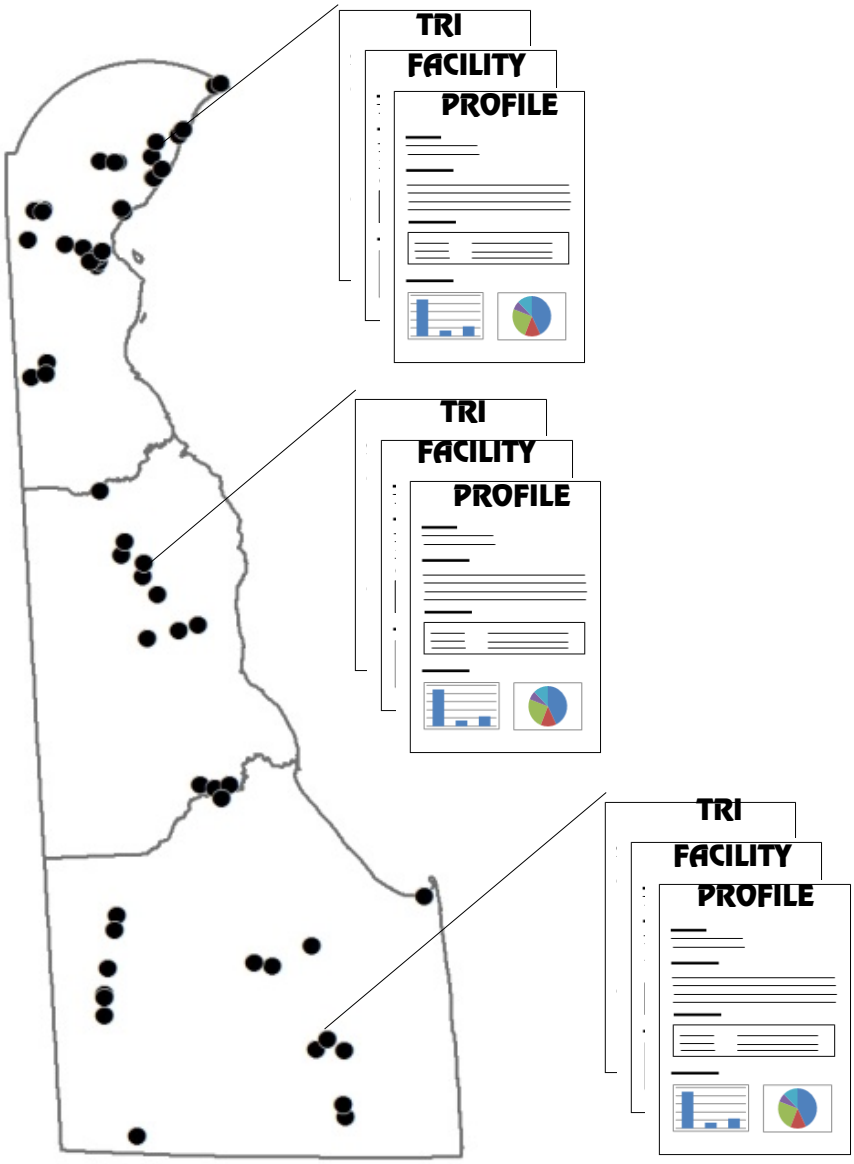
TOXICS RELEASE INVENTORY

2015 DELAWARE TRI FACILITY PROFILES



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

January 2017

Jack Markell
Governor

David Small
Secretary, DNREC

Marjorie A. Crofts
Director, Division of Waste and Hazardous Substances

Virgil Holmes
Director, Division of Water

Ali Mirzakhalili
Director, Division of Air Quality

Jamie Bethard
Program Manager, Emergency Prevention and Response Section

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:

Debra Nielsen
TRI Coordinator
EPCRA Reporting Program, DNREC
89 Kings Highway
Dover, DE 19901
Tel. (302) 739-9405, Fax (302) 739-3106
e-mail: debra.nielsen@state.de.us

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.

TRI FACILITY PROFILES

TOXICS RELEASE INVENTORY

The Facility Profiles provide TRI information specific to each reporting facility in Delaware for 2015. 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.

2015 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 2015. 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 **2015 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 2015 among air, water, and land categories.
- **On-site Releases by Chemical:** Bar chart comparing total on-site releases for 2015 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.
- **2015 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).
- **2015 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.
- **2015 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.

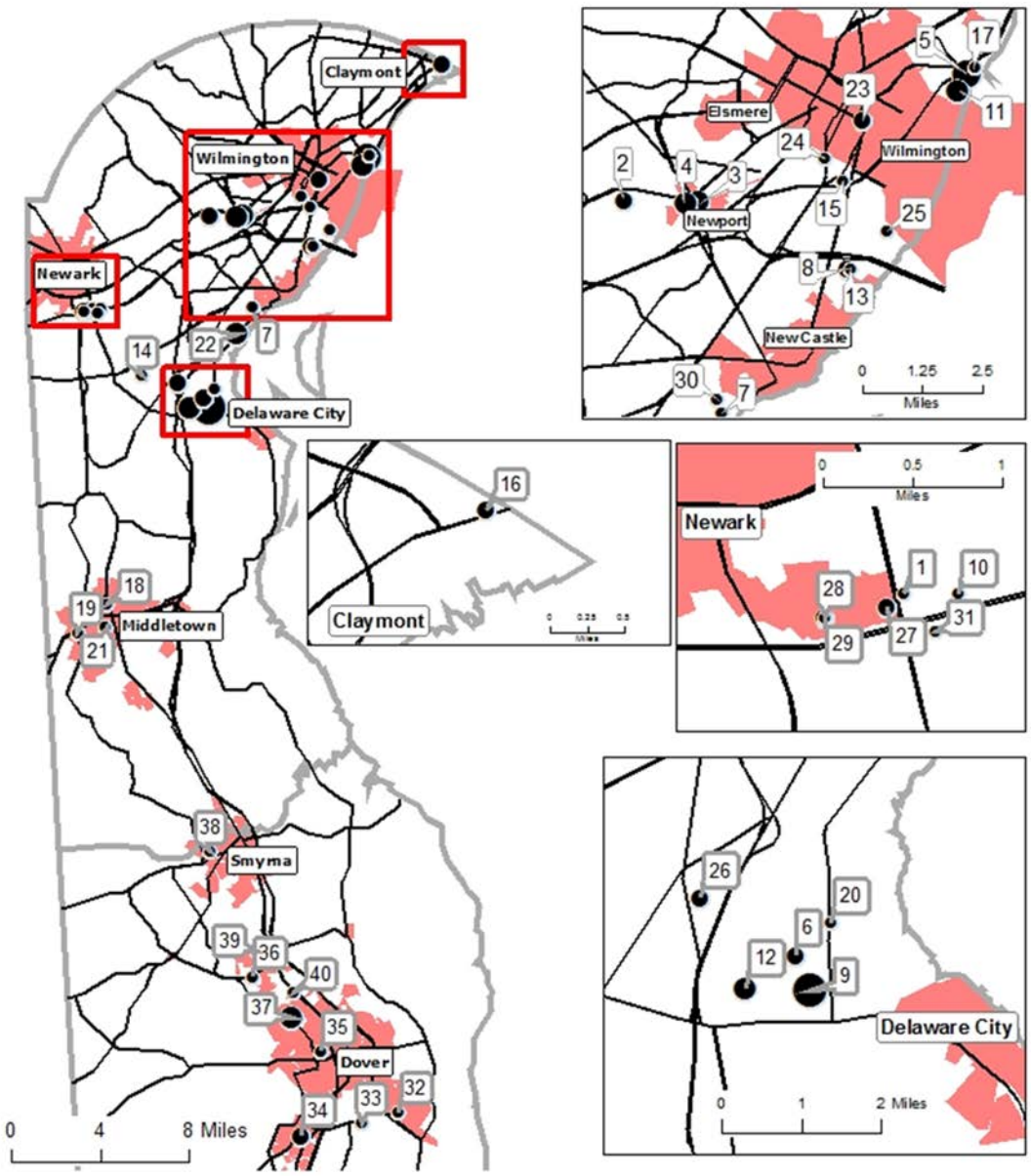
Comparison to Other Delaware TRI Facilities:

This section provides two graphical comparisons for Delaware TRI facilities.

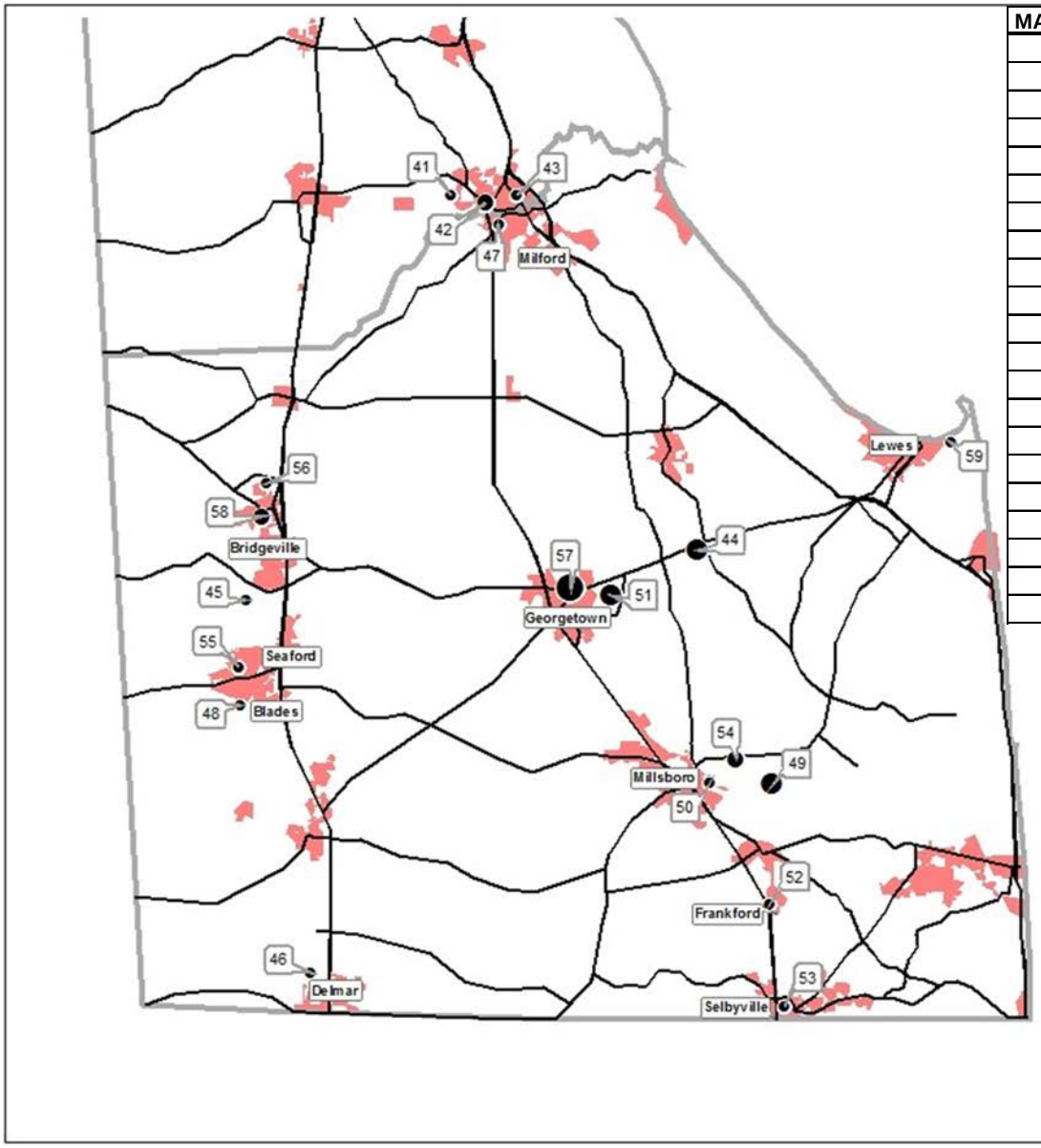
- **2015 On-site Releases: Top 15 Facilities:** Bar chart showing the total on-site releases for the top 15 facilities and a group for all other facilities. The facility is highlighted in red and underlined on the graph. If the facility falls into the bottom third of all facilities for on-site releases in Delaware it is noted. See ***Appendices C, E, F*** in the ***2015 Delaware TRI Report*** for further detail for on-site releases.
- **2015 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 2015, it is noted. See ***Appendices D and G*** in the ***2015 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 2015 data set as of November 2016 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
	NEW CASTLE COUNTY
1	AEARO TECHNOLOGIES
2	AGILENT TECHNOLOGIES
3	AIR LIQUIDE ADVANCED SEPARATIONS
4	BASF CORP
5	CHEMOURS EDGE MOOR
6	CHEMOURS RED LION PLANT
7	COLOR WORKS PAINTING
8	CRODA
9	DELAWARE CITY REFINERY
10	DUHADAWAY TOOL AND DIE SHOP INC
11	EDGE MOOR/HAY ROAD ENERGY CENTERS
12	FORMOSA PLASTICS
13	FUJIFILM
14	HMA-HERITAGE CONCRETE-BEAR
15	HMA-HERITAGE CONCRETE-HEALD STREET
16	HONEYWELL
17	IKO
18	JOHNSON CONTROLS BATTERY PLANT
19	JOHNSON CONTROLS DISTRIBUTION
20	KUEHNE
21	MACDERMID
22	NATIONAL GUARD TRAINING SITE RANGE
23	NORAMCO
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	VP RACING FUELS
	KENT COUNTY
32	DOVER AFB
33	GRIFFITH ENERGY-CARL KING
34	HANDY TUBE
35	HANESBRANDS
36	HMA-HERITAGE CONCRETE-CHESWOLD
37	HIRSH INDUSTRIES INC
38	METAL MASTERS
39	PPG INDUSTRIES
40	SERVICE ENERGY DOVER



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

TRI FACILITY PROFILES

AEARO TECHNOLOGIES

LOCATION/CONTACT:

Address: 650 Dawson Drive
Newark, DE 19713

Phone: (302) 286-2415

Contact: Tom Flaherty

FACILITY OVERVIEW:

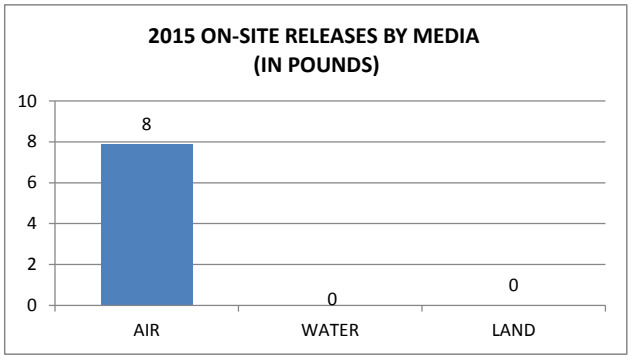
Aearo Technologies manufactures and converts urethane foams and foam composites with a variety of facings for many industries and uses.

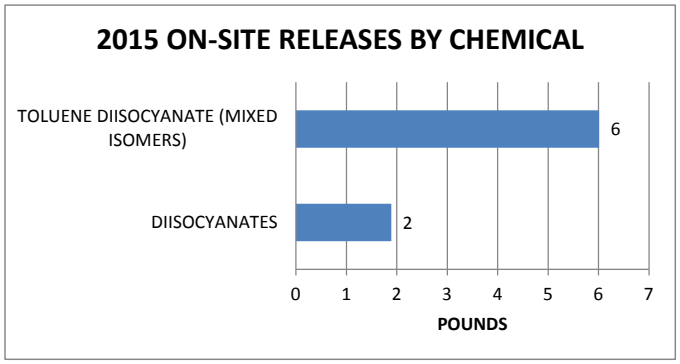
Aearo Technologies has reported since 1987, previously as E.A.R. and Cabot Safety. The facility reported on two chemicals in 2015 (diisocyanates and toluene diisocyanates), with on-site releases only to air. These chemicals are utilized in the process of making of the urethane foam and foam composites. 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.

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
DIISOCYANATES	2	0	0	2	10,034	0	NO	NO
TOLUENE DIISOCYANATE (MIXED ISOMERS)	6	0	0	6	3,272	0	NO	YES
TOTAL	8	0	0	8	13,306	0		

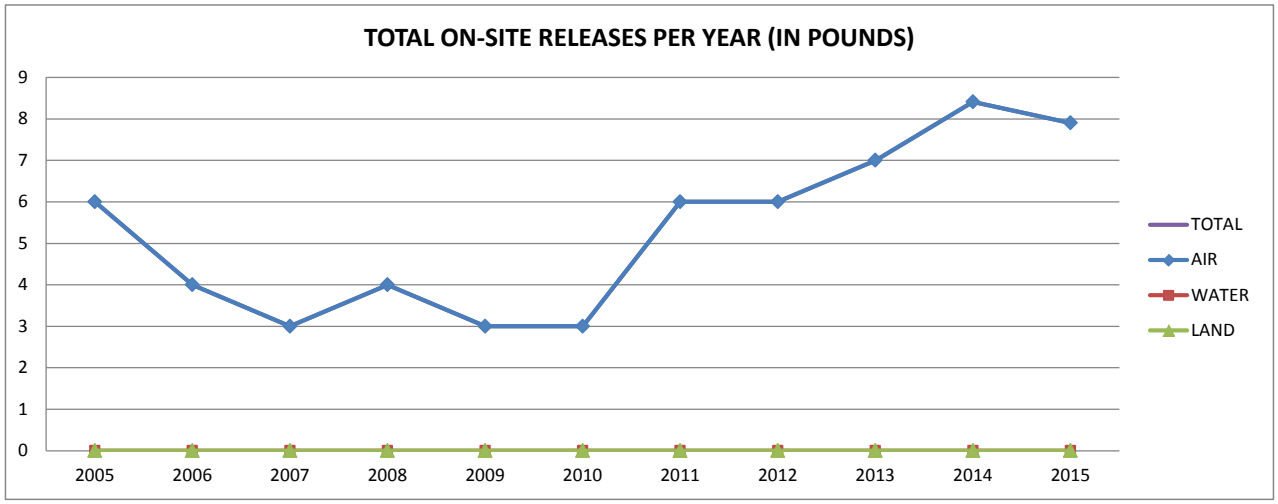
GRAPHICAL INFORMATION:

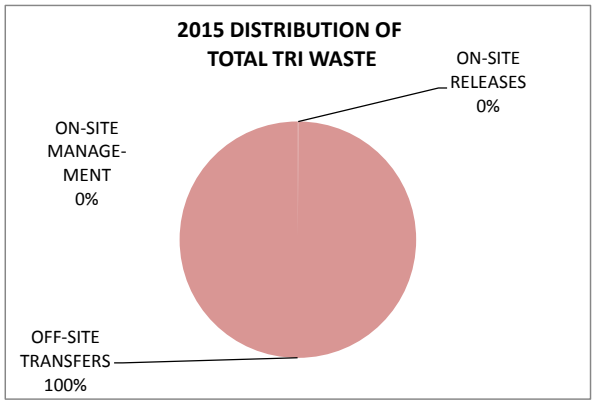


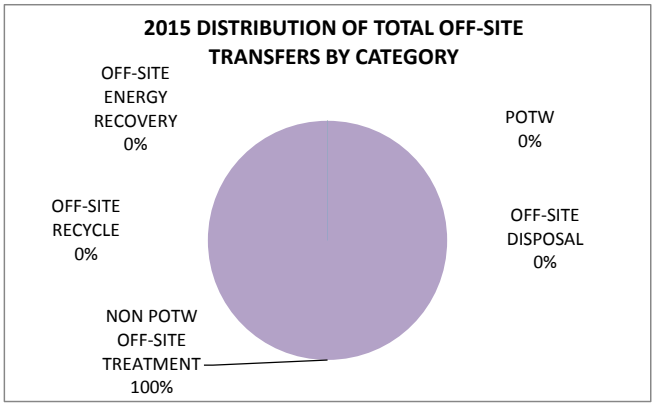


AEARO TECHNOLOGIES, CONT.

GRAPHICAL INFORMATION CONT.:







COMPARISON TO OTHER DELAWARE TRI FACILITIES:

Aearo Technologies ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

Aearo Technologies ranks in the bottom third in total waste reported by facilities in 2013. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

Aearo Technologies ranks 79th in the nation for off-site transfers of diisocyanates (out of 1,332 facilities).

Aearo Technologies ranks 19th 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.

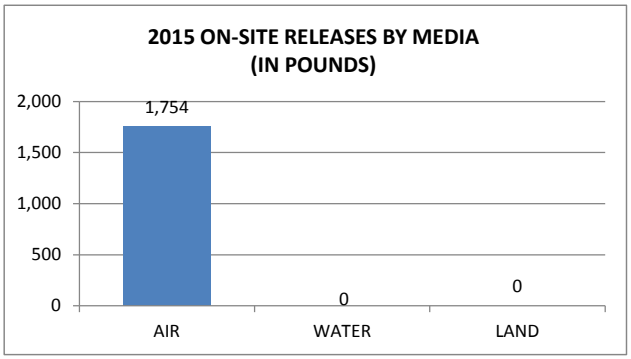
Facilities at the Agilent Technologies Newport site have reported since in 1990, previously as Rockland Technologies and Hewlett-Packard Company. Agilent Technologies has reported for the site since 2001. Agilent Technologies reported on three chemicals in 2015, toluene, methanol and acetonitrile. All 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 94% of all onsite releases, while toluene consists of approximately 67% of all offsite transfers. Both onsite releases and offsite transfers have remained relatively consistent since 2005. Fluctuations in onsite releases and offsite transfers are directly related to production.

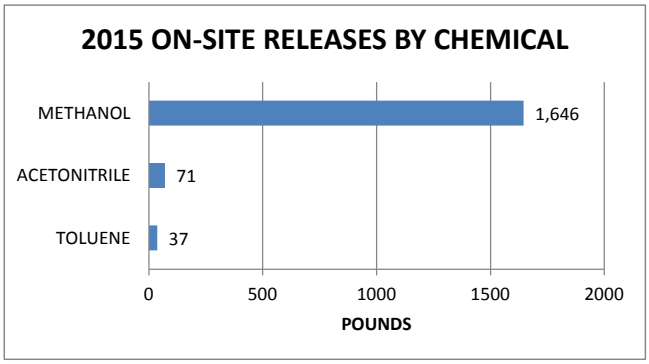
2015 TRI DATA (REPORTED IN POUNDS):

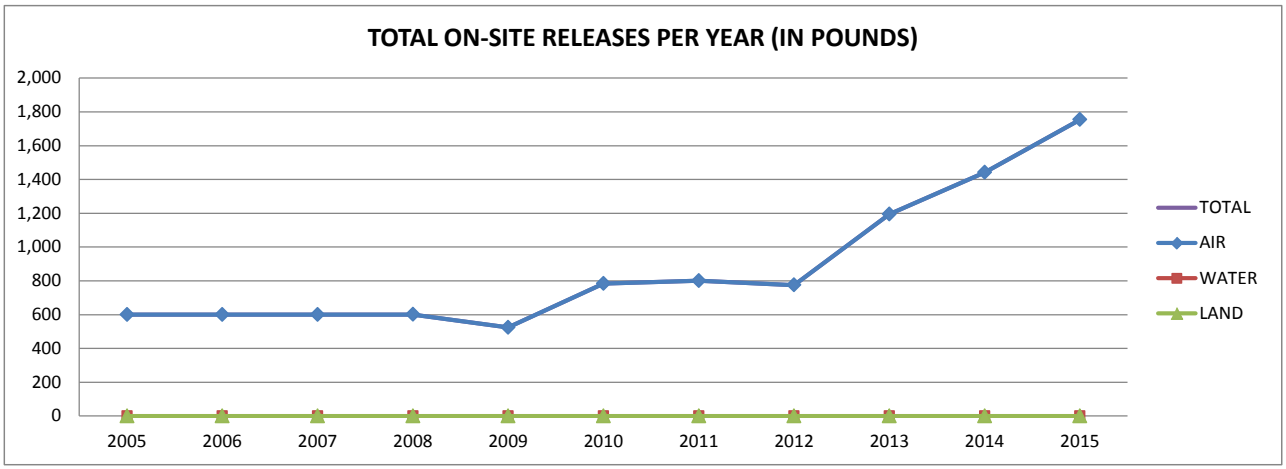
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ACETONITRILE	71	0	0	71	18,206	0	NO	NO
METHANOL	1,646	0	0	1,646	45,246	0	NO	NO
TOLUENE	37	0	0	37	130,007	0	NO	NO
TOTAL	1,754	0	0	1,754	193,459	0		

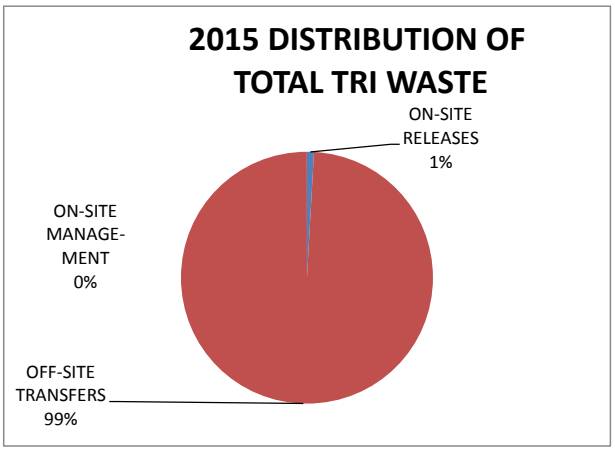
AGILENT TECHNOLOGIES, CONT.

