide is used in the manufacturing process as a raw material. Hydrazine hydrate and hydrazine sulfate are used as process treatment chemicals.

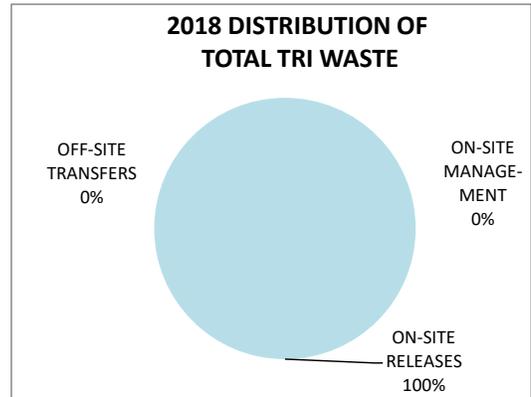
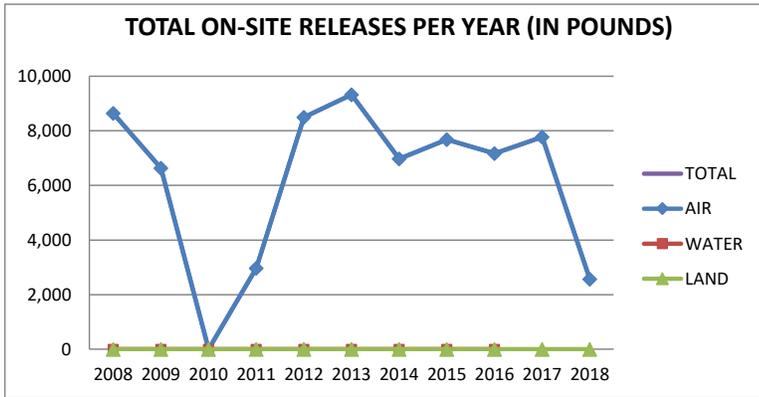
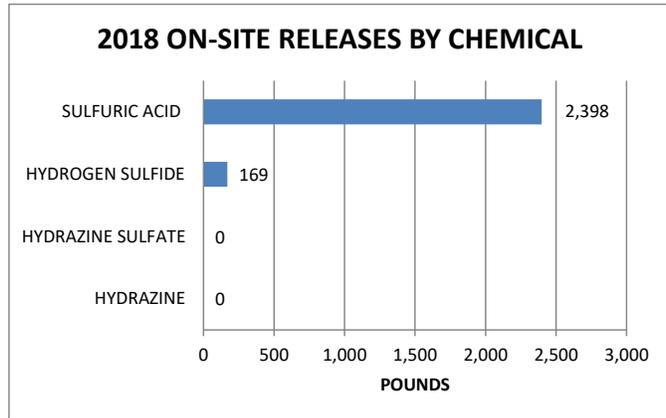
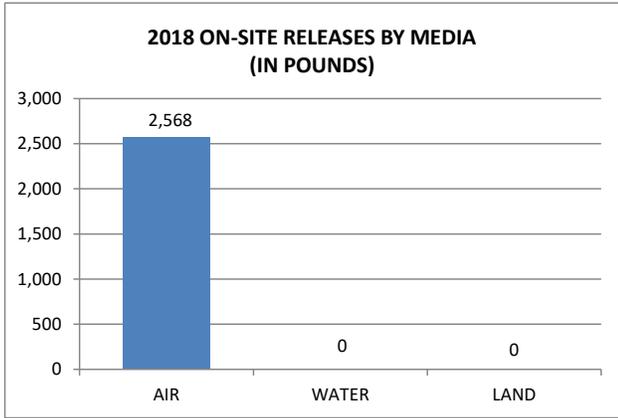
All on-site releases were to air. For 2010, while the Delaware City Refinery was idle, the Red Lion facility was also idled and was below the TRI reporting threshold for sulfuric acid and was not required to report. The Red Lion facility re-started its operations in May of 2011 after an 18 month shutdown. In 2012, the Red Lion facility was operational at more typical production rates for the entire year as compared to 7 months in 2011. For 2018, on-site releases were down 67% compared to 2017, due to release calculations using an updated emission factor based on a 2018 stack test (see *Total On-site Releases Per Year Graph* on the next page).