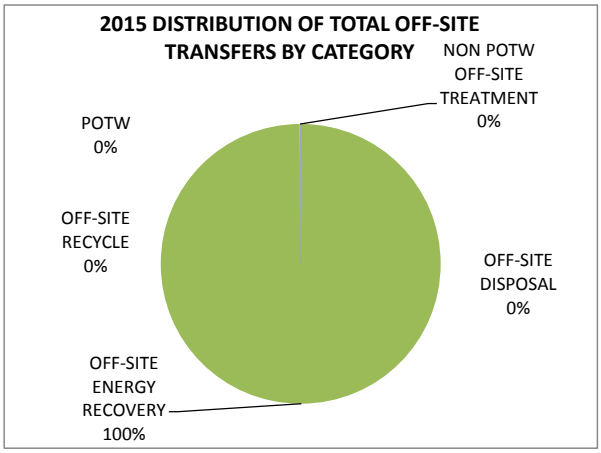
GRAPHICAL INFORMATION:





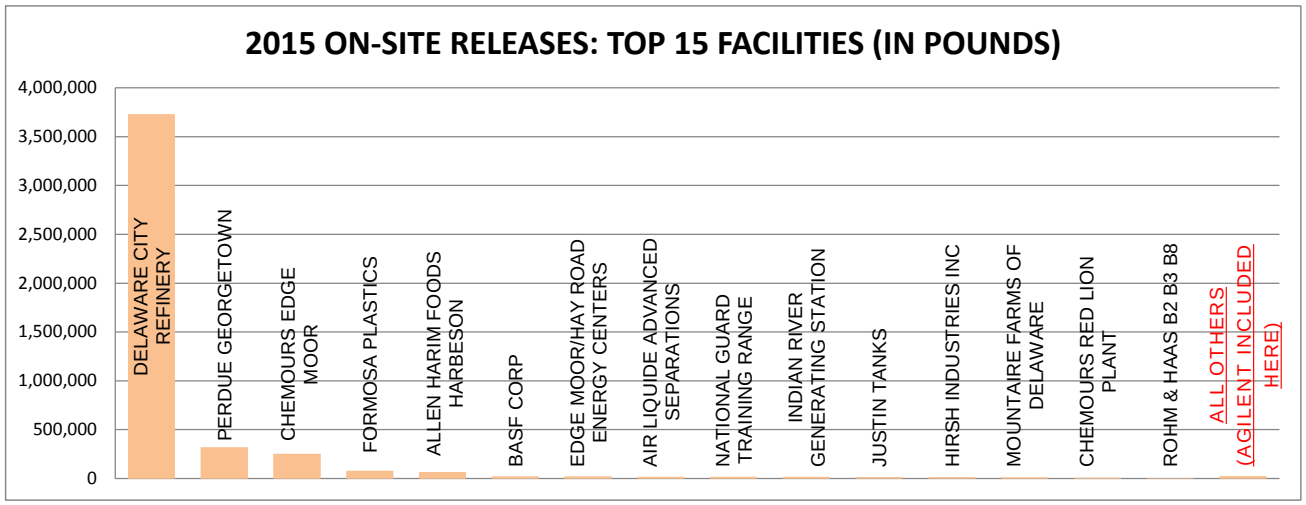


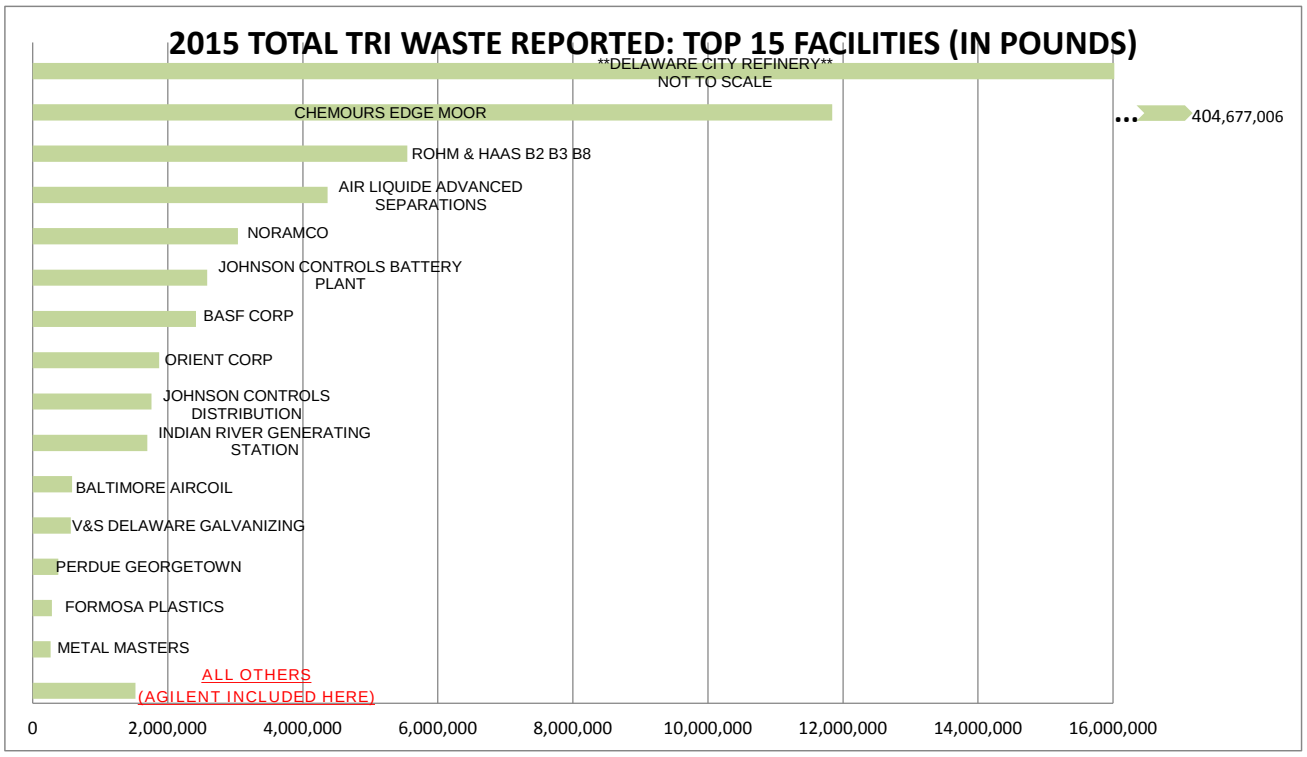




AGILENT TECHNOLOGIES, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

Agilent Technologies ranks 66th in the nation for off-site transfers of acetonitrile (out of 137 facilities).

TRI FACILITY PROFILES

AIR LIQUIDE ADVANCED SEPARATIONS

LOCATION/CONTACT:

Address: 305 Water Street
Newport, DE 19804

Phone: (302) 225-2137

Contact: Steve Poorman

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 2015, 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 0.4% being released on-site to air.

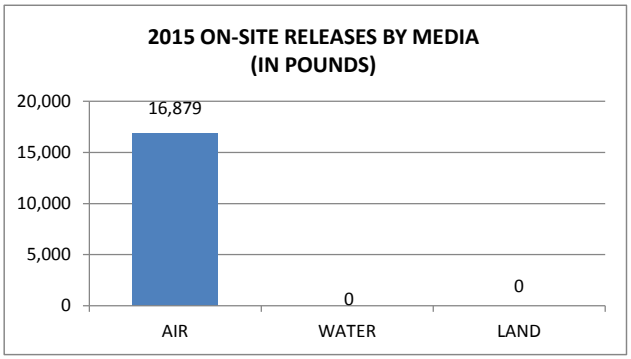
The 2015 increase in cyclohexane releases is due to the increase in production of fiber used in membranes sold into the aerospace industry used to inert aircraft fuel tanks for safety purposes(see *Total On-site Releases Per Year Graph* on the next page). In 2015, on-site recycling for methanol and n-hexane decreased significantly, resulting from decreased production of another product

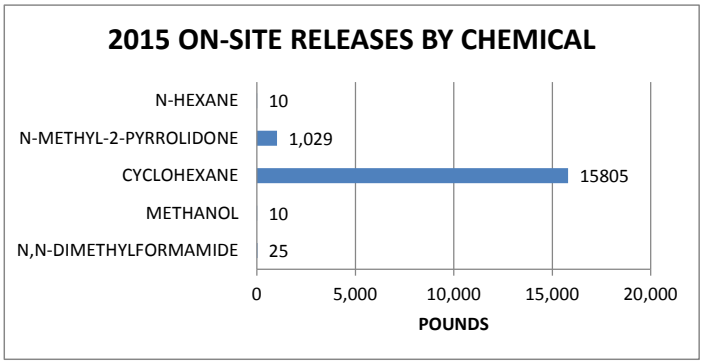
2015 TRI DATA (REPORTED IN POUNDS):

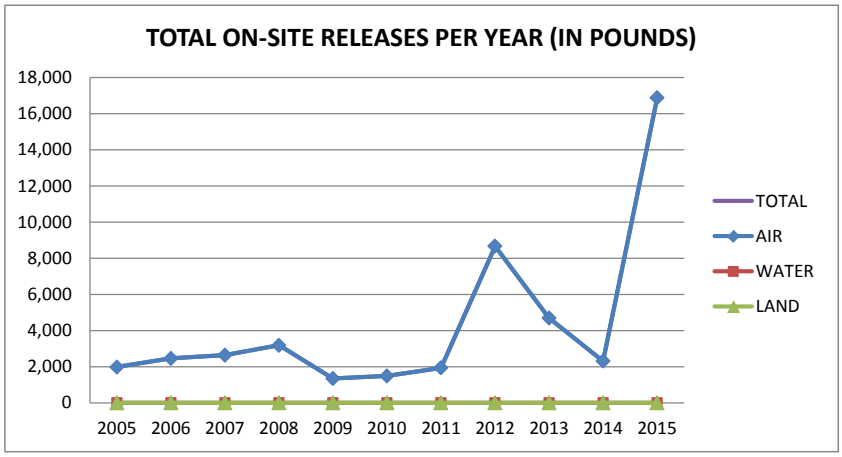
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CYCLOHEXANE	15,805	0	0	15,805	5,578	0	NO	NO
METHANOL	10	0	0	10	70,073	2,243,710	NO	NO
N,N-DIMETHYLFORMAMIDE	25	0	0	25	25,500	0	NO	NO
N-HEXANE	10	0	0	10	0	1,861,822	NO	NO
N-METHYL-2-PYRROLIDONE	1,029	0	0	1,029	142,058	0	NO	NO
TOTAL	16,879	0	0	16,879	243,209	4,105,532		

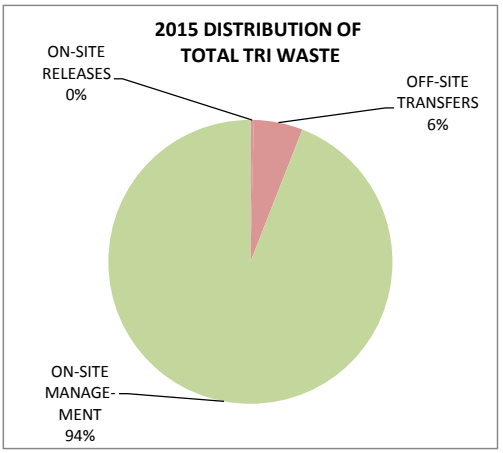
AIR LIQUIDE ADVANCED SEPARATIONS, CONT.

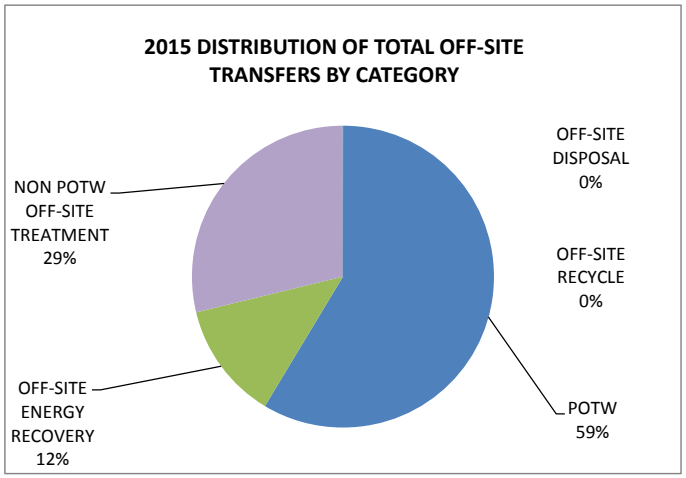
GRAPHICAL INFORMATION:

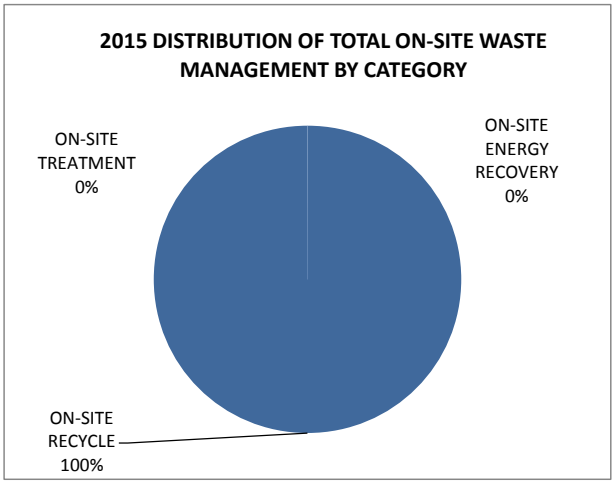






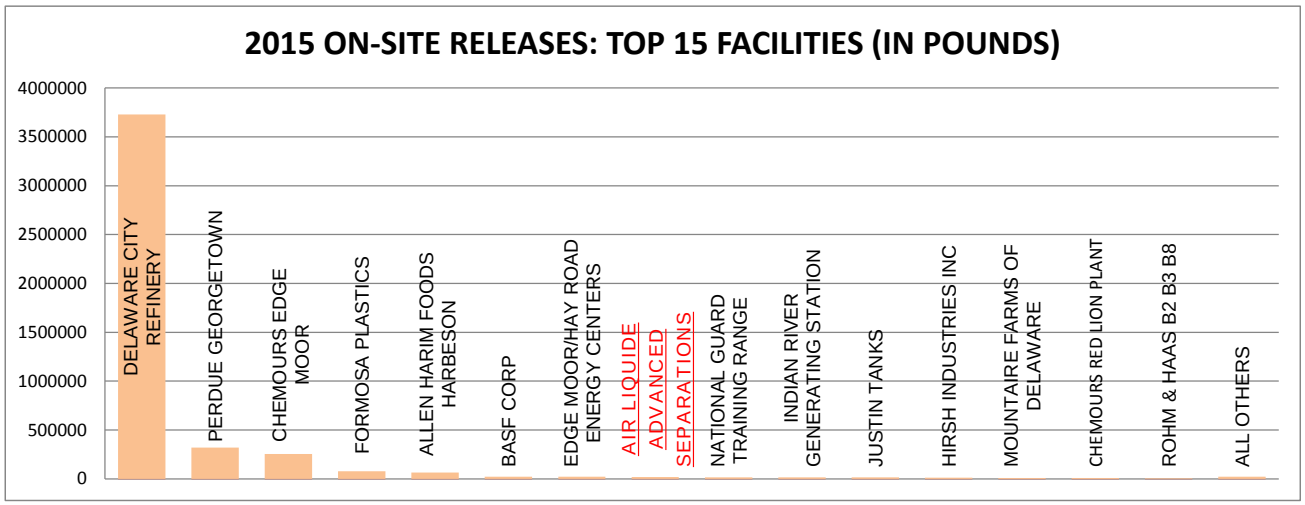


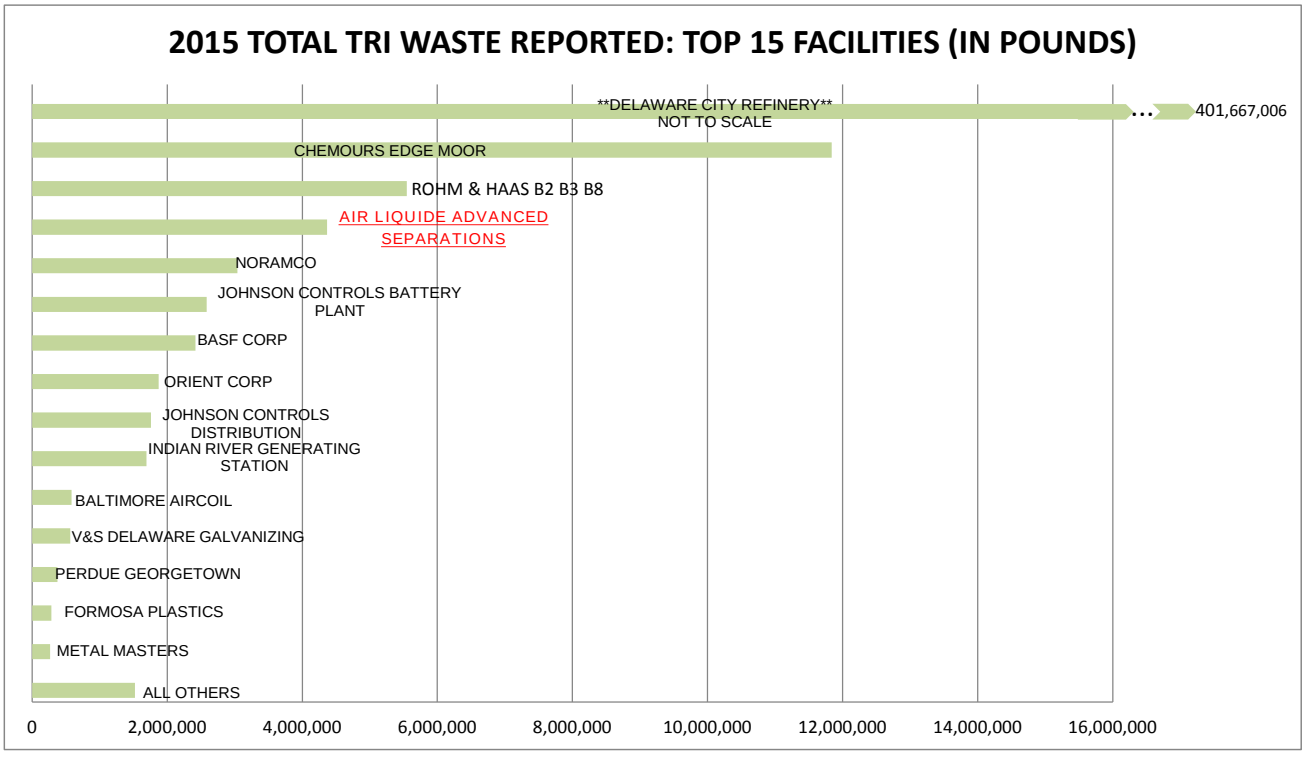




AIR LIQUIDE ADVANCED SEPARATIONS, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

Air Liquide Advanced Separations ranks 31st in the nation for on-site recycling of methanol (out of 2,156 facilities).

Air Liquide Advanced Separations ranks 5th in the nation for on-site recycling of n-hexane (out of 1,243 facilities).

Air Liquide Advanced Separations ranks 48th in the nation for off-site transfers of n-methyl-2-pyrrolidone (out of 385 facilities).

TRI FACILITY PROFILES

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 two chemicals in 2015, 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.

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
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.

TRI FACILITY PROFILES

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.

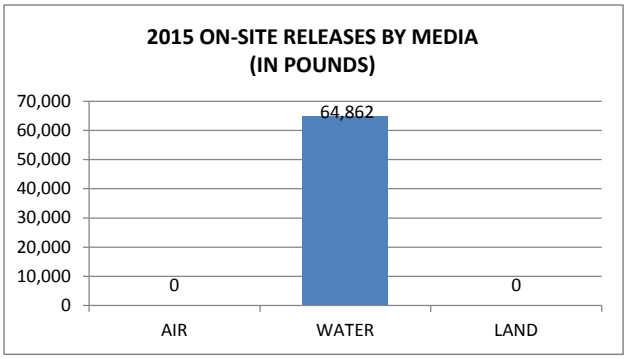
The facility has reported since 1987, previously as Allen Family Foods. Allen Harim Foods has reported since it purchased the facility in September 2011. For 2015, the facility reported on two chemicals, nitrate compounds, and peracetic acid. In the wastewater treatment process, water dissociable nitrate 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.)

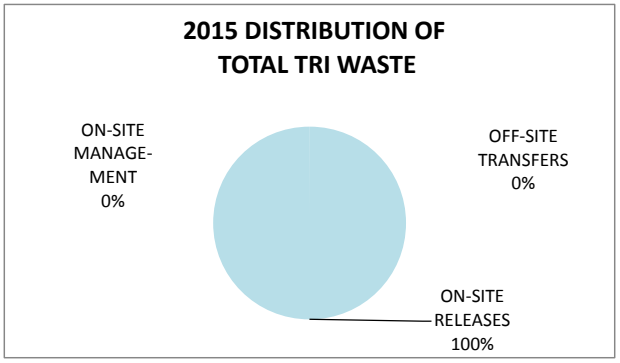
2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
NITRATE COMPOUNDS	0	64,862	0	64,862	0	0	NO	NO
PERACETIC ACID*	0	0	0	0	0	0	NO	NO
TOTAL	0	64,862	0	64,862	0	0		

*Reported on Short Form A

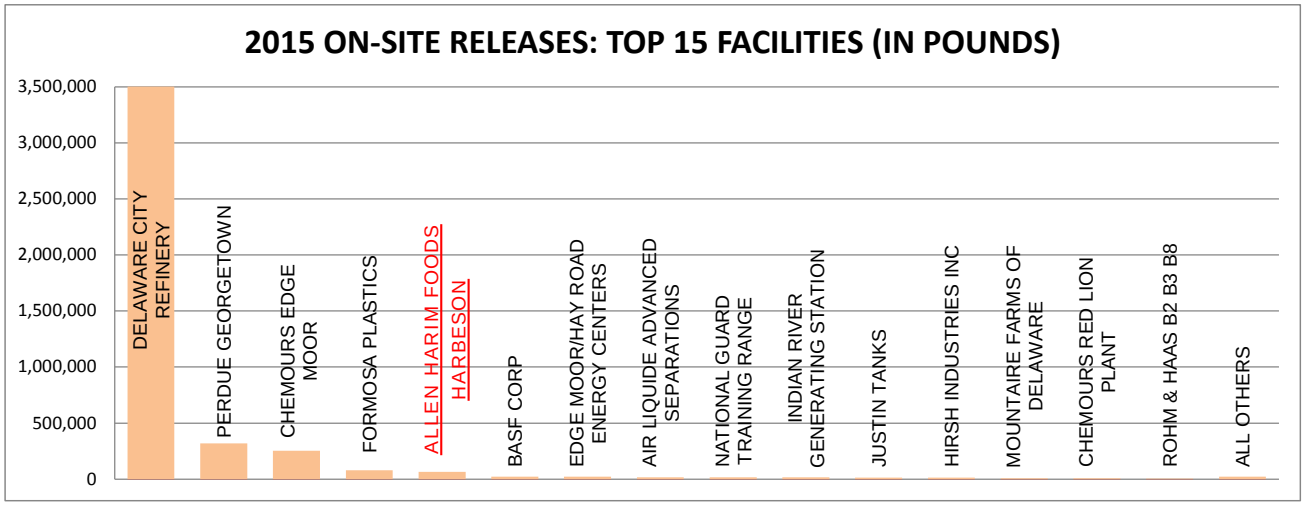
GRAPHICAL INFORMATION:



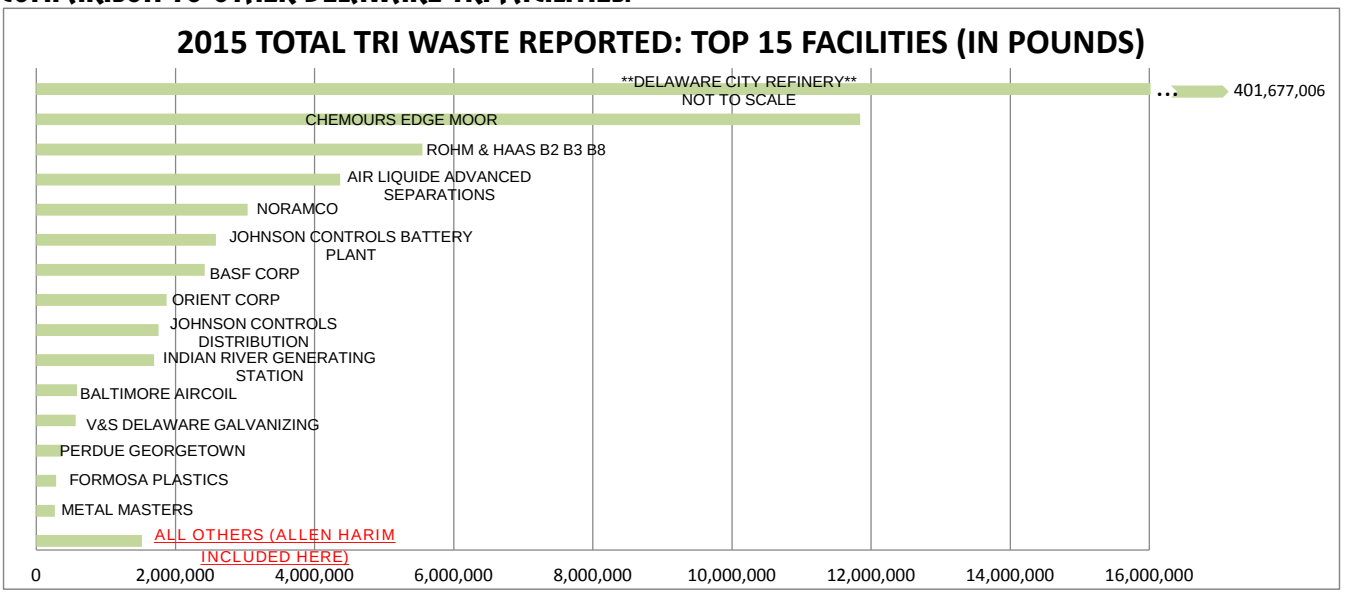


ALLEN HARIM FOODS - HARBESON, CONT.

GRAPHICAL INFORMATION:



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 reported since 1995, previously as Allens Milling Company and Delmar Hatchery. The facility reported on three chemicals in 2015, copper compounds, manganese compounds, and zinc compounds, all 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.) The metal compounds reported are used in poultry feed.

2015 TRI DATA (REPORTED IN POUNDS):

	ON-SITE RELEASES				OFF-SITE	ON-SITE		
CHEMICAL	AIR	WATER	LAND	TOTAL	TRANSFERS	MANAGEMENT	PBT	CARCINOGEN
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.

TRI FACILITY PROFILES

BALTIMORE AIRCOIL COMPANY

LOCATION/CONTACT:

Address: 1162 Holly Hill Road
Milford, DE 19963

Phone: (302) 424-2566

Contact: Angela Sheppard

FACILITY OVERVIEW:

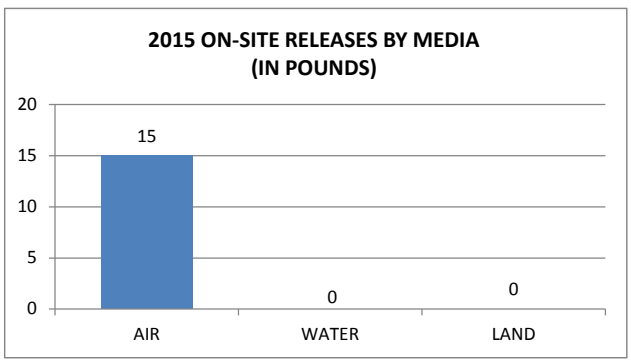
The Baltimore Aircoil Company reported under the North American Industrial Classification System (NAICS) as 333415, which covers air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing.

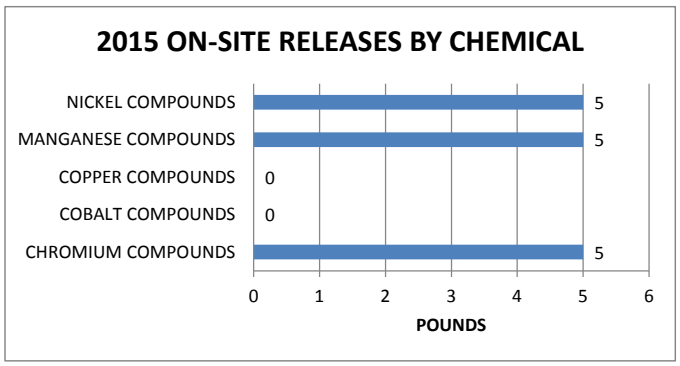
The Baltimore Aircoil Company has reported since 2011. The facility reported on five chemicals in 2015, with on-site releases only to air due to welding and laser cutting of metal. The chemicals were chromium, cobalt, copper, manganese, and nickel compounds. The chemicals that are reported are from scrap 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. In 2015, they reduced the amount of waste sent off-site for recycling by 7% by improving the process to utilize sheet metal.

2015 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	199,817	0	NO	YES
COBALT COMPOUNDS	0	0	0	0	24,570	0	NO	YES
COPPER COMPOUNDS	0	0	0	0	32,708	0	NO	NO
MANGANESE COMPOUNDS	5	0	0	5	97,474	0	NO	NO
NICKEL COMPOUNDS	5	0	0	5	229,301	0	NO	YES
TOTAL	15	0	0	15	583,870	0		

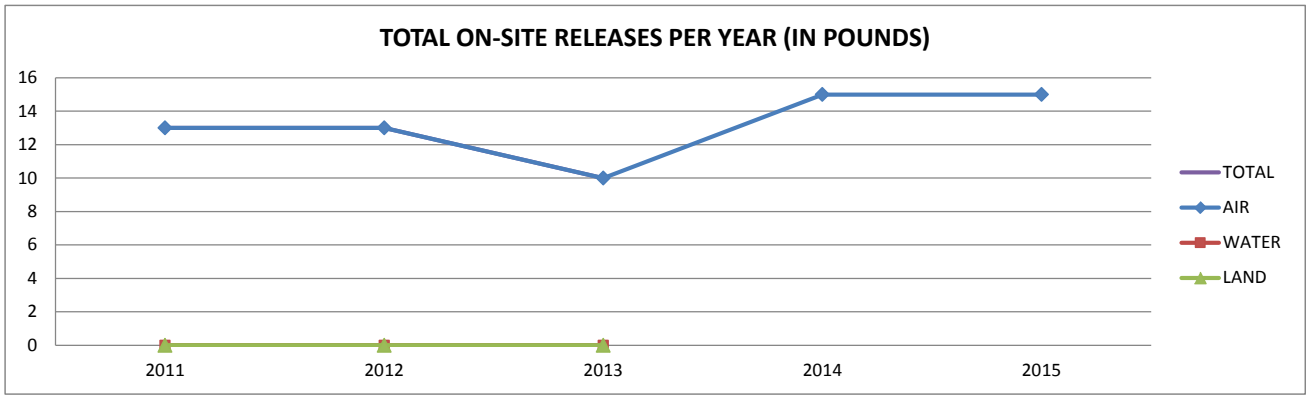
GRAPHICAL INFORMATION:

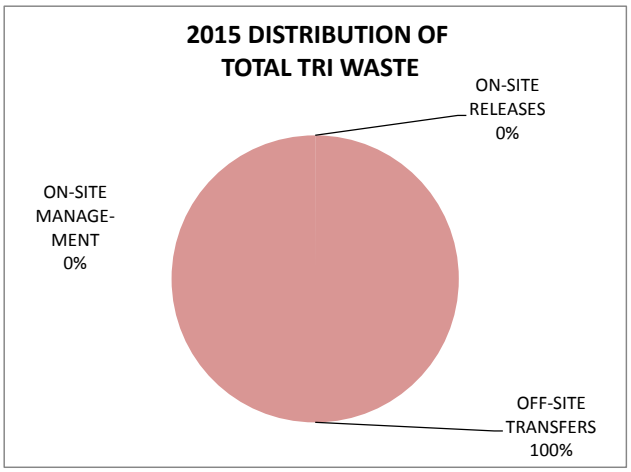


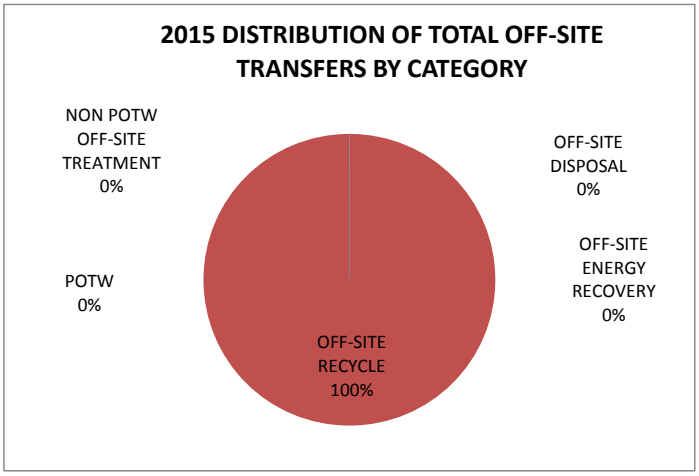


BALTIMORE AIRCOIL COMPANY, CONT.

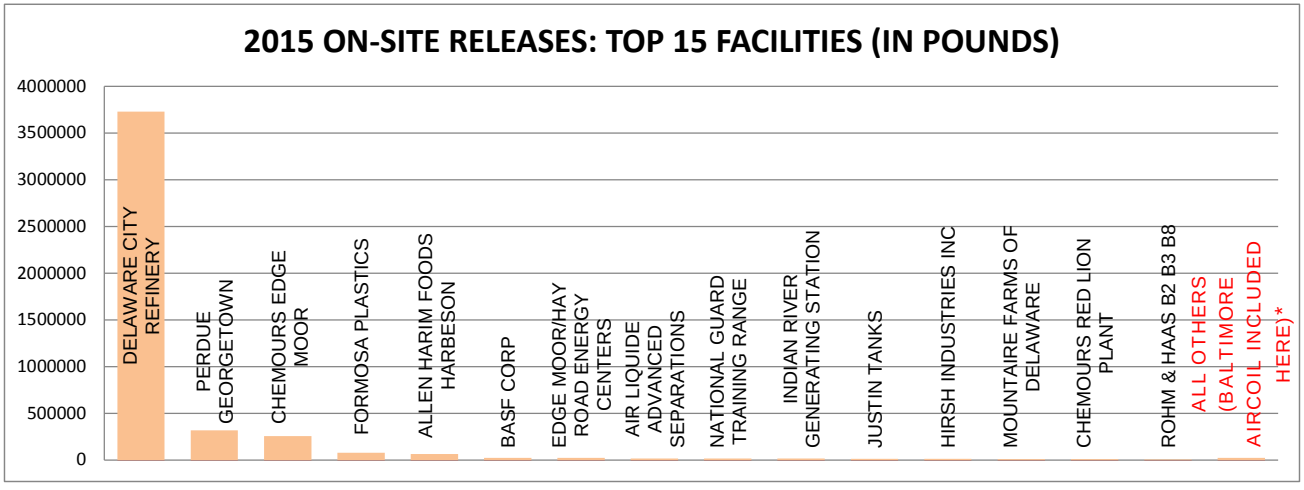
GRAPHICAL INFORMATION CONT.:







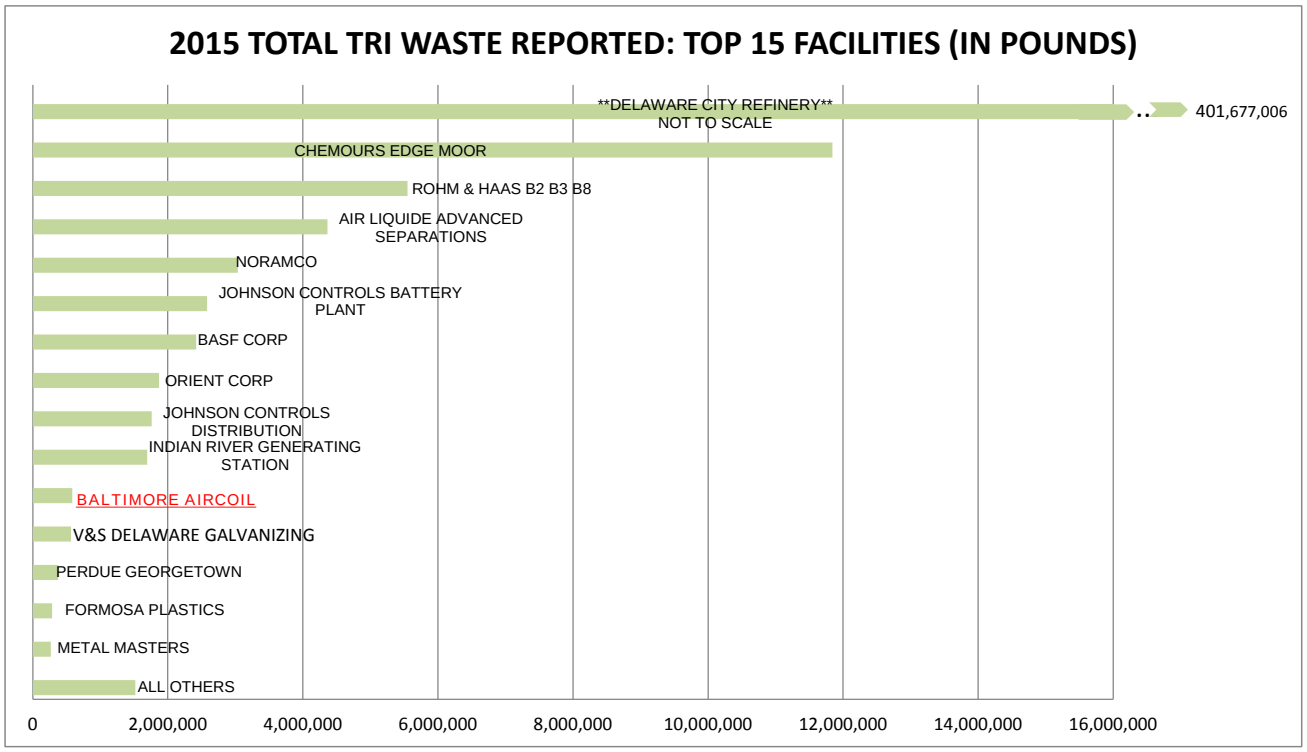
COMPARISON TO OTHER DELAWARE TRI FACILITIES:



*The Baltimore Aircoil Company ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

BALTIMORE AIRCOIL COMPANY,

COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:



NOTABLE 2015 NATIONAL RANKINGS:

Thw Baltimore Aircoil Company ranks 53rd in the nation for off-site transfers of chromium compounds (out of 1,307 facilities).

The Baltimore Aircoil Company ranks 29th in the nation for off-site transfers of nickel compounds (out of 1135 facilities).

TRI FACILITY PROFILES

BASF CORP

LOCATION/CONTACT:

Address: 205 South James Street
Newport, DE 19804

Phone: (973)-245-6077

Contact: Maureen Paukert

FACILITY OVERVIEW:

BASF Corp manufactures high performance pigments for the paint, plastic, and printing industries. The Newport site has reported since 1998, previously as CIBA Specialty Chemicals. The Newport Site became part of BASF Corporation in April 2010. For 2015, the facility reported on nine chemicals, with the majority either being treated or recycled on or off-site, with less than 1% being released on-site.

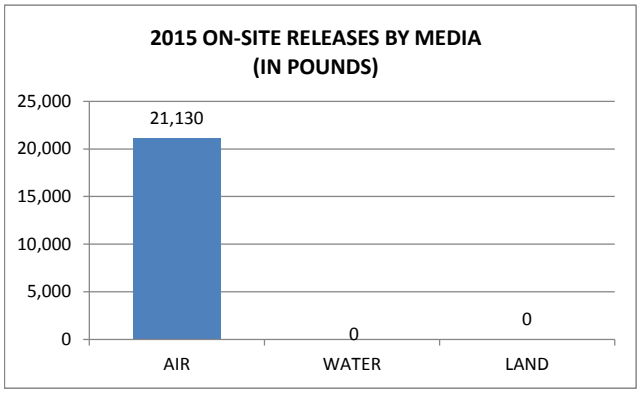
Methanol is the primary chemical released onsite. Methanol is utilized in pigment production while also being generated as a co/by-product in some of the same processes. Methanol is managed both on and off-site, with less than 1% being released on-site. The other TRI chemicals used on-site are either raw materials or process aids.

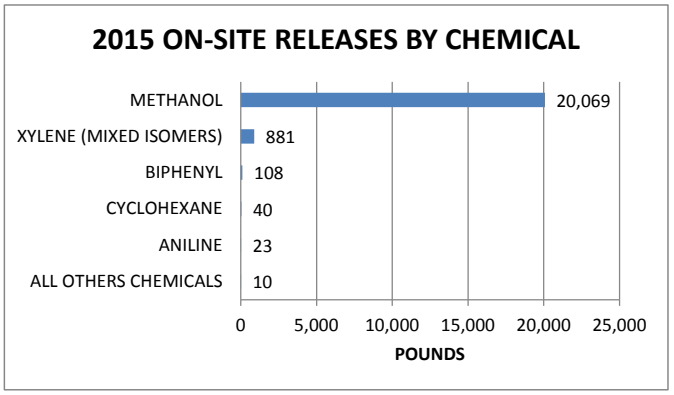
2015 TRI DATA (REPORTED IN POUNDS):

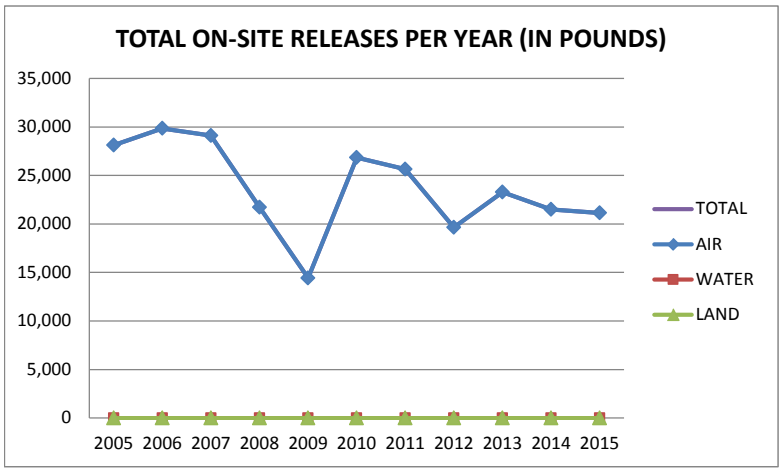
	ON-SITE RELEASES							
CHEMICAL	AIR	WATER	LAND	TOTAL	OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
ANILINE	23	0	0	23	9,139	1,094	NO	NO
BIPHENYL	108	0	0	108	134,026	2,321	NO	NO
CYCLOHEXANE	40	0	0	40	14,125	3,417	NO	NO
METHANOL	20,069	0	0	20,069	768,284	1,170,739	NO	NO
NITRATE COMPOUNDS	0	0	0	0	19,986	0	NO	NO
NITRIC ACID	0	0	0	0	0	20,309	NO	NO
N-METHYL-2-PYRROLIDONE	0	0	0	0	137,536	11	NO	NO
P-CHLOROANILINE	9	0	0	9	112,173	423	NO	YES
XYLENE (MIXED ISOMERS)	881	0	0	881	708	4,102	NO	NO
TOTAL	21,130	0	0	21,130	1,195,977	1,202,416		

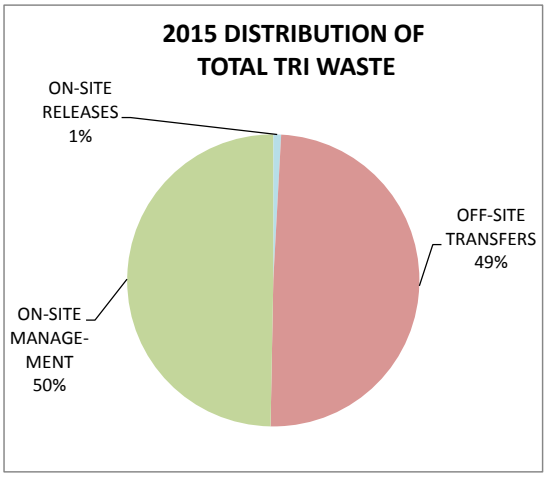
BASF CORP, CONT.

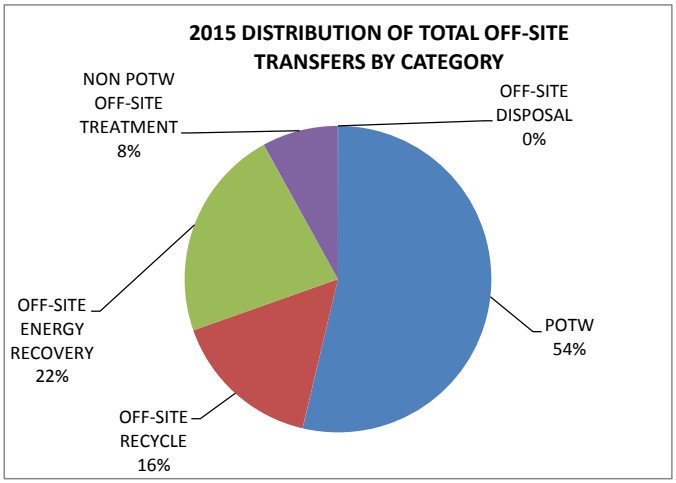
GRAPHICAL INFORMATION:

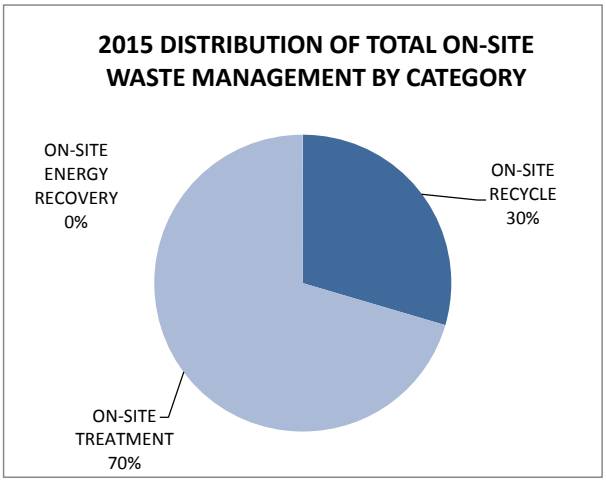






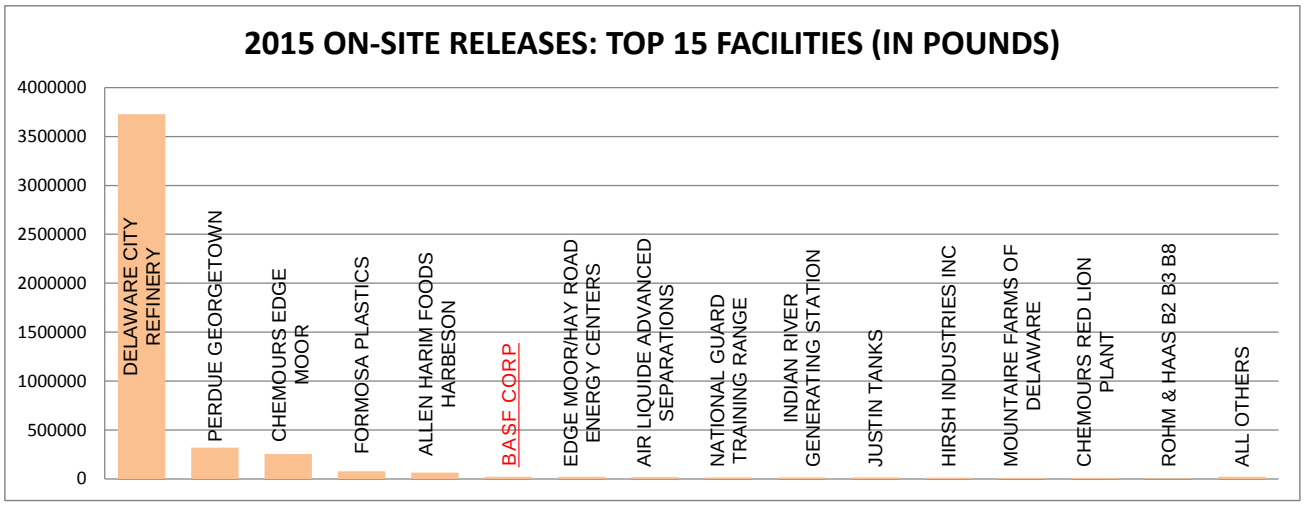


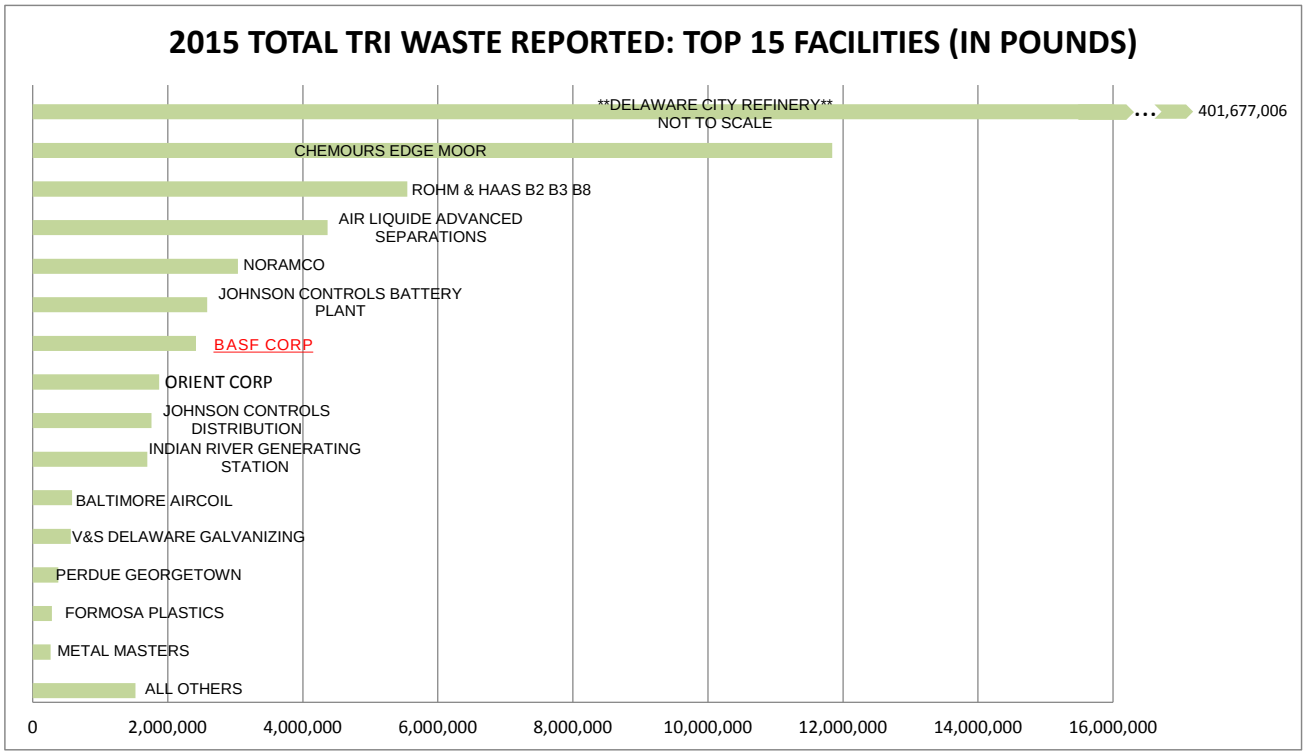




BASF CORP, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

BASF Corp ranks 60th in the nation for off-site transfers of methanol (out of 2,156 facilities).

BASF Corp ranks 59th in the nation for on-site recycling for methanol (out of 2,156 facilities).

BASF Corp ranks 3rd in the nation for off-site transfers of biphenyl (out of 119 facilities).

TRI FACILITY PROFILES

CHEMOURS EDGE MOOR

LOCATION/CONTACT:

Address: 104 Hay Road
Edgemoor, DE 19809

Phone: (304) 863-4513

Contact: Robin Ollis Stemple

FACILITY OVERVIEW:

Chemours Edge Moor manufactured titanium dioxide, a white pigment that is used in the paint and paper industries. The facility also produced titanium tetrachloride and ferric chloride. This facility ceased production in September, 2015.

The facility has reported since 1987, previously as DuPont Edge Moor. For 2015, Chemours Edge Moor reported on 22 TRI chemicals. Carbonyl Sulfide alone accounted for 53% of the total onsite releases for 2015. Carbonyl sulfide is a gas by-product of the titanium dioxide production process, and is produced from the use of sulfur-bearing coke in the process of manufacturing the titanium dioxide from titanium-rich ores. Manganese compounds accounted for 42% of the total on-site releases. Annual releases of manganese compounds can fluctuate with the sources of raw materials the site utilizes. Carbonyl Sulfide (95.4%), hydrochloric acid aerosol (1.9%) and chlorine (2.4%) account for 99.7% of the total onsite releases to air for 2015. Hydrochloric acid is formed as a gas by-product of the titanium dioxide production process, and chlorine is utilized as a raw material to manufacture titanium dioxide.