#### 2018 TRI DATA (REPORTED IN POUNDS):

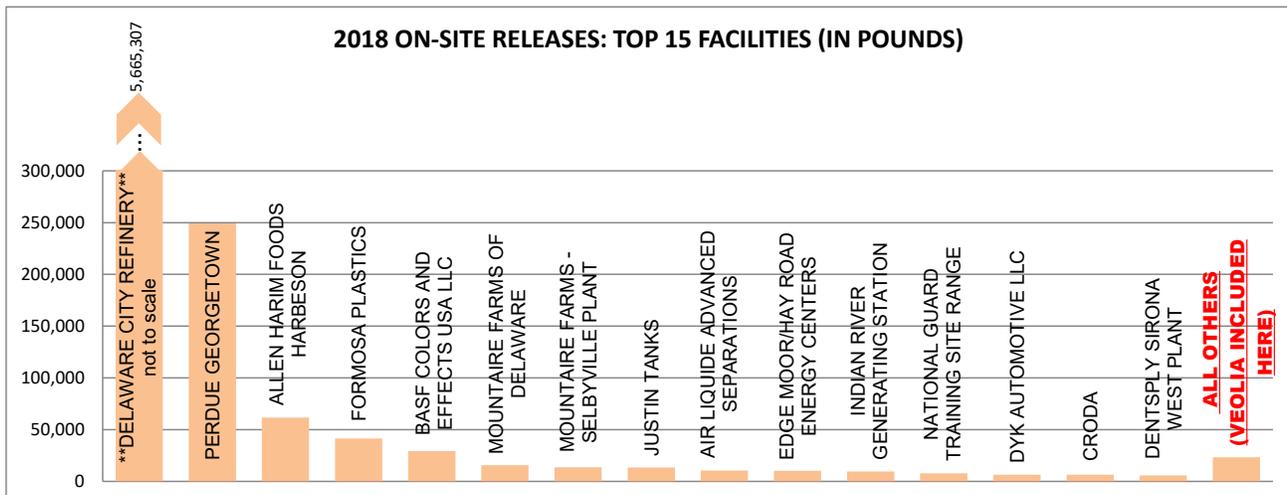
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
HYDRAZINE	0	0	0	0	0	0	NO	YES
HYDRAZINE SULFATE	0	0	0	0	0	0	NO	YES
HYDROGEN SULFIDE	169	0	0	169	0	0	NO	NO
SULFURIC ACID	2,398	0	0	2,398	0	0	NO	NO
TOTAL	2,568	0	0	2,568	0	0		

## VEOLIA RED LION, CONT.

### GRAPHICAL INFORMATION:



### COMPARISON TO OTHER DELAWARE TRI FACILITIES



Veolia Red Lion ranks in the bottom third in total waste reported by facilities in 2018. The bottom third accounted for less than 32,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.



## TRI FACILITY PROFILES

### VP RACING FUELS

#### LOCATION/CONTACT:

Address: 16 Brookhill Drive  
Newark, DE 19702

Phone: (210)-635-7744

Contact: Susan Gray



#### FACILITY OVERVIEW:

VP Racing Fuels reported under the North American Industrial Classification System (NAICS) as 324199, which covers petroleum and coal products manufacturing.

VP Racing Fuels has reported since 2001. The facility reported on one chemical, toluene, in 2018 using the short Form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.) Persistent Bio-Accumulative Toxic (PBT) Chemicals, such as lead, are ineligible for Form A.

#### 2018 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
TOLUENE*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

\*Reported on short Form A

#### GRAPHICAL INFORMATION:

TRI reports for this facility were submitted on Short Form A. No on-site releases, off-site transfers, or on-site waste management activities are reported. Total reportable waste activities for this facility do not exceed 500 pounds per chemical reported.



EPCRA Reporting Program  
Emergency Response and Strategic Services Section, DNREC  
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(302) 739-9405

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