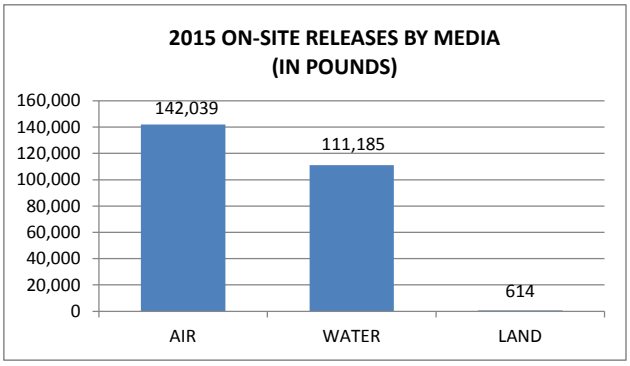
Since 2001, Chemours Edge Moor has reduced dioxin generation by 99.9% by implementing a capital project and by making process modifications. Over 98.9% (346.3 grams out of 350.1 grams generated) of the dioxins generated are contained within the solid material sent offsite. The remaining 1.1% of dioxins was released onsite to water and air. The onsite releases of Dioxin and Dioxin Like compounds (DLCs 3.82 grams) decreased by 4.73 grams in 2015 compared to 2014. This was due to a decrease in the releases to water; and to the September, 2015 shutdown of operations. The DLC in water can change based on process parameters. The dioxins released to water were calculated based on sampling analysis completed as required by the NPDES permit. The majority (93%) of the DLCs released to water reported by Chemours Edge Moor is either a dioxin or furan of the lowest toxicity level.

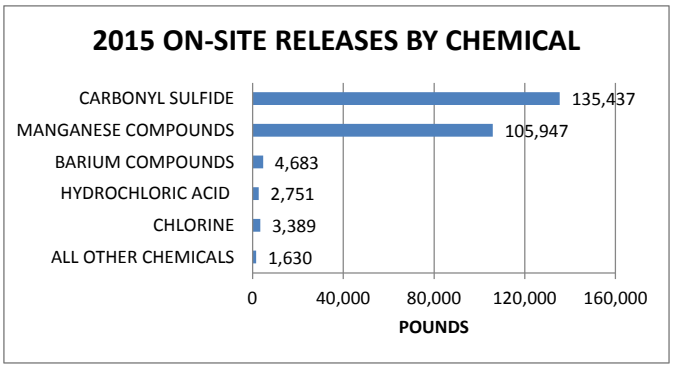
CHEMOURS EDGE MOOR, CONT.

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES AIR	WATER	LAND	TOTAL	OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
ARSENIC COMPOUNDS	0	32	0	32	89	0	NO	YES
BARIUM COMPOUNDS	2	4,681	0	4,683	5,029	0	NO	NO
CARBONYL SULFIDE	135,437	0	0	135,437	0	0	NO	NO
CHLORINE	3,389	0	0	3,389	0	1,583,989	NO	NO
CHROMIUM COMPOUNDS	1	40	0	40	97,446	0	NO	YES
COBALT COMPOUNDS	0	16	0	16	2,716	0	NO	YES
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0.000062	0.008352	0.000000	0.008414	0.762769	0.000000	YES	NO
HEXACHLOROBENZENE	0	0	0	0	50	0	YES	YES
HYDROCHLORIC ACID	2,751	0	0	2,751	0	7,918,972	NO	NO
LEAD COMPOUNDS	0	62	0	62	11,804	0	YES	YES
MANGANESE COMPOUNDS	0	105,947	0	105,947	865,335	0	NO	NO
MERCURY COMPOUNDS	0.8080	0.0084	0.0000	0.8164	7.6529	0.0000	YES	NO
NICKEL COMPOUNDS	1	142	0	143	10,497	0	NO	YES
OCTACHLOROSTYRENE	0	0	0	0	2	0	YES	NO
PENTACHLOROBENZENE	0	0	0	0	2	0	YES	NO
PHOSGENE	251	0	0	251	0	165,815	NO	NO
POLYCHLORINATED BIPHENYLS	0	0	0	0	4	0	YES	YES
POLYCYCLIC AROMATIC COMPOUNDS	70	0	614	684	0	0	YES	YES
TITANIUM TETRACHLORIDE	50	0	0	50	0	823,251	NO	NO
TOLUENE	73	0	0	73	23,147	0	NO	NO
VANADIUM COMPOUNDS	1	95	0	96	64,758	0	NO	NO
ZINC COMPOUNDS	12	169	0	181	13,960	0	NO	NO
TOTAL	142,039	111,185	614	253,837	1,094,847	10,492,028		

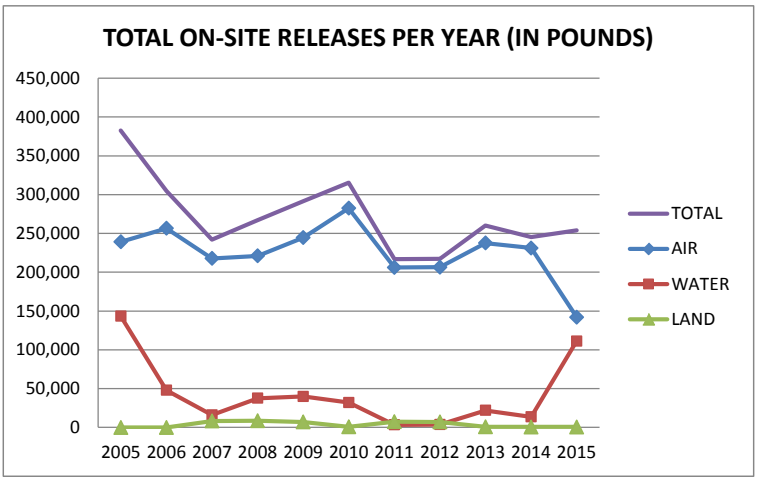
GRAPHICAL INFORMATION:

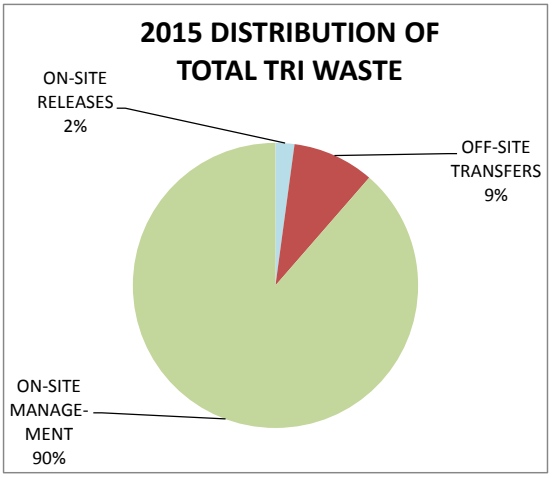


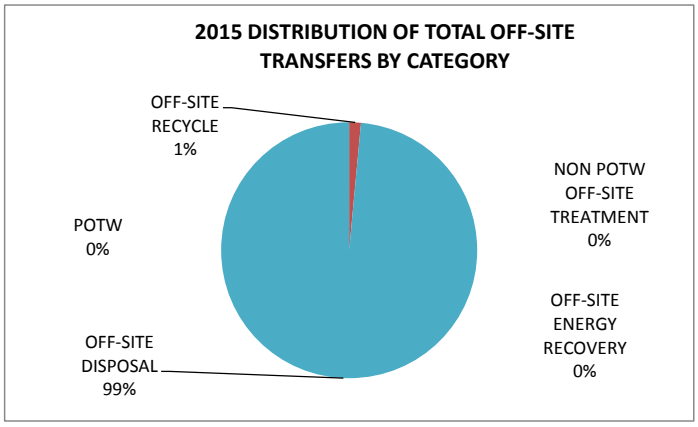


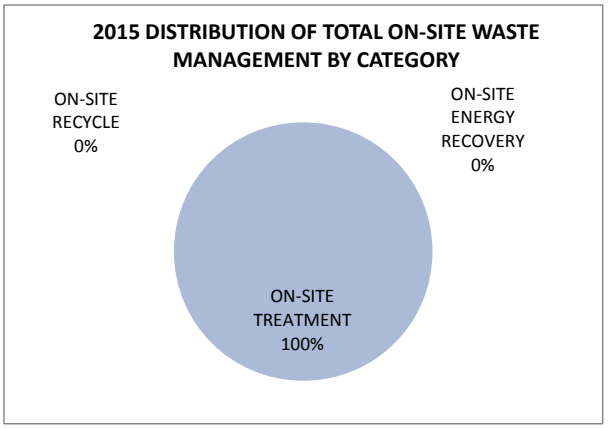
CHEMOURS EDGE MOOR, CONT.

GRAPHICAL INFORMATION CONT.:

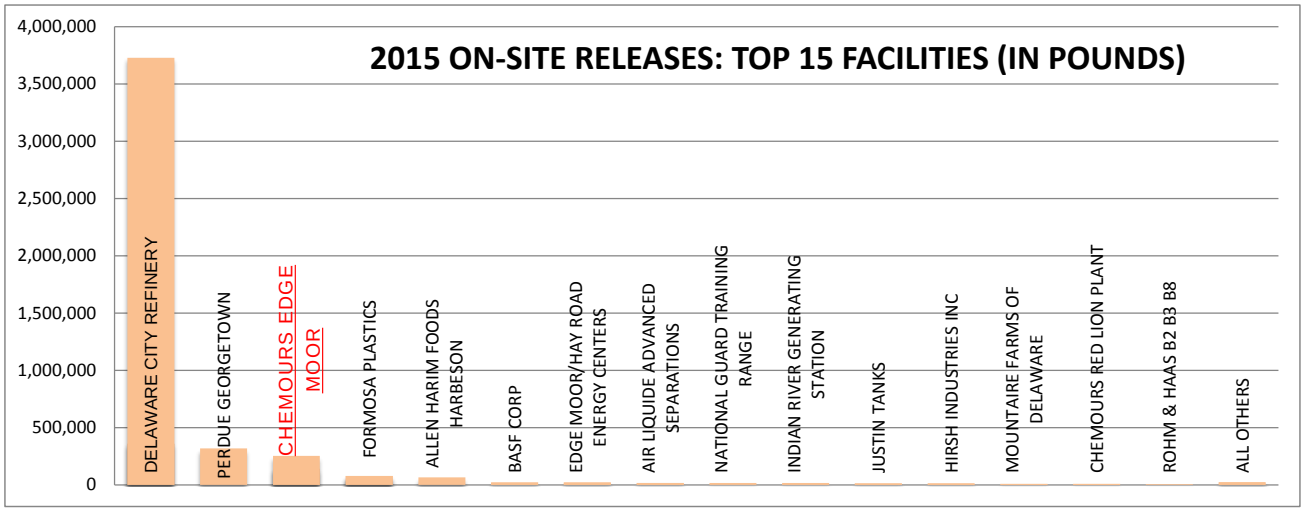








COMPARISON TO OTHER DELAWARE TRI FACILITIES:



CHEMOURS EDGE MOOR,

COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:

NOTABLE 2015 NATIONAL RANKINGS:

Chemours Edge Moor ranks 14th in the nation for on-site release of carbonyl sulfide (out of 137 facilities).

Chemours Edge Moor ranks 26th in the nation for on-site treatment of hydrochloric acid aerosols (out of 1,019 facilities).

Chemours Edge Moor ranks 8th in the nation for on-site treatment of titanium tetrachloride (out of 31 facilities).

CHEMOURS RED LION

LOCATION/CONTACT:

Address: 766 Governor Lea Road
Delaware City, DE 19706

Phone: (302) 834-5901

Contact: W. James Harman

FACILITY OVERVIEW:

Chemours 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 Chemours facility via pipeline, tank trucks and tank cars.

Chemours Red Lion has reported since 2005, previously as DuPont Red Lion. The facility reported on four chemicals in 2015, 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.

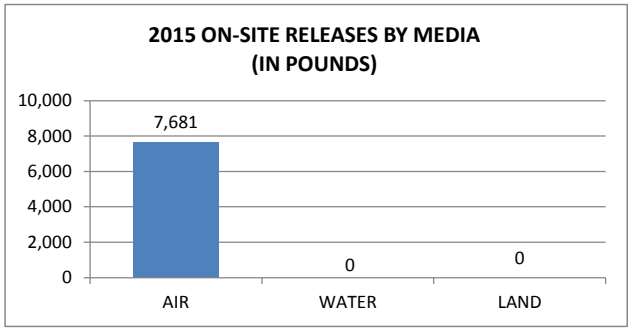
All on-site releases were to air. For 2010, while the Delaware City Refinery was idle, the Chemours Red Lion facility was also idled and was below the TRI reporting threshold for sulfuric acid and was not required to report. The Chemours Red Lion facility re-started its operations in May of 2011 after an 18 month shutdown. In 2012, the Chemours facility was operational at more typical production rates for the entire year as compared to 7 months in 2011. For 2015, on-site releases increased slightly over 2014, corresponding with an increase in production of 13% (see *Total On-site Releases Per Year Graph* on the next page).

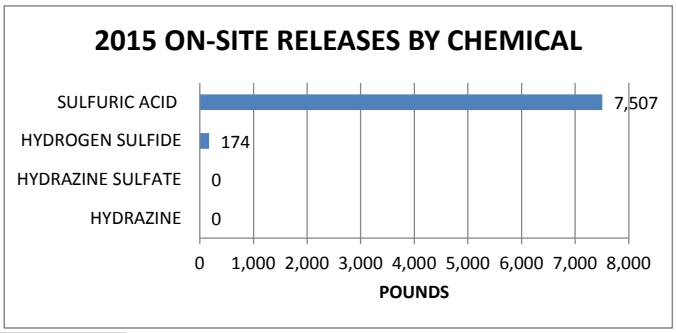
2015 TRI DATA (REPORTED IN POUNDS):

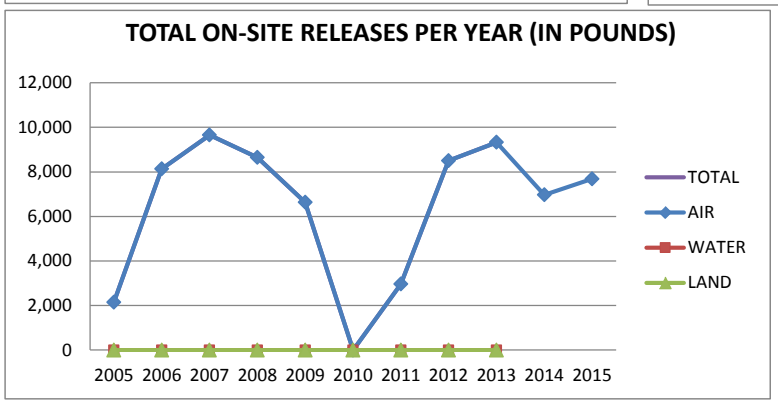
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
HYDRAZINE	0	0	0	0	0	0	NO	YES
HYDRAZINE SULFATE	0	0	0	0	0	0	NO	YES
HYDROGEN SULFIDE	174	0	0	174	0	0	NO	NO
SULFURIC ACID	7,507	0	0	7,507	0	0	NO	NO
TOTAL	7,681	0	0	7,681	0	0		

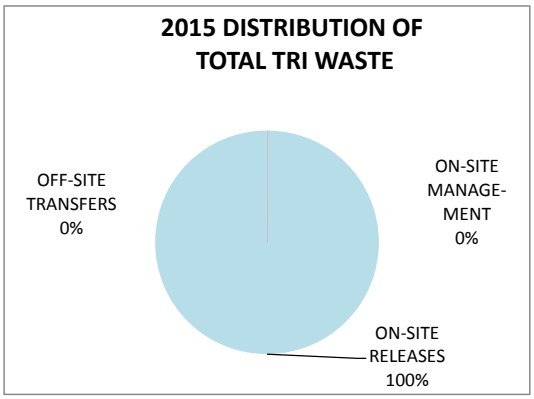
CHEMOURS RED LION, CONT.

GRAPHICAL INFORMATION:

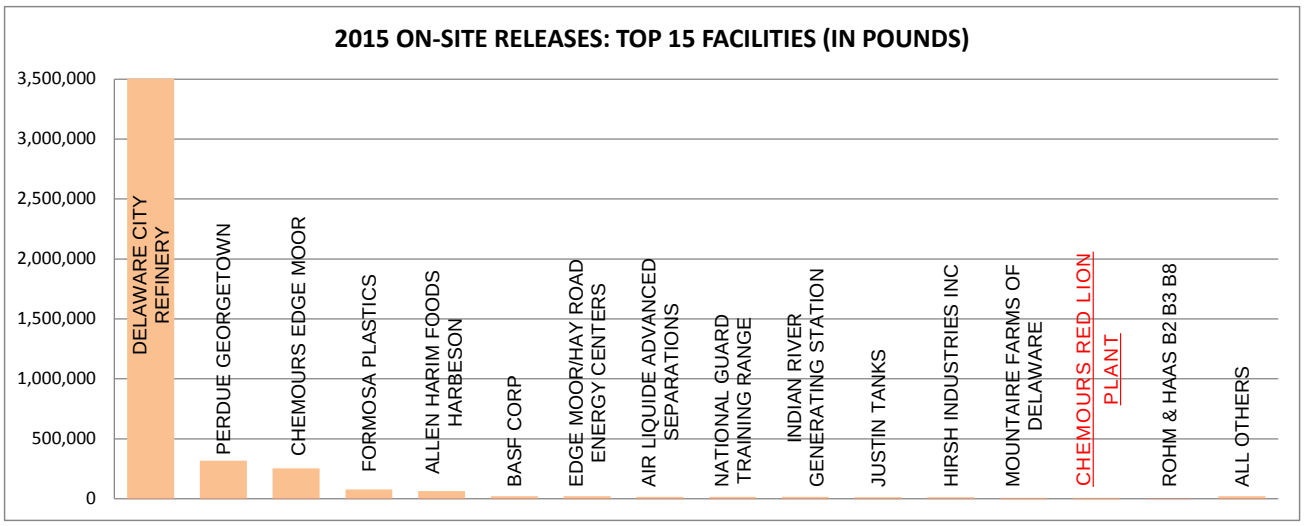








COMPARISON TO OTHER DELAWARE TRI FACILITIES



Chemours Red Lion ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 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

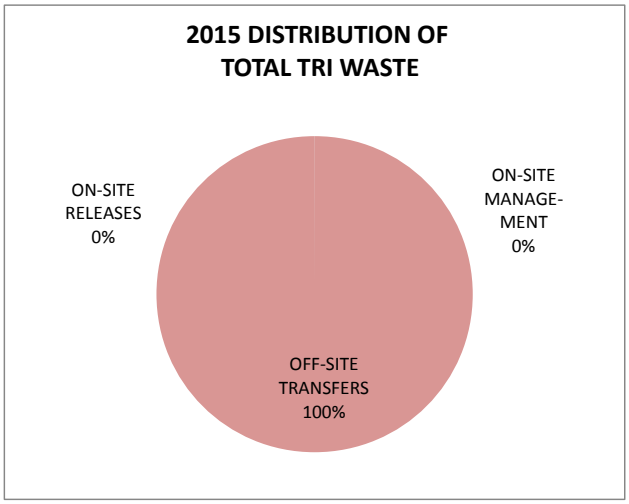
FACILITY OVERVIEW:

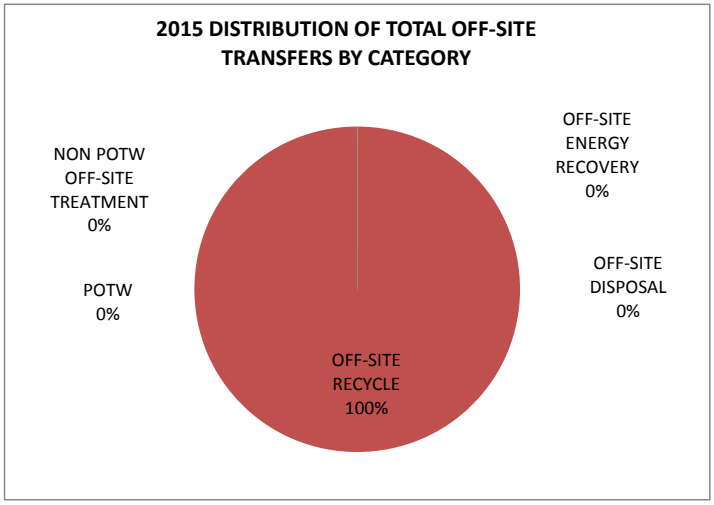
Color Works Painting reported under the North American Industrial Classification System (NAICS) as 332812, which covers metal coating, engraving, and allied services to manufacturers. Color Works reported on one chemical in 2015, manganese. There were no reported on-site releases, with all waste being sent off-site for recycling.

2015 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	1,101	0	NO	NO
TOTAL	0	0	0	0	1,101	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 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

Color Works Painting ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

TRI FACILITY PROFILES

CRODA

LOCATION/CONTACT:

Address: 315 Cherry Lane
New Castle, DE 19720

Phone: (302) 429-5269

Contact: Robert Touhey

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.

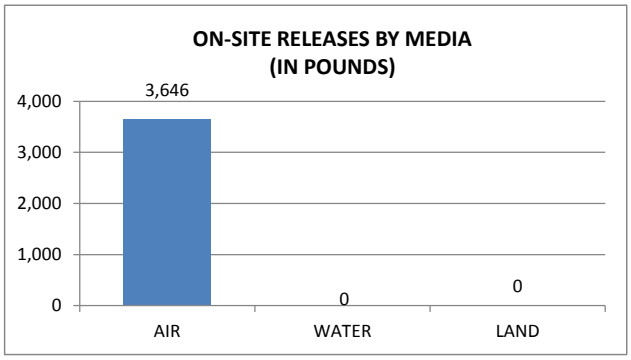
The facility has reported since 1987, previously as ICI Atlas Point and Uniqema, with Croda International acquiring Uniqema in 2006. Croda reported on nine chemicals for 2015. All on-site releases were to air, with the largest being ethylene oxide. The majority of chemicals reported are primarily utilized as ingredients in the facility's products.

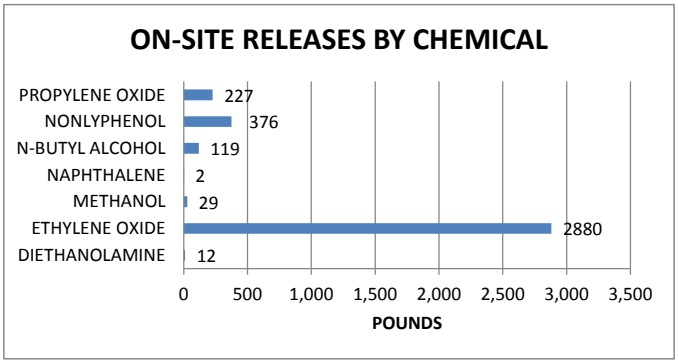
2015 TRI DATA (REPORTED IN POUNDS):

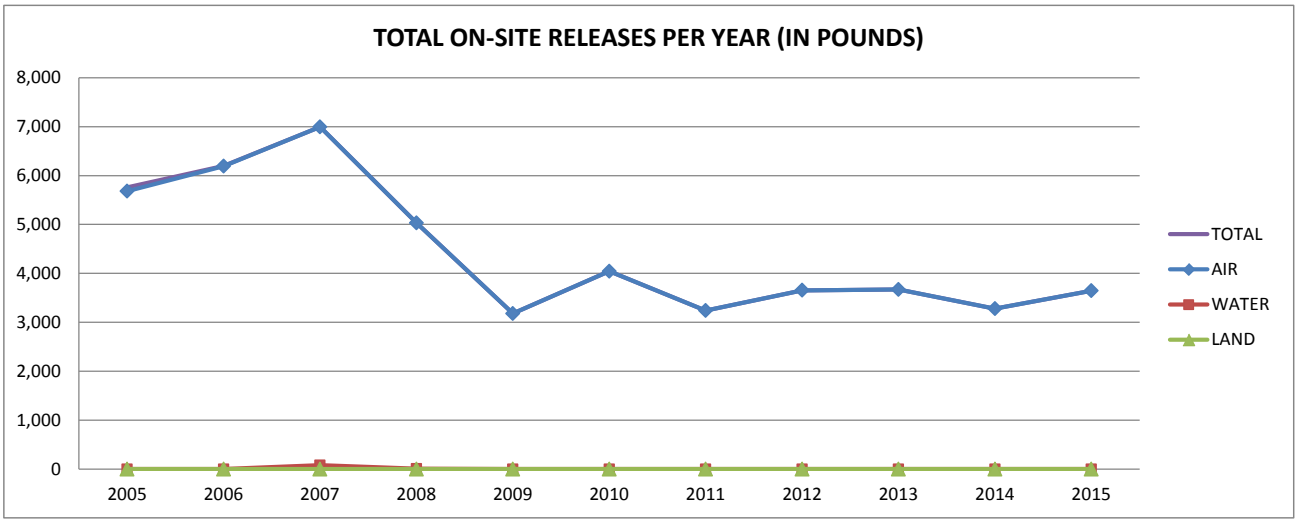
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CERTAIN GLYCOL ETHERS	1	0	0	1	2,357	0	NO	NO
DIETHANOLAMINE	12	0	0	12	800	0	NO	NO
ETHYLENE GLYCOL	0	0	0	0	54,520	0	NO	NO
ETHYLENE OXIDE	2,880	0	0	2,880	0	38,748	NO	YES
METHANOL	29	0	0	29	9,126	0	NO	NO
N-BUTYL ALCOHOL	119	0	0	119	275	0	NO	NO
NAPHTHALENE	2	0	0	2	310	0	NO	YES
NONLYPHENOL	376	0	0	376	0	0	NO	NO
PROPYLENE OXIDE	227	0	0	227	0	8,722	NO	YES
TOTAL	3,646	0	0	3,646	67,388	47,470		

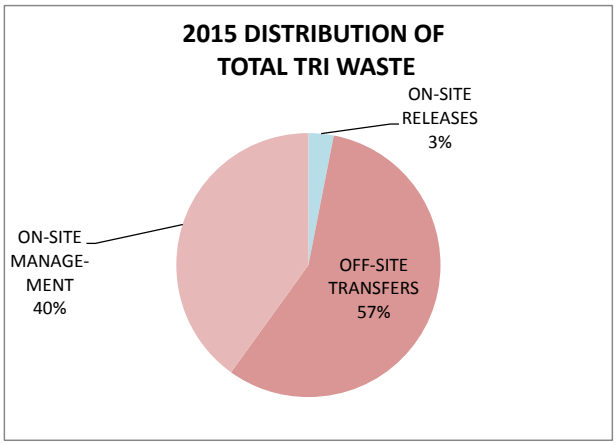
CRODA, CONT.

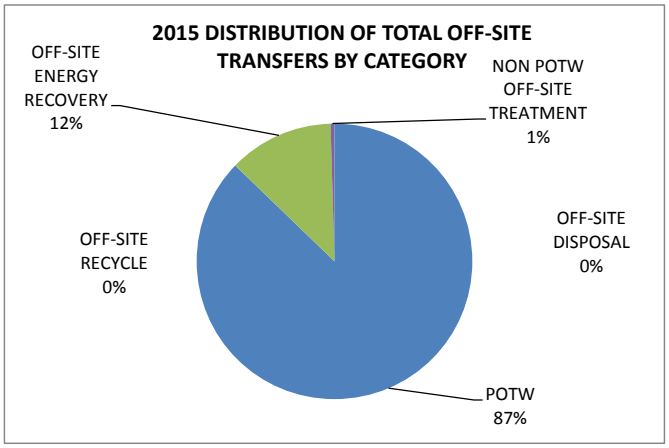
GRAPHICAL INFORMATION:





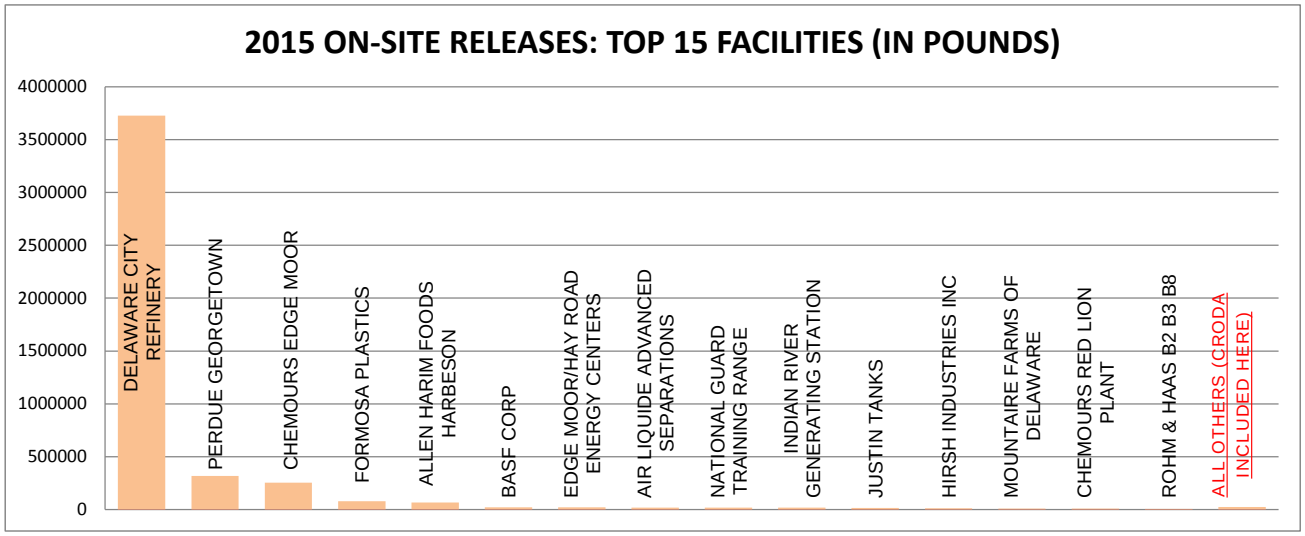




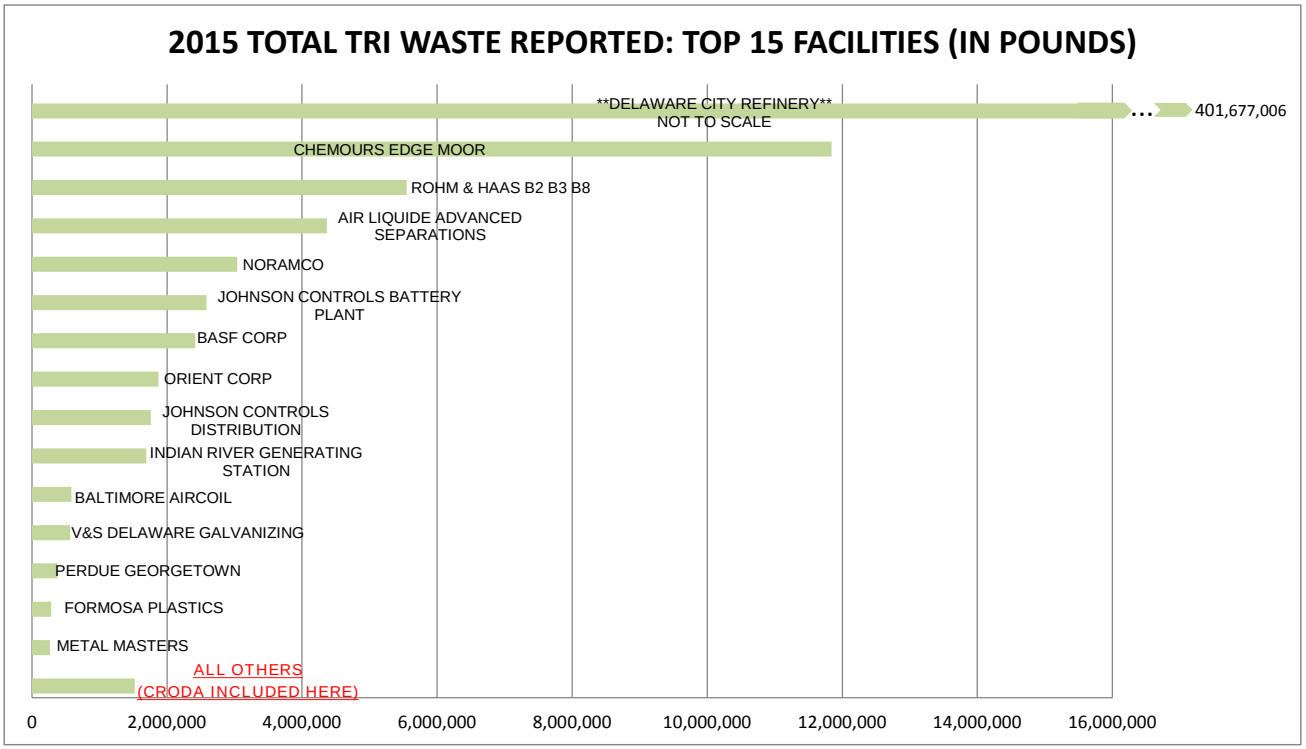


CRODA, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



COMPARISON TO OTHER DELAWARE TRI FACILITIES:



NOTABLE 2015 NATIONAL RANKINGS:

Croda ranks 28th in the nation for on-site releases of ethylene oxide (out of 118 facilities).

Croda ranks 52nd in the nation for on-site releases of propylene oxide (out of 100 facilities).

TRI FACILITY PROFILES

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, diesel fuel, 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 2015 reporting year, the refinery reported on 37 chemicals, with 3.7 million pounds being released on-site. The largest two contributors to on-site releases were the 3.365 million pounds of nitrate compounds released to water and 217,011 pounds of sulfuric acid aerosol, accounting for 96% of all on-site releases. Nitrogen, a naturally occurring compound in all crude oil, is removed during the refining process creating ammonia (NH3), 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 treatment plant, creating the nitrate compounds that are released to 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 (SO2). Under certain conditions, a small portion of the SO2 converts to Sulfur Trioxide (SO3). A fraction of the SO3 can undergo a further reaction to form sulfuric acid aerosol. Sulfuric acid mist emissions vary from year to year.

On-site releases for the refinery are up 18% compared to 2014. This was primarily due to the increase of nitrate compounds being released to water, which are up 622,393 pounds compared to 2014. Nitrate releases vary from year to year(see *Total On-site Releases Per Year Graph* on the next page).

The refinery reported over 397 million pounds of chemicals managed on-site, via treatment and energy recovery. The largest of amount reported was hydrogen sulfide with over 360 million pounds treated on-site. Hydrogen sulfide is a gas that is produced during the petroleum refining process that is treated and converted to elemental sulfur by sulfur recovery processes, 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 NOx emissions from sources such as process heaters, package boilers and the Fluid Coking Unit CO boiler. Over 15 million pounds of ammonia is treated on site, with less than 0.2 percent being released on-site to air and water

DELAWARE CITY REFINERY, CONT.

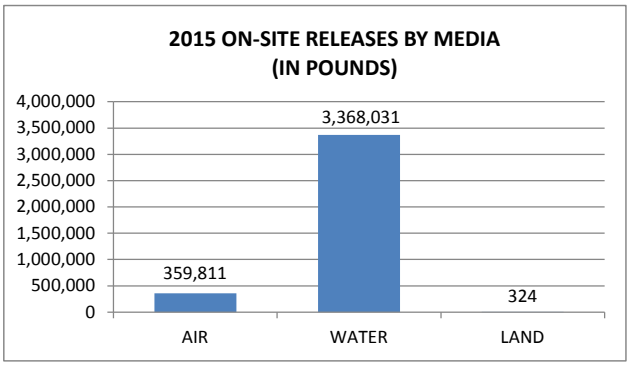
An off-site transfer of asbestos for disposal (220,500 pounds) was recorded in 2015 related to asbestos remediation and abatement activities performed by the refinery.

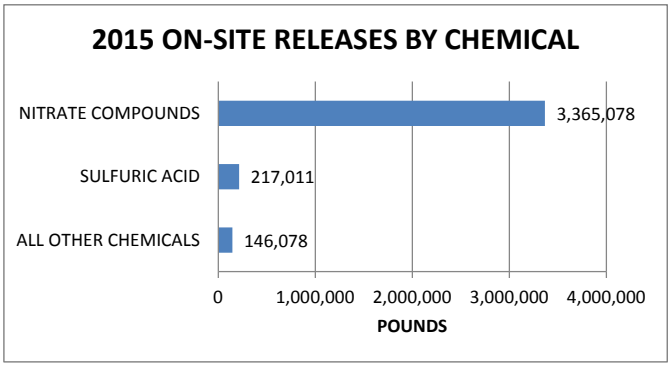
2015 TRI DATA (REPORTED IN POUNDS):

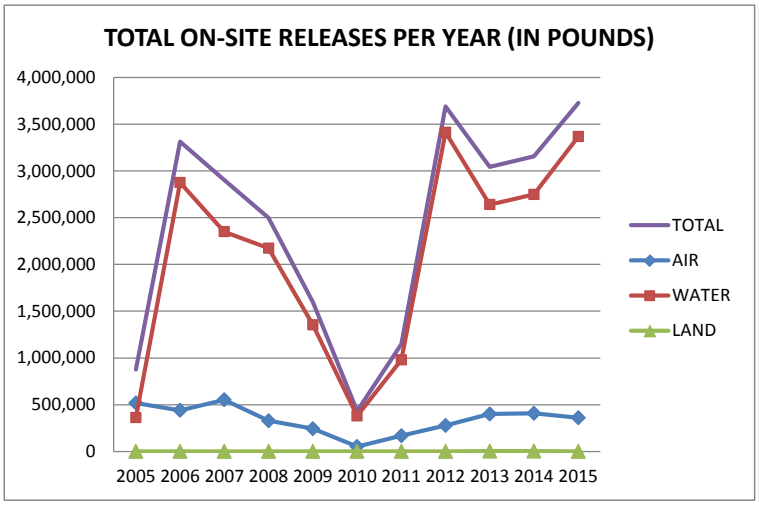
	ON-SITE RELEASES							
CHEMICAL	AIR	WATER	LAND	TOTAL	OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
1,2,4-TRIMETHYLBENZENE	1,020	5	0	1,025	0	62,593	NO	NO
1,3-BUTADIENE	490	0	0	490	0	0	NO	YES
2,4-DIMETHYLPHENOL	0	157	0	157	0	219,922	NO	NO
AMMONIA	25,018	1,918	0	26,936	0	15,485,033	NO	NO
ANTHRACENE	10	5	0	15	0	0	NO	NO
ASBESTOS (FRIABLE)	0	0	0	0	220,500	0	NO	YES
BENZENE	5,585	11	0	5,596	249	415,706	NO	YES
BENZO(G,H,I)PERYLENE	1	4	0	5	0	430	YES	NO
CARBON DISULFIDE	1,108	0	0	1,108	0	4,290,899	NO	NO
CARBONYL SULFIDE	479	0	0	479	0	14,648,589	NO	NO
CREOSOTE	57	0	324	381	52,473	0	NO	YES
CRESOL (MIXED ISOMERS)	0	313	0	313	0	338,789	NO	NO
CUMENE	3,030	5	0	3,035	0	3,726	NO	NO
CYANIDE COMPOUNDS	0	138	0	138	0	13,664	NO	NO
CYCLOHEXANE	1,782	5	0	1,787	0	7,011	NO	NO
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0.001254	0.000000	0.000000	0.001254	0.000000	0.001254	YES	NO
ETHYLBENZENE	1,733	5	0	1,738	141	50,438	NO	YES
ETHYLENE	6,151	0	0	6,151	0	0	NO	NO
HYDROCHLORIC ACID	172	0	0	172	0	87,834	NO	NO
HYDROGEN CYANIDE	33,429	192	0	33,621	0	460,889	NO	NO
HYDROGEN SULFIDE	15,479	1	0	15,480	0	360,703,361	NO	NO
LEAD COMPOUNDS	105	2	0	107	495	0	YES	YES
MERCURY COMPOUNDS	94.0200	1.4000	0.0000	95.4200	3.5100	0.0000	YES	NO
METHANOL	5,304	5	0	5,309	0	8,930	NO	NO
MOLYBDENUM TRIOXIDE	14	0	0	14	5	0	NO	NO
N-HEXANE	18,567	5	0	18,572	0	118,040	NO	NO
NAPHTHALENE	2,042	0	0	2,042	0	11,924	NO	YES
NITRATE COMPOUNDS	0	3,365,078	0	3,365,078	0	0	NO	NO
PHENANTHRENE	1	5	0	6	212	38	NO	NO
PHENOL	136	157	0	293	0	318,136	NO	NO
POLYCYCLIC AROMATIC COMPOUNDS	213	4	0	217	0	353	YES	YES
PROPYLENE	5,073	0	0	5,073	0	0	NO	NO
STYRENE	7	5	0	12	0	1,084	NO	YES
SULFURIC ACID	217,011	0	0	217,011	0	0	NO	NO
TETRACHLOROETHYLENE	9	0	0	9	0	0	NO	YES
TOLUENE	11,014	5	0	11,019	362	217,944	NO	NO
XYLENE (MIXED ISOMERS)	4,677	5	0	4,682	1766	207,483	NO	NO
TOTAL	359,811	3,368,031	324	3,728,166	276,208	397,672,816		

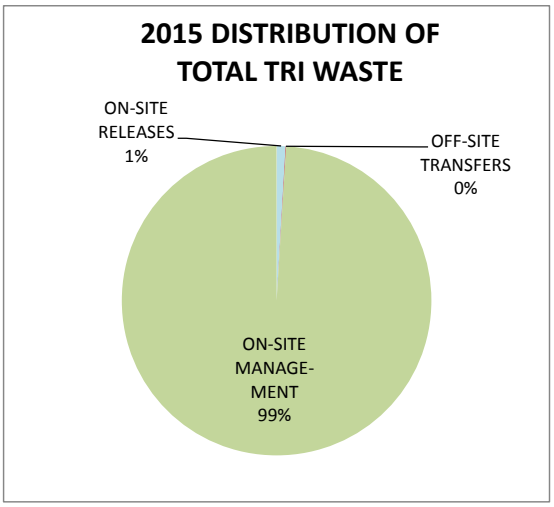
DELAWARE CITY REFINERY, CONT.

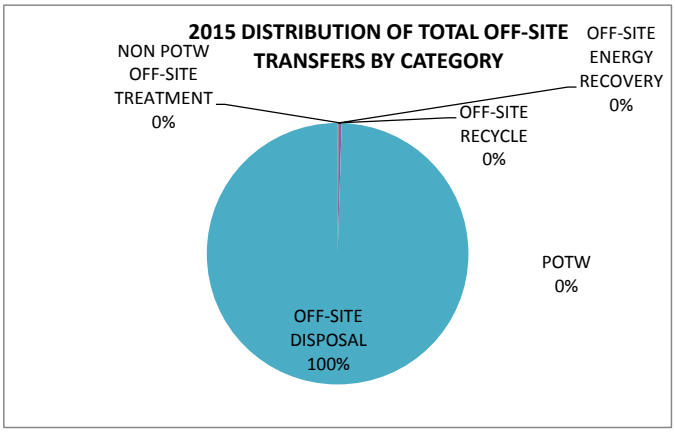
GRAPHICAL INFORMATION:

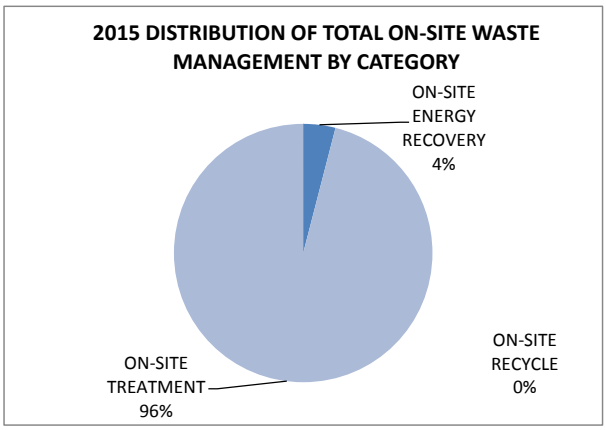






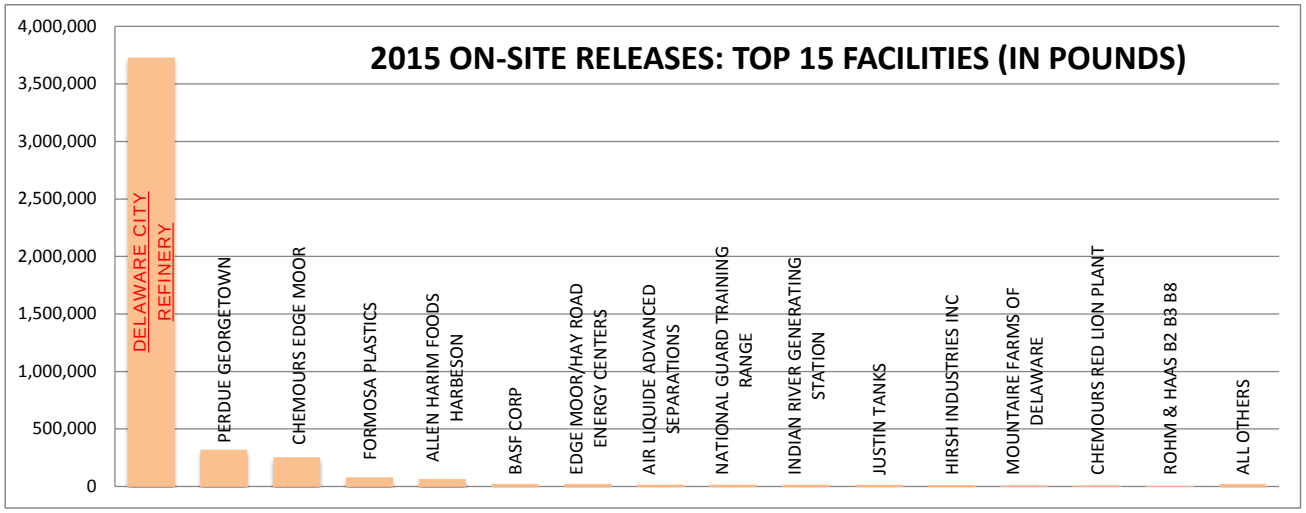






DELAWARE CITY REFINERY, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



NOTABLE 2015 NATIONAL RANKINGS:

Delaware City Refinery ranks 12th in the nation for on-site releases of nitrate compounds (out of 2,166 facilities).

Delaware City Refinery ranks 1st in the nation for total waste managed and for total on-site treament of hydrogen sulfide (out of 514 facilities).

Delaware City Refinery ranks 81st in on-site releases of sulfuric acid aerosols (out of 706 facilities).

Delaware City Refinery ranks 3rd in off-site transfers of asbestos (friable) (out of 36 facilities).

TRI FACILITY PROFILES

DENTSPLY MAIN PLANT

LOCATION/CONTACT:

Address: 38 West Clarke Ave.
Milford, DE 19963

Phone: (302) 422-4511

Contact: Jesse Bautista

FACILITY OVERVIEW:

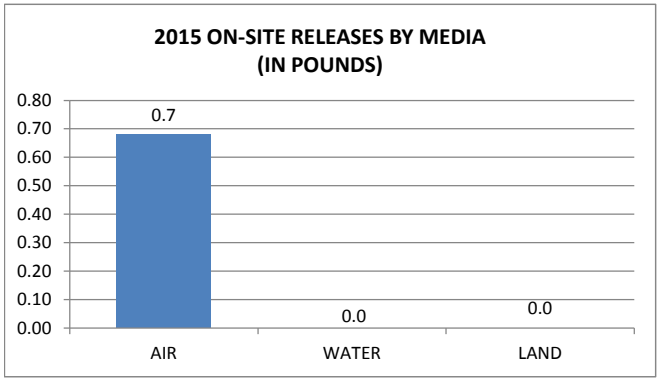
DENTSPLY International LLC, Caulk Division produces a line of consumable products for the dental industry. These products include dental adhesives, dental impression materials, and restoratives. These products are used in dental maintenance and restoration applications.

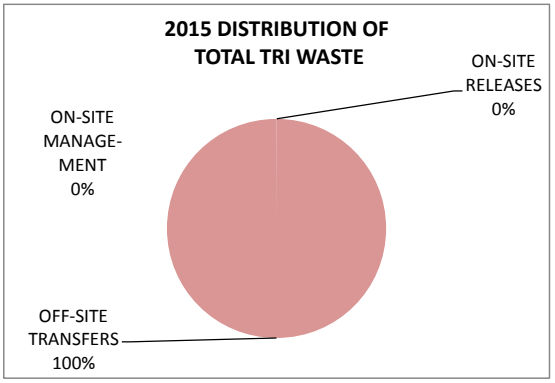
For 2015, the Dentsply Main Plant reported on one chemical, mercury. Virtually all of their mercury is used in their products or recycled (2,120 pounds recycled), with reported on-site mercury releases to air of 0.68 pounds.

2015 TRI DATA (REPORTED IN POUNDS):

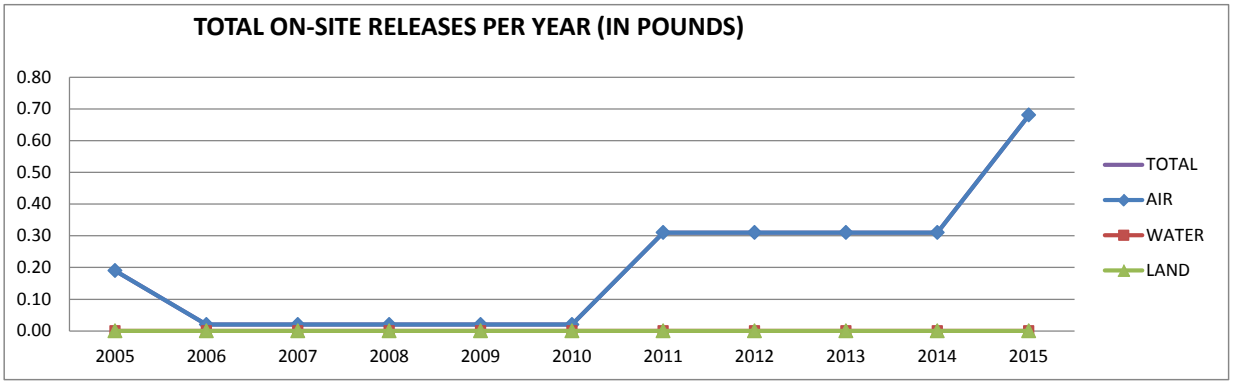
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
MERCURY	0.6800	0.0000	0.0000	0.6800	2,119.9400	0.0000	YES	NO
TOTAL	0.7	0.0	0.0	1	2,120	0		

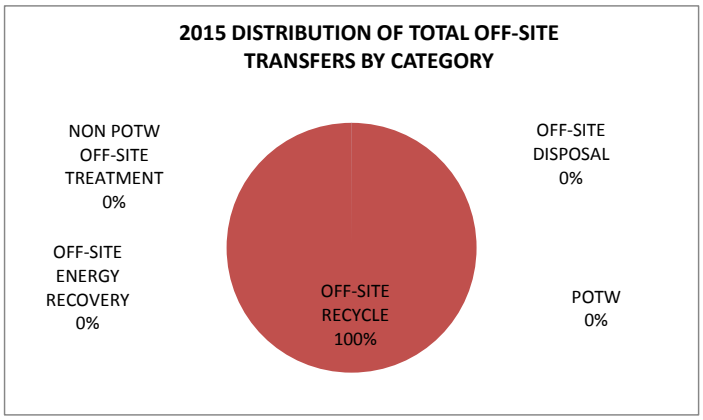
GRAPHICAL INFORMATION:





DENTSPLY MAIN PLANT, CONT.





COMPARISON TO OTHER DELAWARE TRI FACILITIES:

The Dentsply Main Plant ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

The Dentsply Main Plant ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

The Dentsply Main Plant ranks 9th in the nation for off-site transfers of mercury (out of 406 facilities).

DENTSPLY WEST

LOCATION/CONTACT:

Address: 779 E Masten Circle
Milford, DE 19963

Phone: (302) 422-4511

Contact: Jesse Bautista

FACILITY OVERVIEW:

The Dentsply International LLC, Caulk Division 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 Caulk's East Masten Circle facility (Dentsply West) and the West Clarke Avenue facility (Dentsply Main) are located in Milford.

The facility has reported since 1987. The Dentsply West Plant reported three TRI chemicals for 2015, methanol, methyl methacrylate (MMA), and toluene. Methanol is used as a processing aid in the manufacture of polymethacrylates. Methyl methacrylate (MMA) is also used in the manufacture of polymethacrylates. Toluene is used for cleaning. All on-site releases were reported as released to air.

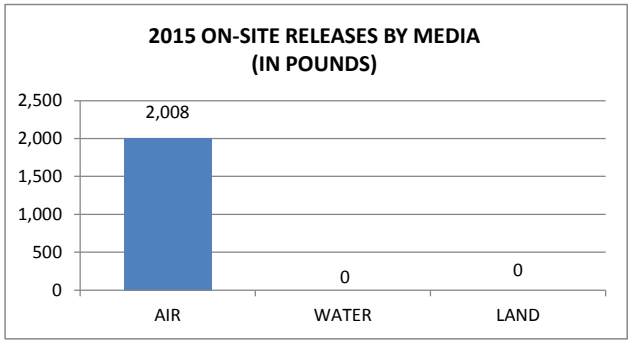
Reported on-site releases have increased significantly since 2004 because of increased production, addition of new equipment, and more accurate reporting methods. In 2005, the facility reported significant increases in on-site releases for toluene and MMA, and the facility reported on-site release of methanol in 2005 for the first time since 2002. For 2015, on-site releases decreased 51% over 2014 (see *Total On-site Releases Per Year Graph* on the next page).

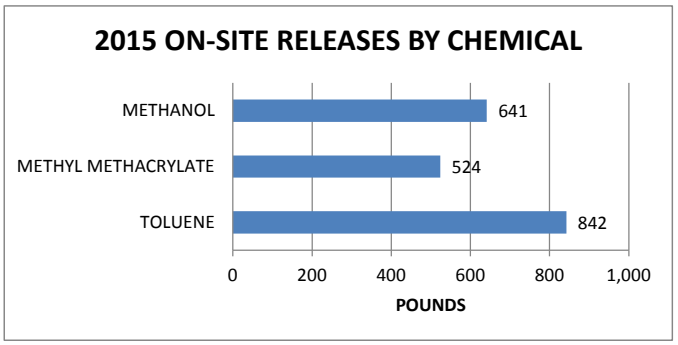
2015 TRI DATA (REPORTED IN POUNDS):

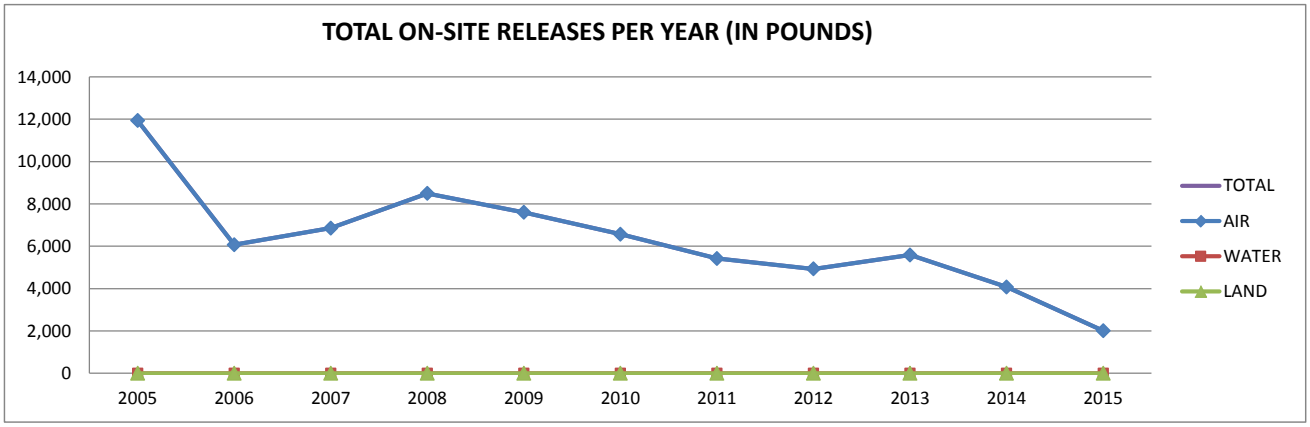
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
METHANOL	641	0	0	641	9,939	0	NO	NO
METHYL METHACRYLATE	524	0	0	524	79	0	NO	NO
TOLUENE	842	0	0	842	15,874	0	NO	NO
TOTAL	2,008	0	0	2,008	25,891	0		

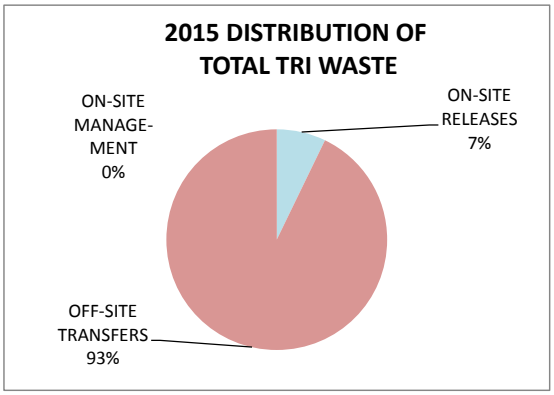
DENTSPLY WEST, CONT.

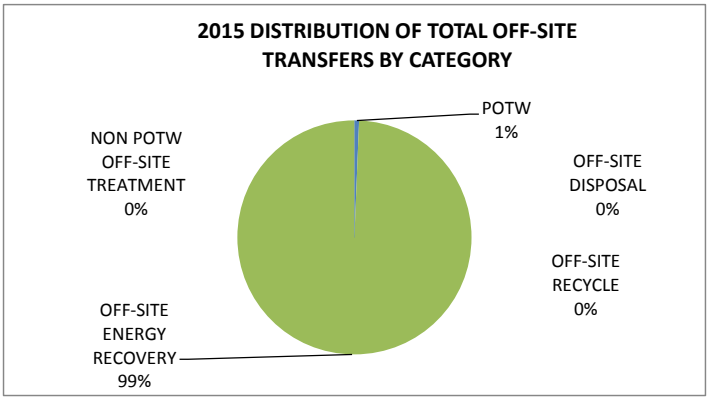
GRAPHICAL INFORMATION:





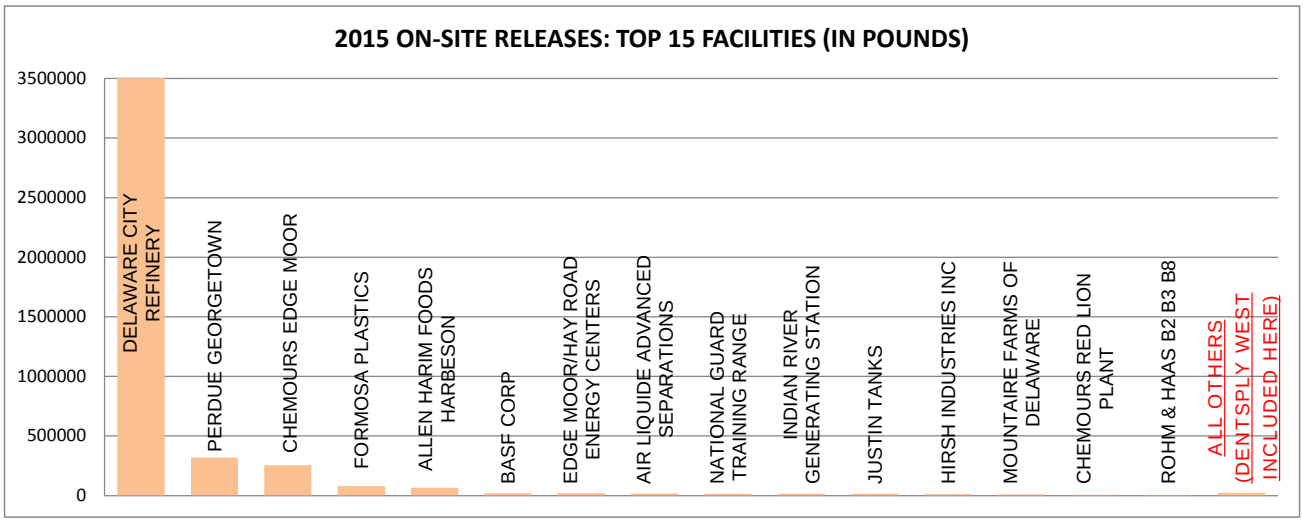


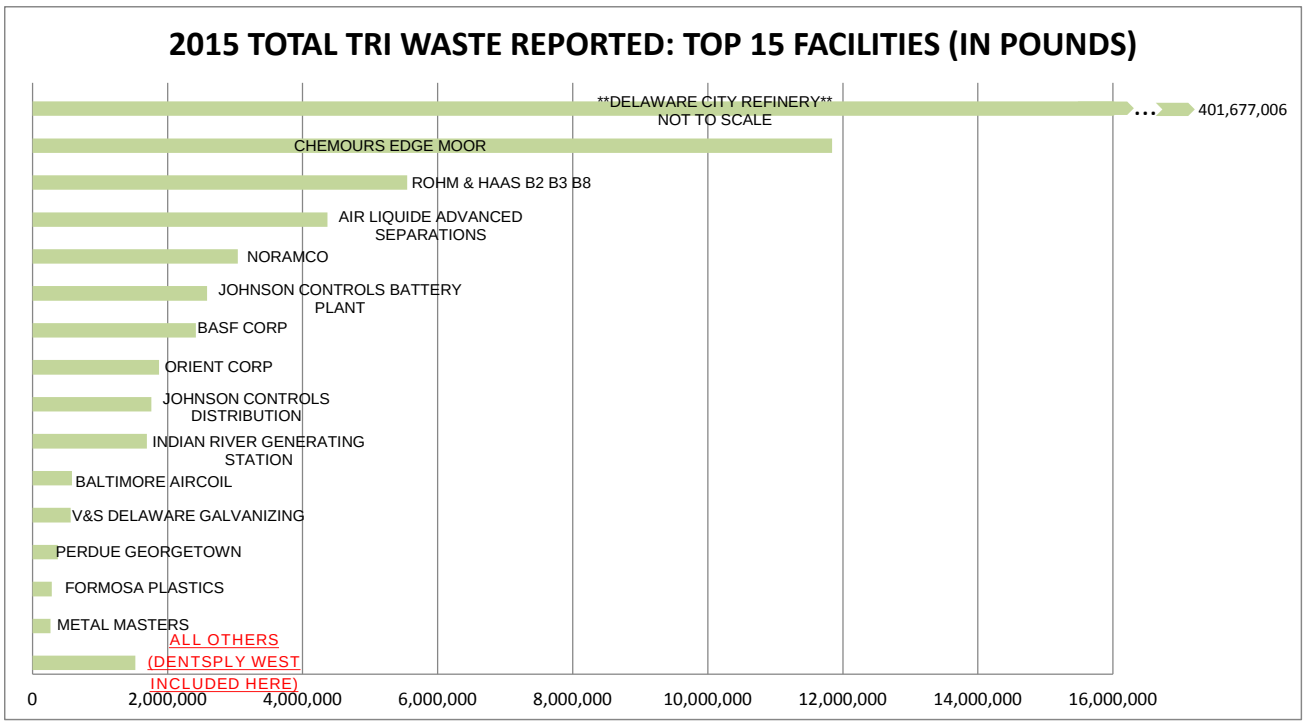




DENTSPLY WEST, CONT.

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.

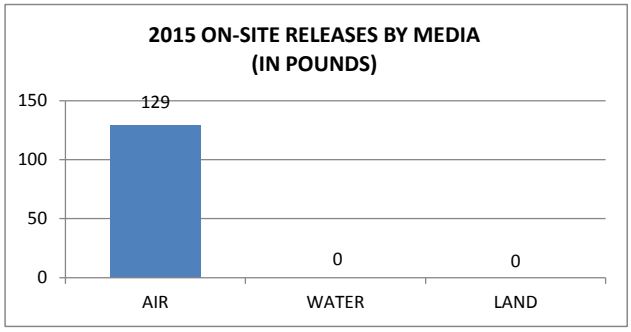
Dover Air Force Base (DAFB) has reported to TRI since 2001. For 2015, the facility reported on five chemicals (naphthalene; xylene; 1,2,4-Trimethylbenzene; cumene; ethylbenzene), with all on-site releases being made to air. These chemicals are the by-product of jet fuel being used on DAFB. The reported 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 air are down by 36% compared to 2014.

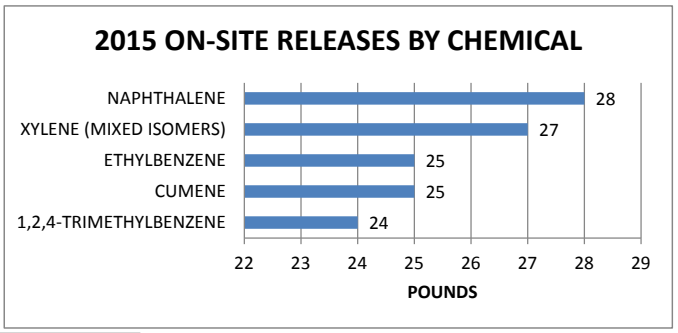
2015 TRI DATA (REPORTED IN POUNDS):

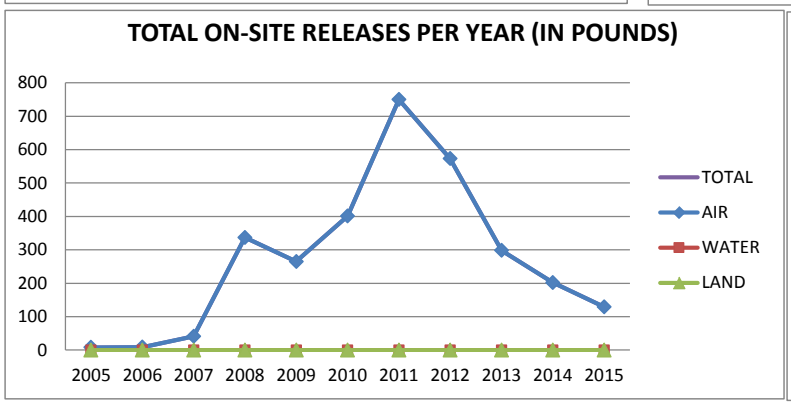
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
1,2,4-TRIMETHYLBENZENE	24	0	0	24	0	0	NO	NO
CUMENE	25	0	0	25	0	0	NO	NO
ETHYLBENZENE	25	0	0	25	0	0	NO	YES
NAPHTHALENE	28	0	0	28	0	0	NO	YES
XYLENE (MIXED ISOMERS)	27	0	0	27	0	0	NO	NO
TOTAL	129	0	0	129	0	0		

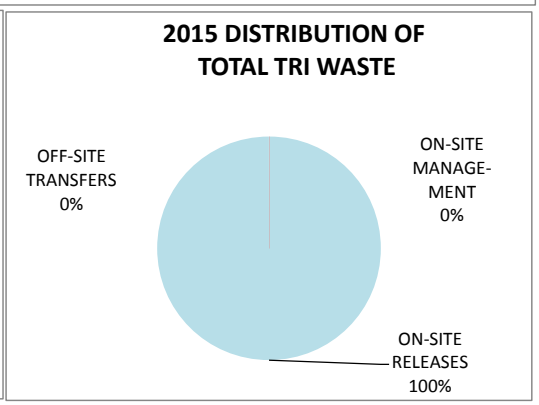
DOVER AIR FORCE BASE, CONT.

GRAPHICAL INFORMATION:

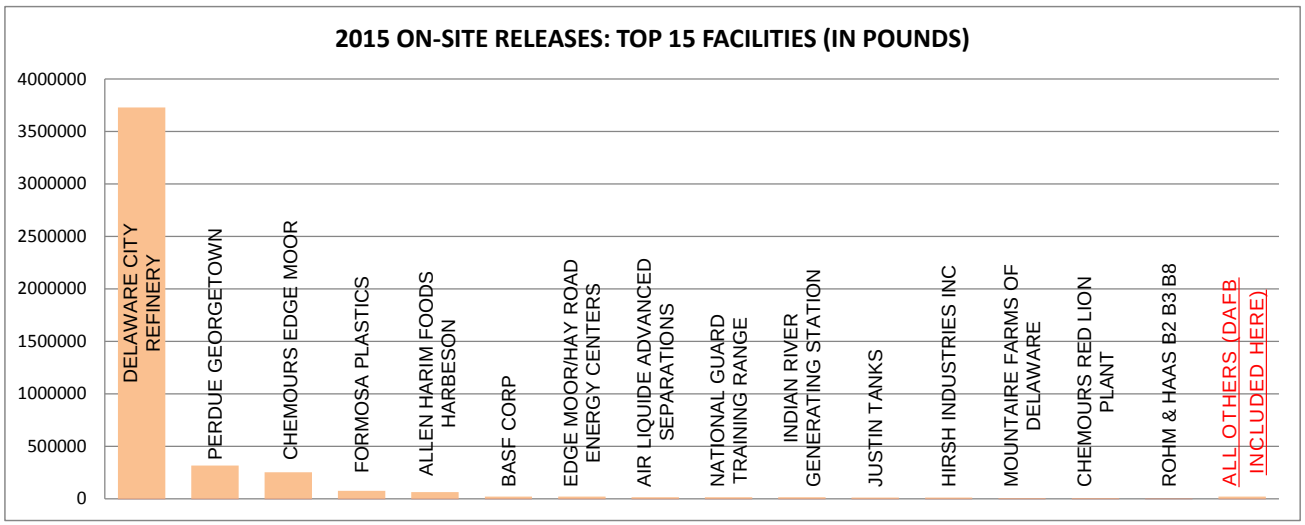








COMPARISON TO OTHER DELAWARE TRI FACILITIES:



Dover Air Force Base ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

TRI FACILITY PROFILES

DUHADAWAY TOOL AND DIE

LOCATION/CONTACT:

Address: 801 Dawson Drive
Newark, DE 19713

Phone: (302) 366-0113

Contact: John O'Donnell

FACILITY OVERVIEW:

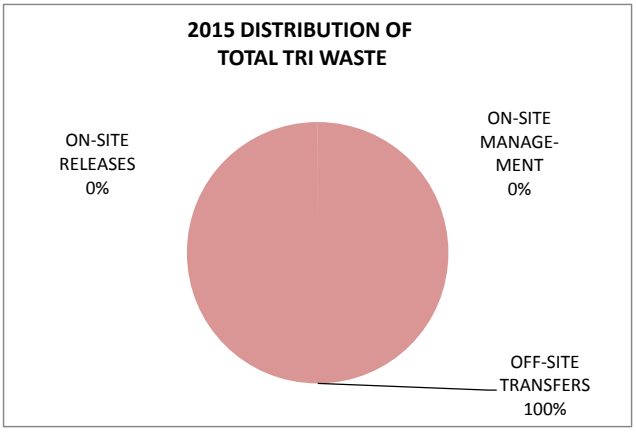
DuHadaway Tool and Die Shop produces precision crafted parts and assemblies for global power generation, automotive, military, and aerospace industries. The facility provides precision machining with the use of horizontal and vertical boring mills, machining centers, lathes, turning centers, electrical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

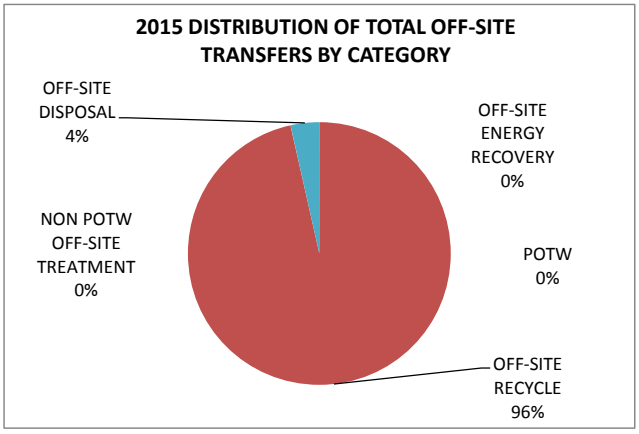
DuHadaway Tool and Die first filed a TRI report for the 2009 reporting year. The facility was below the reporting thresholds in 2010 and 2011. For 2015, the facility reported on two chemicals, chromium and nickel, with all waste being transferred off-site. Chromium and nickel are present in varying levels 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.

2015 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	11,907	0	NO	NO
NICKEL	0	0	0	0	7,462	0	NO	YES
TOTAL	0	0	0	0	19,369	0		

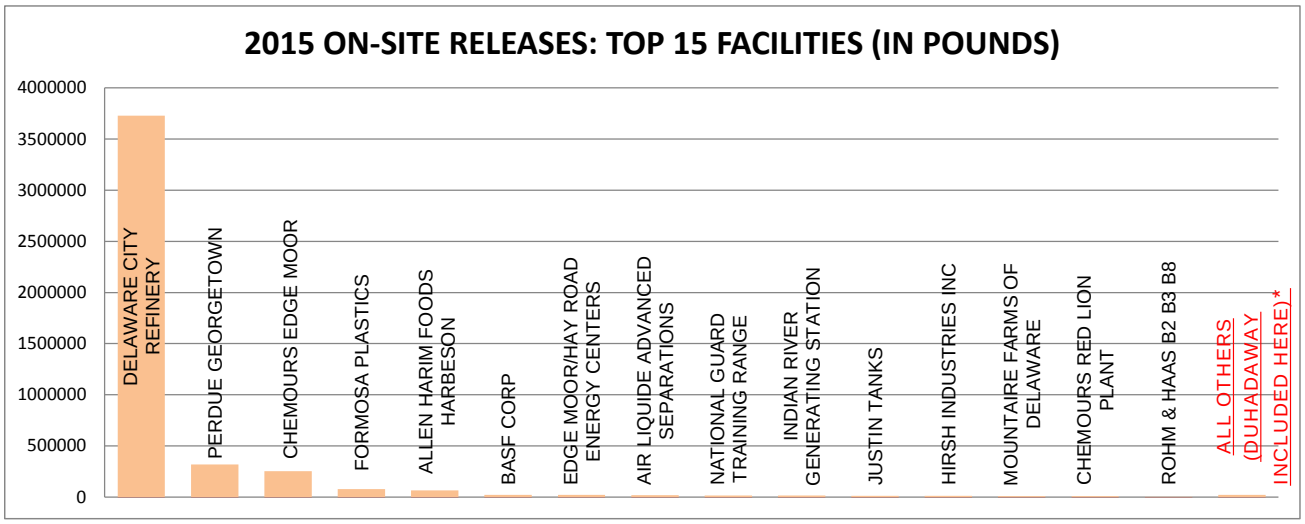
GRAPHICAL INFORMATION:



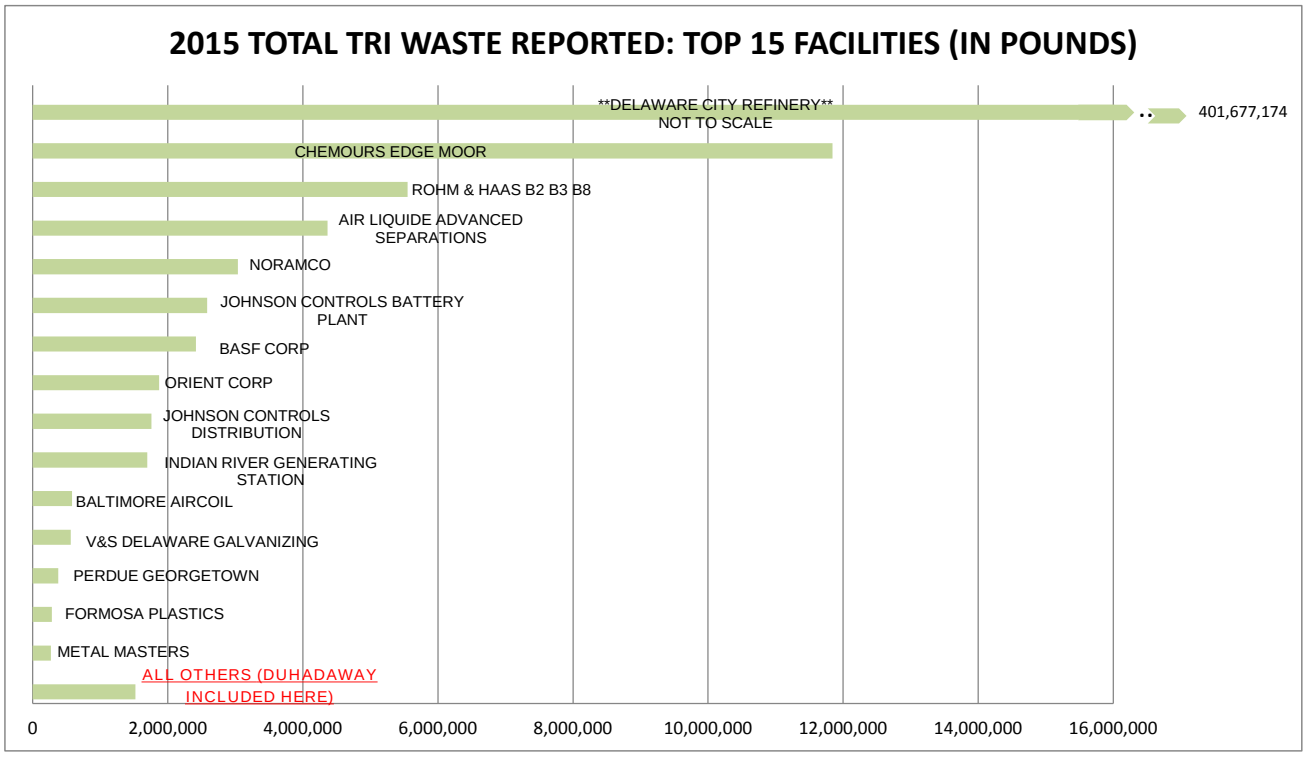


DUHADAWAY TOOL AND DIE, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



*Duhadaway Tool and Die ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site. Comparisons only include facilities reporting on Form R.



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 facilities are located along the Delaware River a mile north of the Port of Wilmington and produce 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 and Deepwater, NJ plants 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.

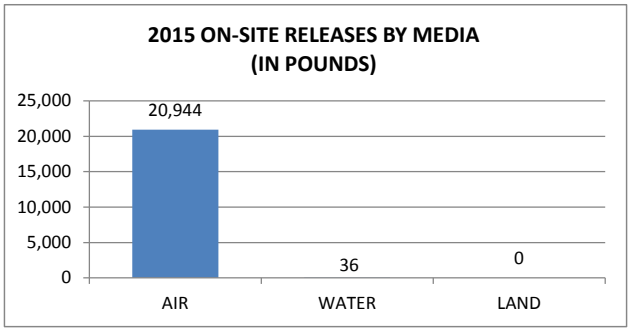
For 2015, the facility reported on 5 chemicals, ammonia, mercury, nitrate compounds, polycyclic aromatic compounds (PACs) and dioxin and dioxin like compounds (DLCs), with the on-site releases to air and water. All the chemicals released except ammonia are formed as by-products during combustion process due to impurities in the fuel. Ammonia is utilized for at the facilities for pollution control.

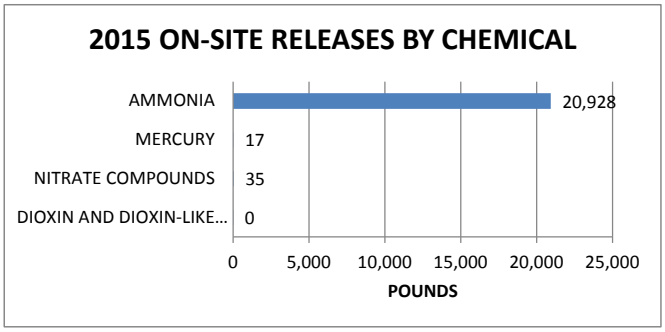
2015 TRI DATA (REPORTED IN POUNDS):

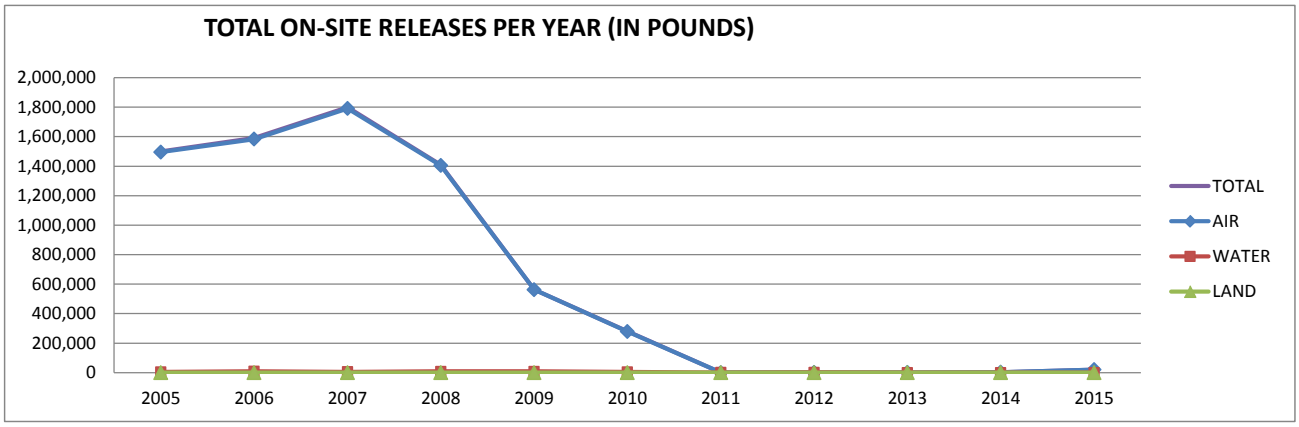
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	20,927	1	0	20,928	30	0	NO	NO
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0.006214	0.000000	0.000000	0.006214	0.000000	0.000000	YES	NO
MERCURY	17.1000	0.0030	0.0000	17.1030	0.1000	0.0000	YES	NO
NITRATE COMPOUNDS	0	35	0	35	0	0	NO	NO
POLYCYCLIC AROMATIC COMPOUNDS	0	0	0	0	0	0	YES	YES
TOTAL	20,944	36	0	20,980	30	0		

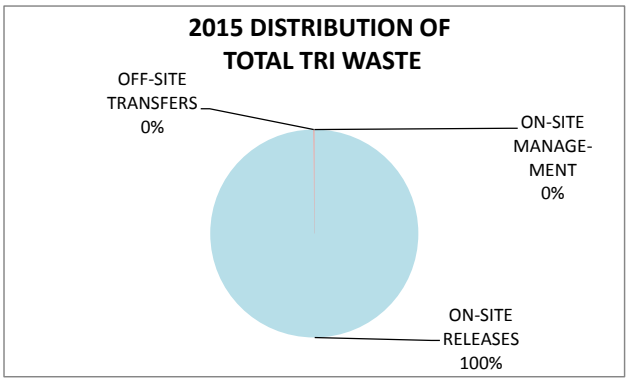
EDGE MOOR/HAY ROAD ENERGY CENTERS, CONT.

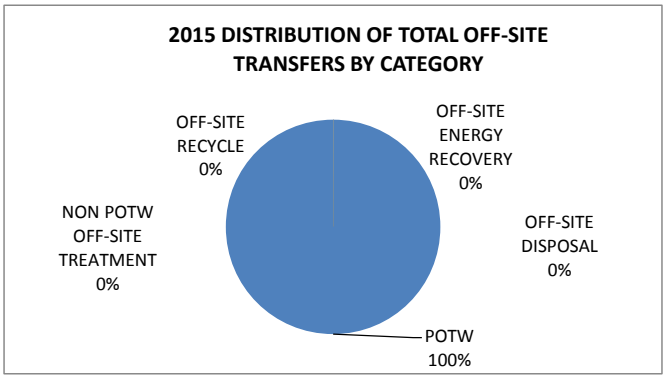
GRAPHICAL INFORMATION:





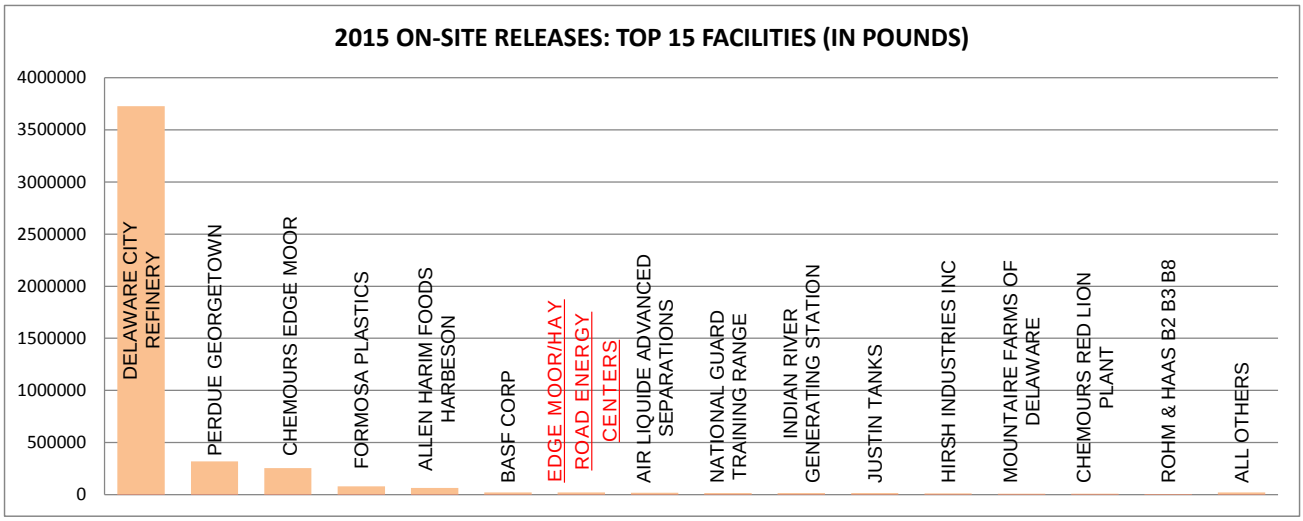






EDGE MOOR/HAY ROAD ENERGY CENTERS, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



NOTABLE 2015 NATIONAL RANKINGS:

Edge Moor-Hay Road Energy Centers ranks 28 for on-site releases of mercury from electric utility facilities (NAICS code 2211) (out of 33 facilities).

TRI FACILITY PROFILES

FORMOSA PLASTICS

LOCATION/CONTACT:

Address: 780 Schoolhouse Road
Delaware City, DE 19706

Phone: (302)-836-2256

Contact: Kimberly Bennett

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. Formosa reported on four TRI chemicals for 2015; 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 (0.000008 pounds) and waste and recycled solids (0.000249 pounds), possibly the result of on-site incineration of waste gases. Scrubber water from the incinerator is processed by the wastewater treatment system.

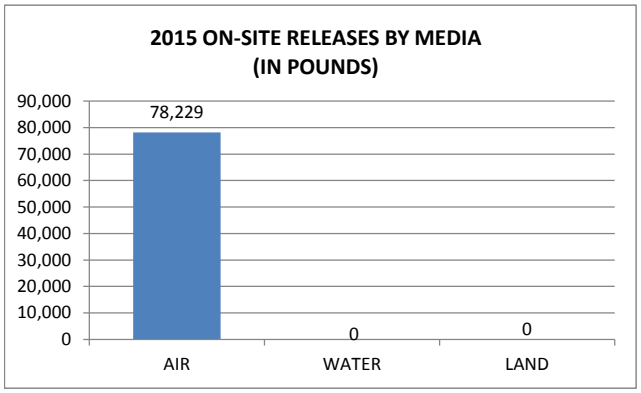
For 2015, total on-site releases were up by 18.7%, compared to 2014.

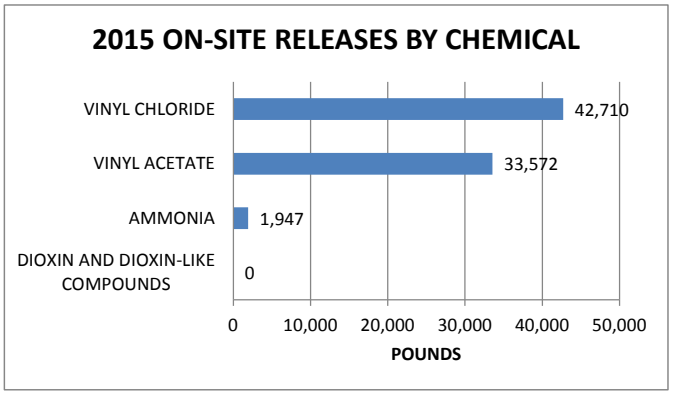
2015 TRI DATA (REPORTED IN POUNDS):

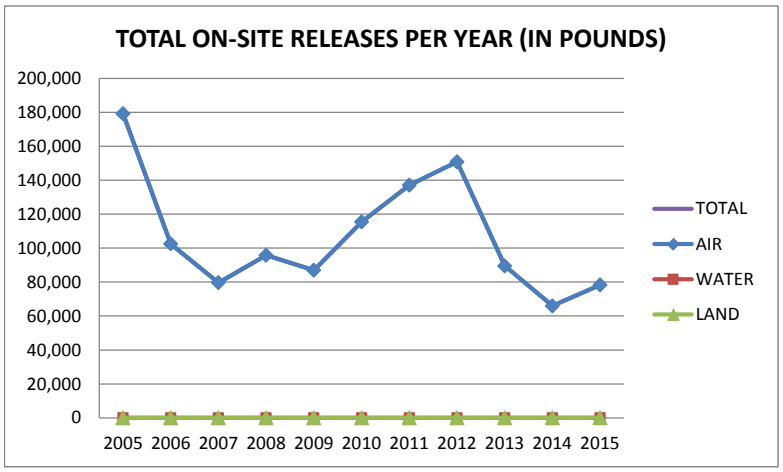
	ON-SITE RELEASES							
CHEMICAL	AIR	WATER	LAND	TOTAL	OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
AMMONIA	1,947	0	0	1,947	0	0	NO	NO
DIOXIN AND DIOXIN-LIKE COMPOUNDS	0.000008	0.000000	0.000000	0.000008	0.000249	0.000000	YES	NO
VINYL ACETATE	33,572	0	0	33,572	0	0	NO	YES
VINYL CHLORIDE	42,710	0	0	42,710	94	206,273	NO	YES
TOTAL	78,229	0	0	78,229	94	206,273		

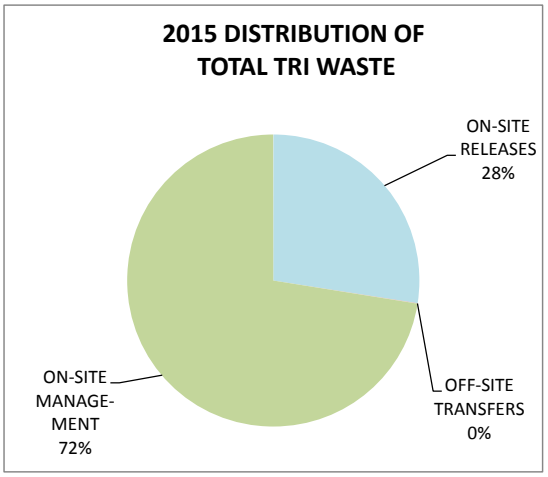
FORMOSA PLASTICS, CONT.

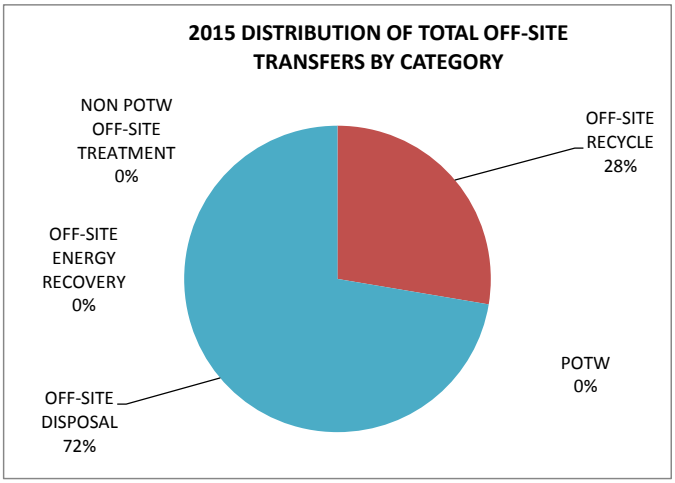
GRAPHICAL INFORMATION:

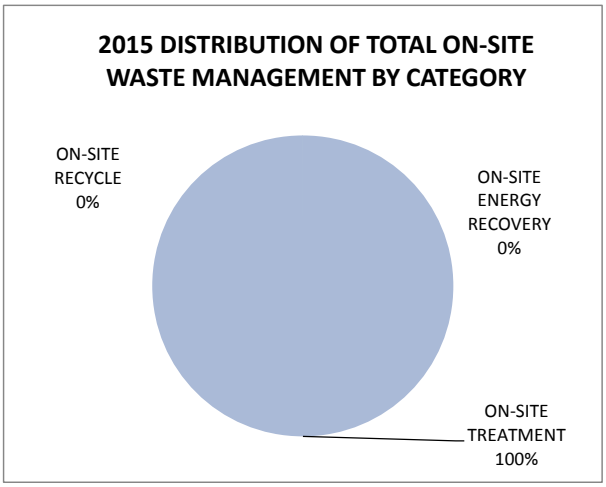






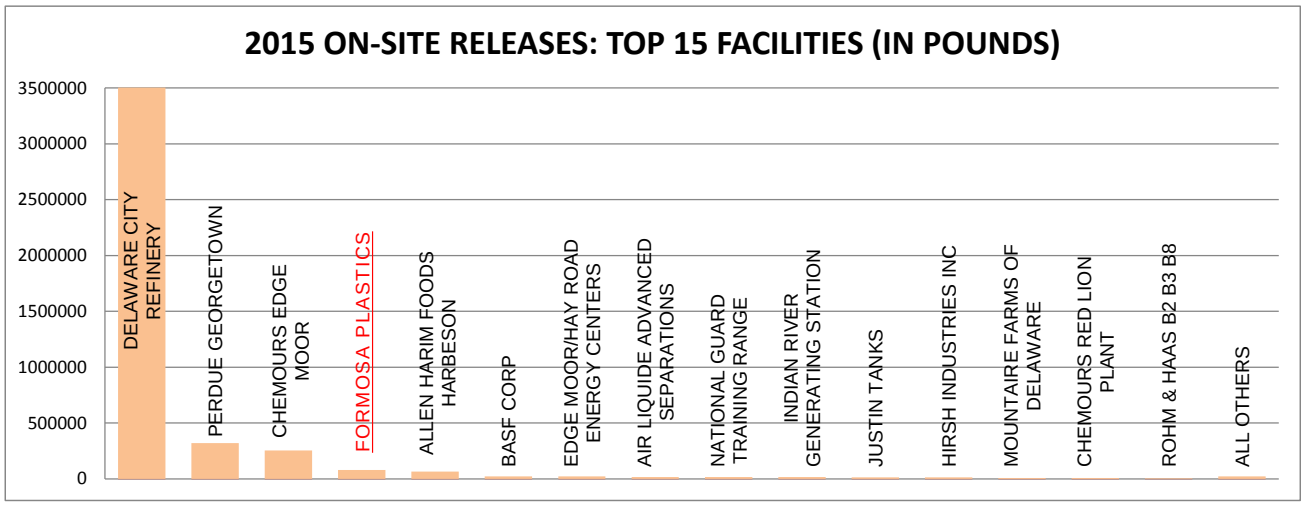


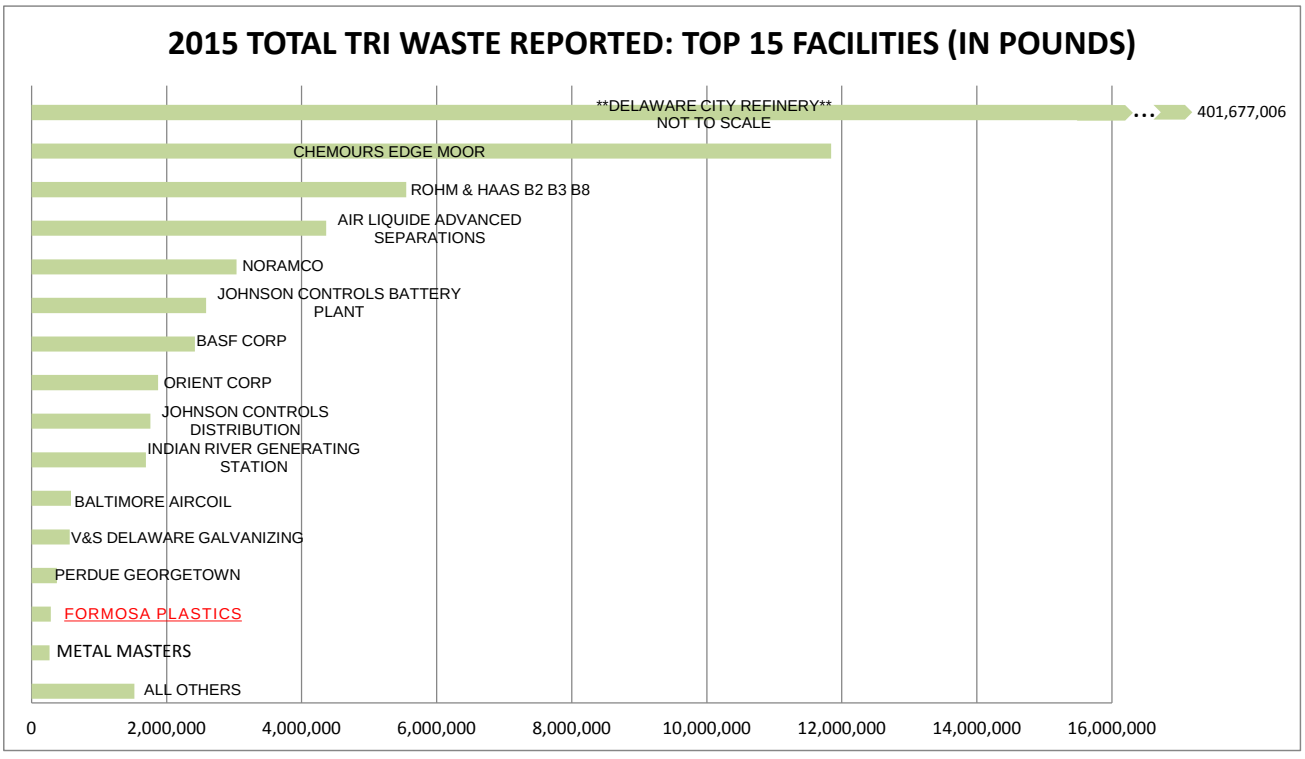




FORMOSA PLASTICS, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

Formosa Plastics ranks 5th in the nation for on-site releases of vinyl chloride (out of 43 facilities).

Formosa Plastics ranks 12th in the nation for on-site releases of vinyl acetate (out of 150 facilities).

Formosa Plastics ranks 14th in the nation for on-site treatment of vinyl chloride (out of 43 facilities).

TRI FACILITY PROFILES

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. FujiFilm reported on one chemical in 2015, ethylene glycol on short Form A. The ethylene glycol is added into a vessel with other chemicals to make aqueous ink formulations. 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.)

2015 TRI DATA (REPORTED IN POUNDS):

	ON-SITE RELEASES							
CHEMICAL	AIR	WATER	LAND	TOTAL	OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
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.

TRI FACILITY PROFILES

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 2015, 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.)

2015 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 2015, (1,2,4-trimethylbenze, 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.)

2015 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 Vepco Boulevard
Camden, DE 19934

Phone: (302)-697-9521

Contact: Keith DuPont

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 8,000 feet. The tubing ranges in size from .016 to 1.0 inch outer diameter.

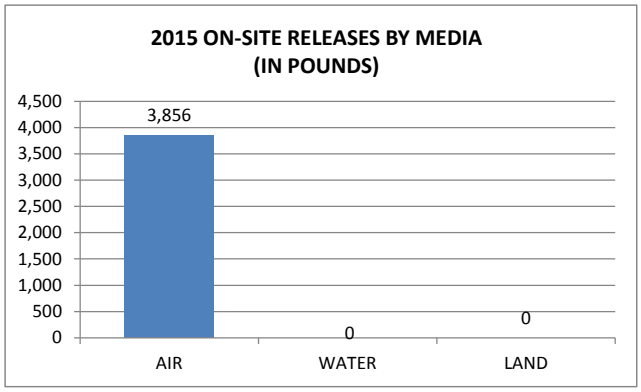
The facility has reported since 1987, previously as Camdel Metals. Trichloroethylene (TCE) is the primary TRI chemical reported by Handy Tube and makes up 100% of the on-site release amount. It is used as a solvent to clean the tubing. After 1994, Handy Tube switched to a closed vacuum system for the 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 has further reduced TCE releases to air. Of the scrap metal generated at the facility, 99% is sent off site for recycle.

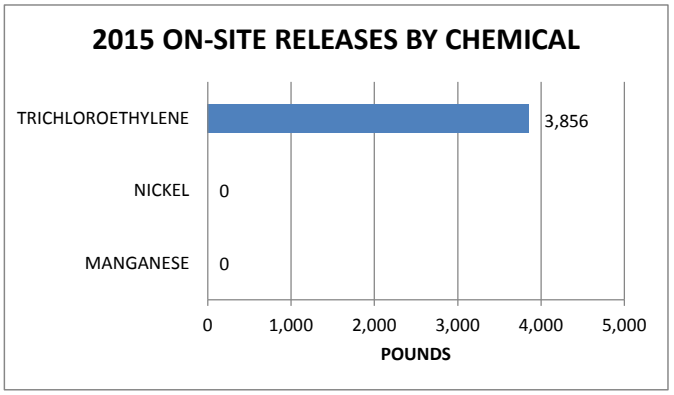
2015 TRI DATA (REPORTED IN POUNDS):

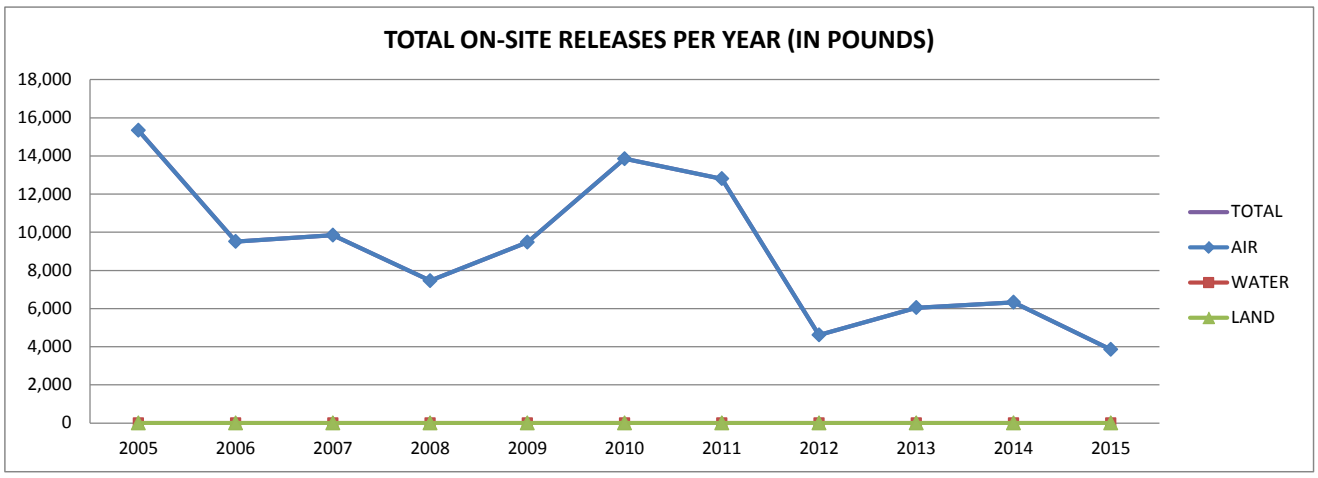
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
MANGANESE	0	0	0	0	3,476	0	NO	NO
NICKEL	0	0	0	0	30,831	0	NO	NO
TRICHLOROETHYLENE	3,856	0	0	3,856	8,445	0	NO	NO
TOTAL	3,856	0	0	3,856	42,752	0		

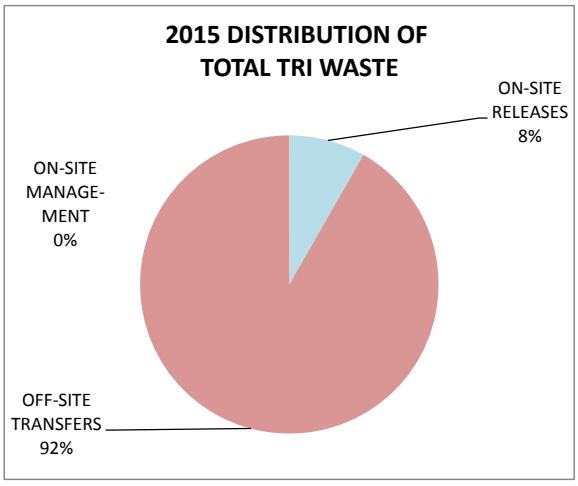
HANDYTUBE, CONT.

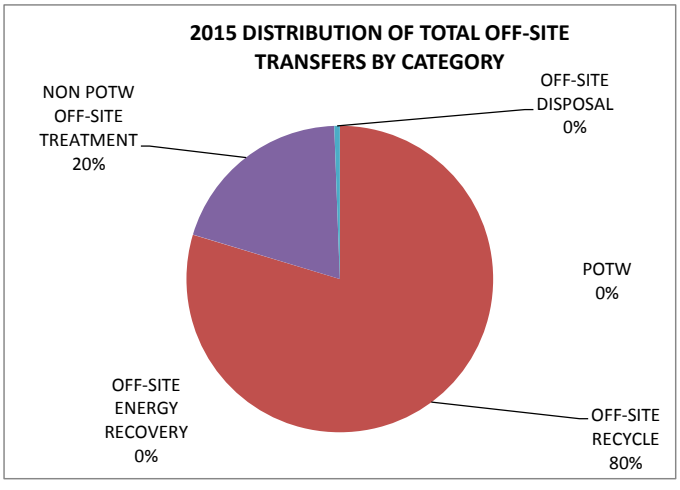
GRAPHICAL INFORMATION:





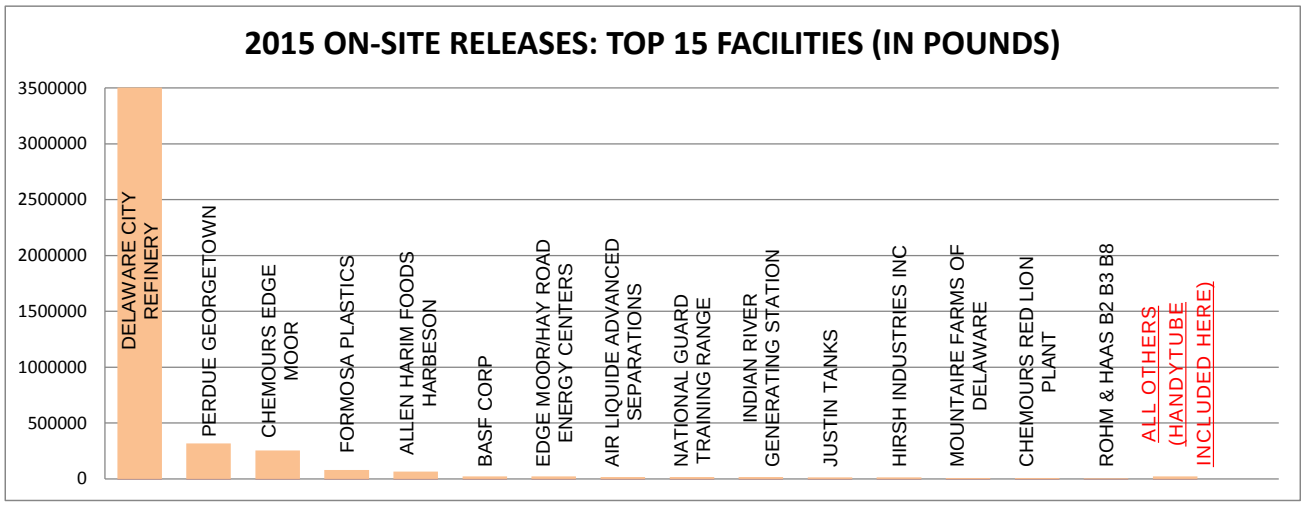


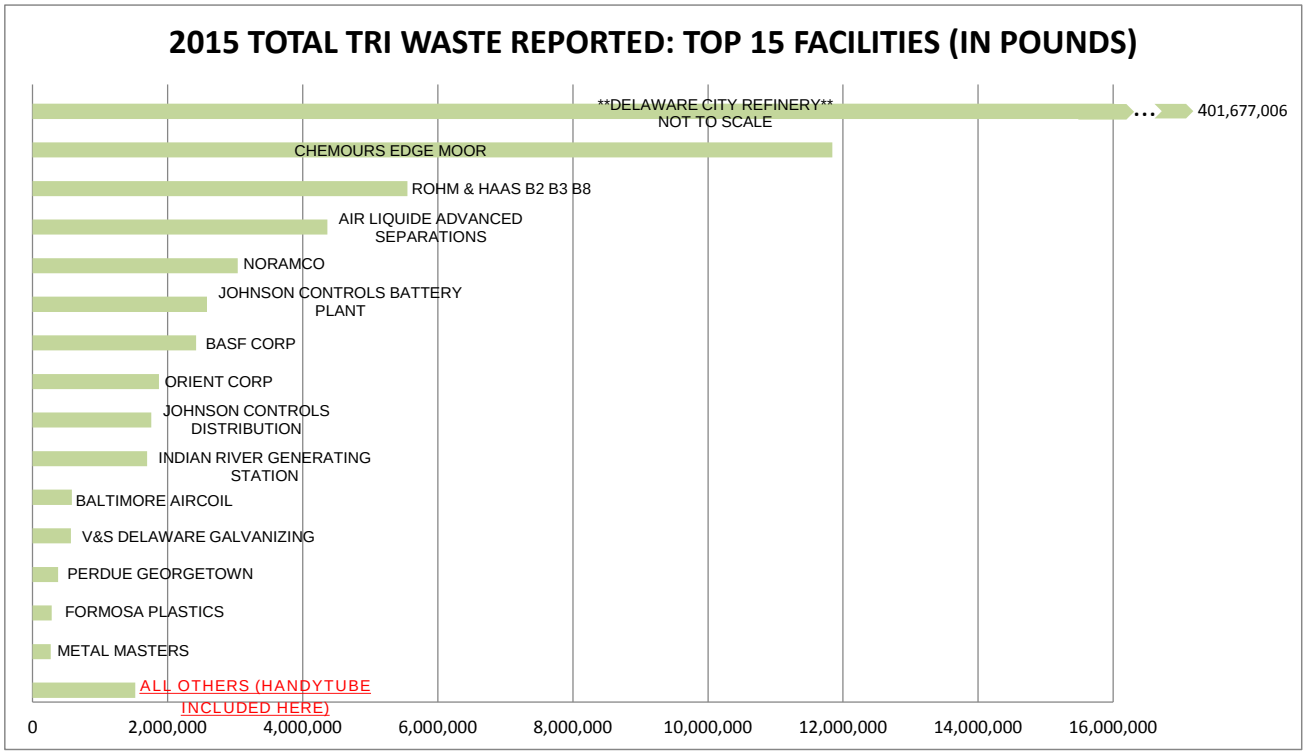




HANDYTUBE, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

HandyTube ranks 76th in the nation for on-site releases of trichloroethylene (out of 172 facilities).

TRI FACILITY PROFILES

HANESBRANDS

LOCATION/CONTACT:

Address: 631 Ridgley Street
Dover, DE 19904

Phone: (336)-519-2582

Contact: David Swicegood

FACILITY OVERVIEW:

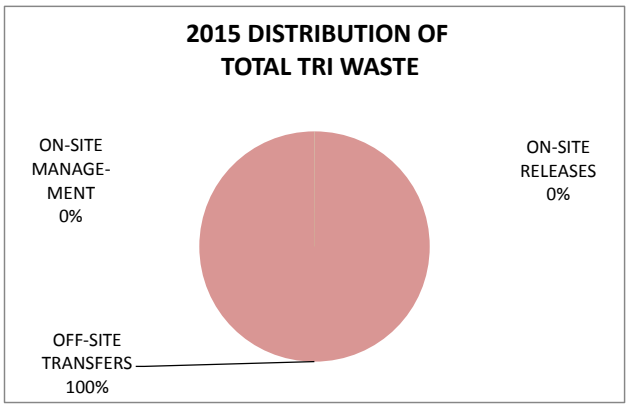
Hanesbrands makes the 18-Hour material for the Playtex 18-Hour Bras. By compounding the latex with different chemicals, a rubber latex is produced. This latex is placed on an engraved roll which then goes through a process which coats the rubber latex with adhesive, and nylon fabric is adhered to both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

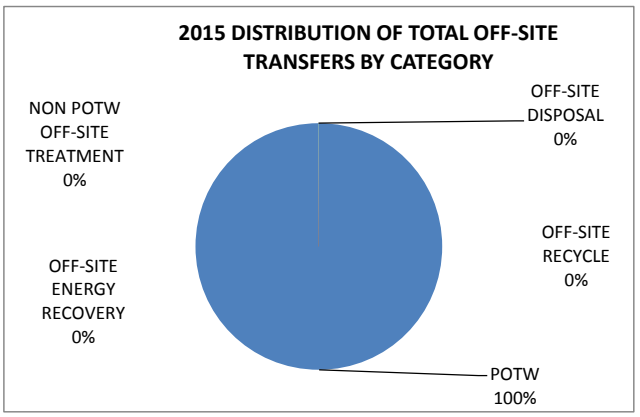
Hanesbrands has reported since 2003, formerly as Sara Lee Apparel and Playtex Apparel. The facility reported on 2 chemicals in 2015, nitrate compounds and zinc compounds. Nitrate Compounds are a by-product of compounding the latex and are transferred off-site for treatment.

2015 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	49,136	0	NO	NO
ZINC COMPOUNDS	0	0	0	0	562	0	NO	NO
TOTAL	0	0	0	0	49,698	0		

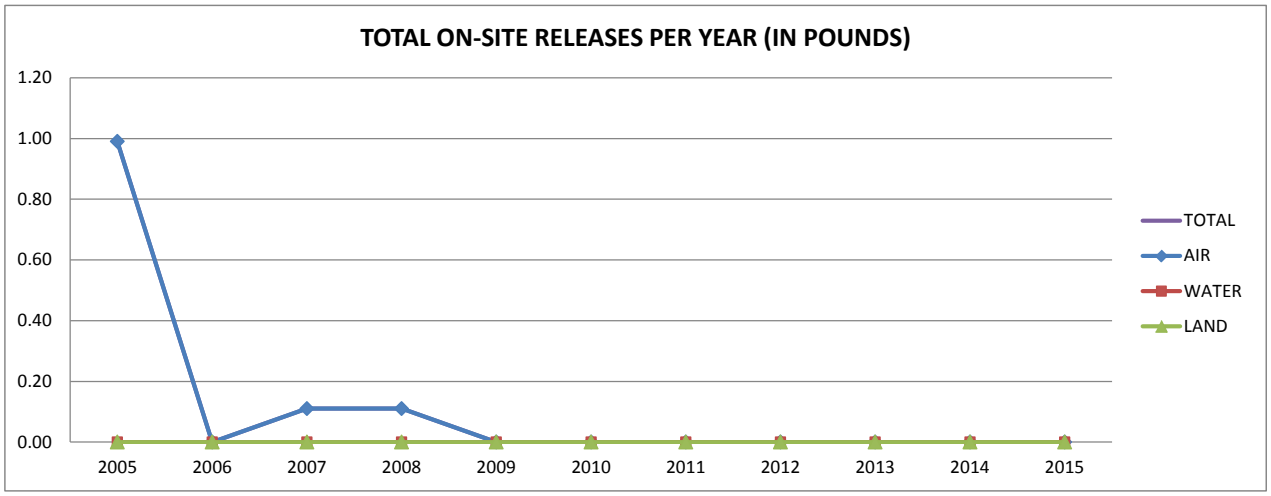
GRAPHICAL INFORMATION:



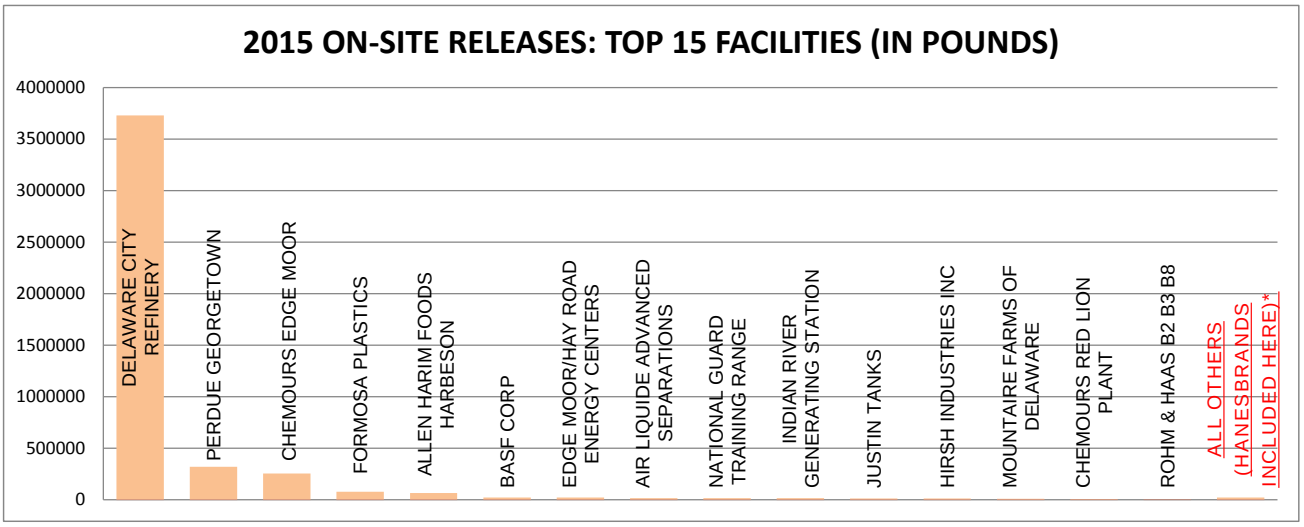


HANESBRANDS, CONT.

GRAPHICAL INFORMATION CONT.:



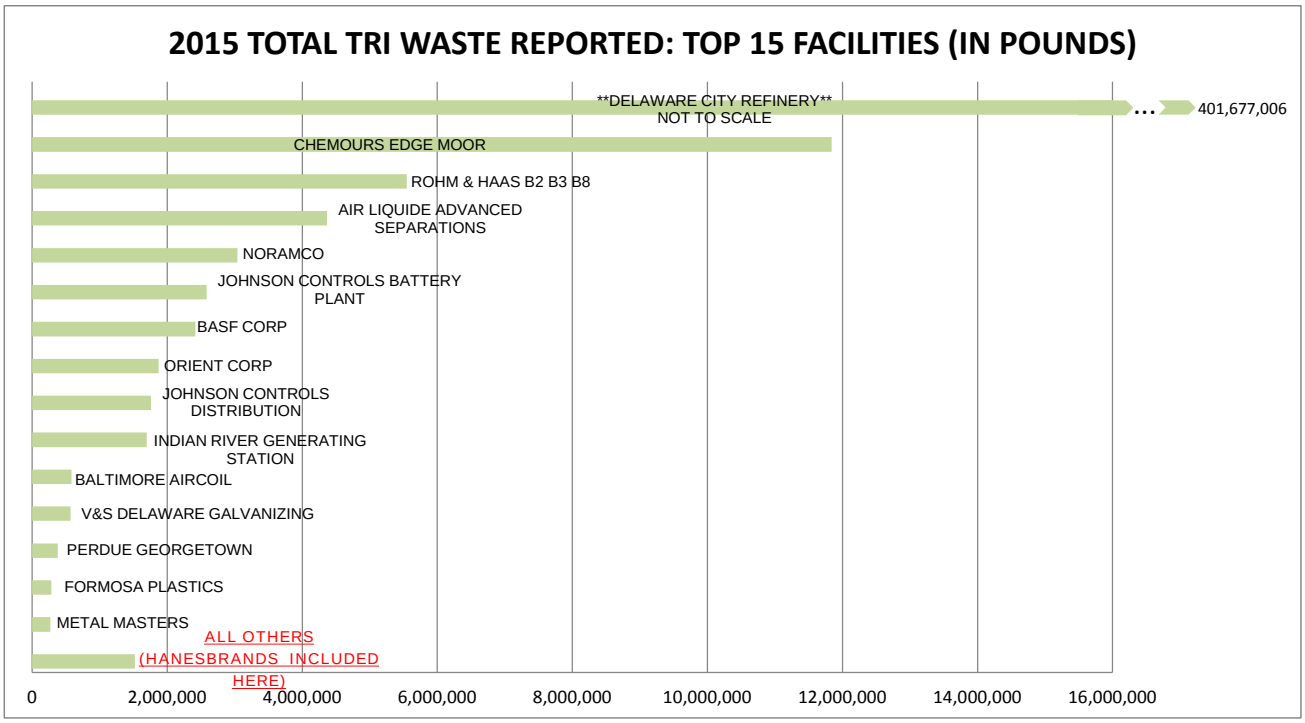
COMPARISON TO OTHER DELAWARE TRI FACILITIES:



*Hanesbrands ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site. Comparisons only include facilities reporting on Form R.

HANESBRANDS, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:



NOTABLE 2015 NATIONAL RANKINGS:

Hanesbrands ranks 3rd in the off-site transfer of nitrate compounds for textile facilities (NAICS 313/314) (out of 8 facilities).

TRI FACILITY PROFILES

HIRSH INDUSTRIES

LOCATION/CONTACT:

Address: 1525 McKee Road
Dover, DE 19904

Phone: (302)-678-3454

Contact: Ken Murr

FACILITY OVERVIEW:

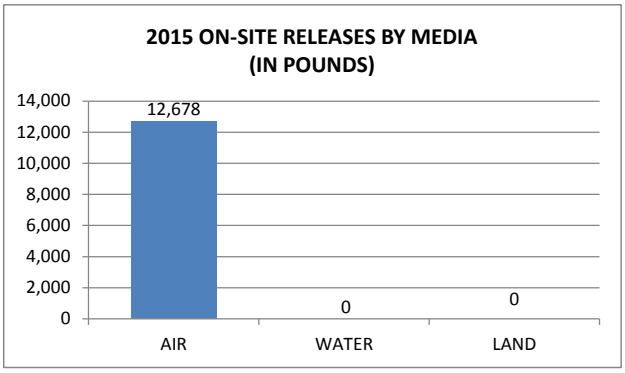
Hirsh Industries, located in Dover, produces a line of consumer durables. These products include file cabinets, shelving units, and lateral filing systems. These items are used in home and office applications.

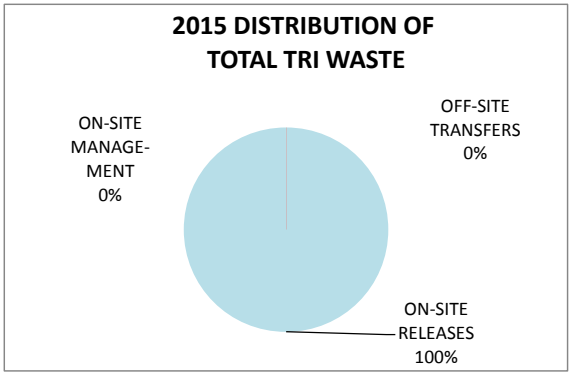
Hirsh Industries has reported since 1989, previously as Steel Works and General Metal Craft. The facility reported one TRI chemical in 2015, certain glycol ethers, with on-site releases made only to air. The chemical is used as a component in the water based coatings for their painting process. On-site releases for 2015 increased by 44% compared to 2014, as a result of higher coatings use, due to increased production demands for filing cabinets; and to a suppliers increased use of glycol ethers in the formulation of paint products. Releases, however, in general have trended downward since 2009, the result of utilizing improved paint products from their vendors.

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CERTAIN GLYCOL ETHERS	12,678	0	0	12,678	0	0	NO	NO
TOTAL	12,678	0	0	12,678	0	0		

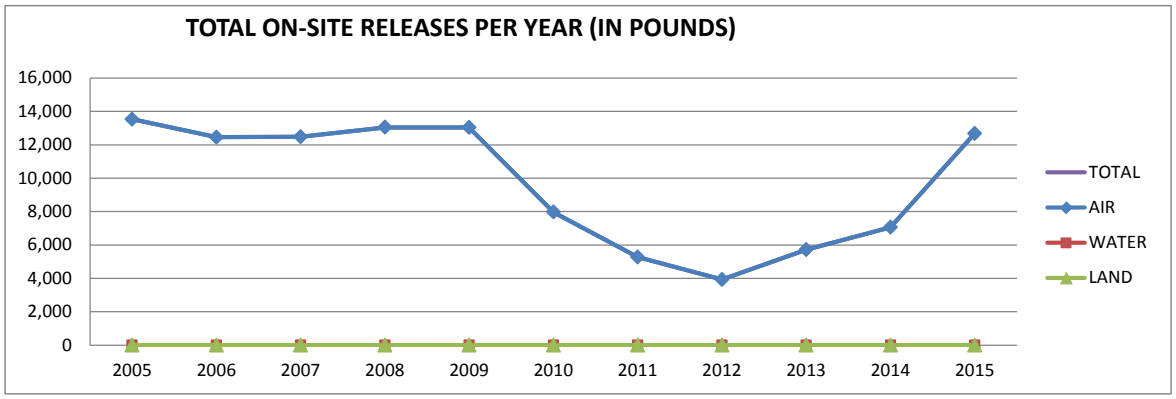
GRAPHICAL INFORMATION:



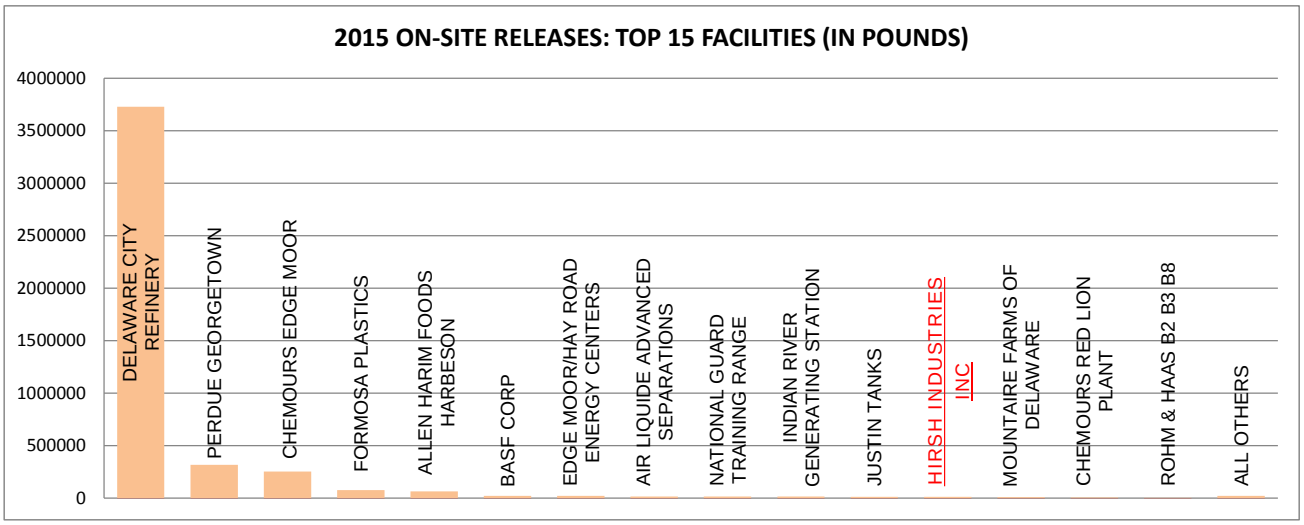


HIRSH INDUSTRIES, CONT.

GRAPHICAL INFORMATION:



COMPARISON TO OTHER DELAWARE TRI FACILITIES:



Hirsh Industries ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

Hirsh Industries ranks 5th in the on-site releases of certain glycol ethers for furniture facilities (NAICS 337) (out of 13 facilities).

TRI FACILITY PROFILES

HMA HERITAGE CONCRETE-BEAR

LOCATION/CONTACT:

Address: 1250 Porter Road
Bear, DE 19701

Phone: (717)-236-7023

Contact: John Rice

FACILITY OVERVIEW:

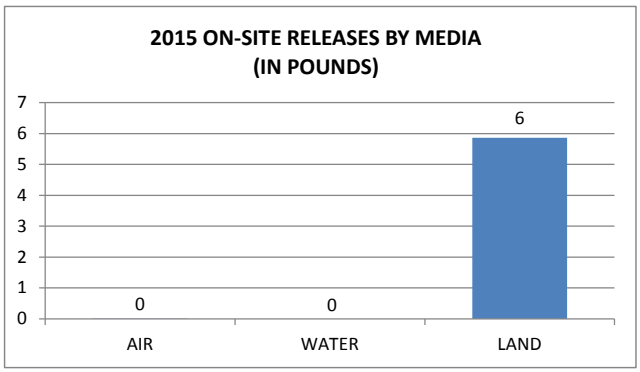
HMA Heritage Concrete reported under the North American Industrial Classification System (NAICS) as 327320, which covers ready-mix concrete manufacturing.

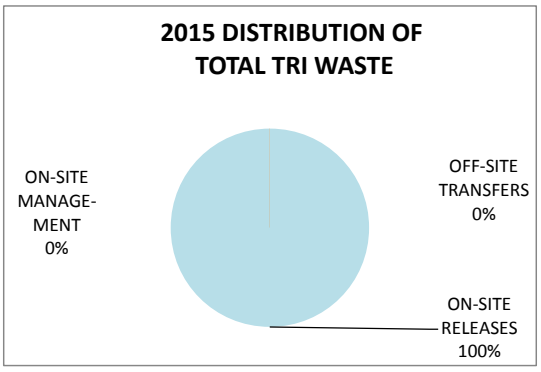
HMA Heritage Concrete has three facilities in Delaware that report to TRI located in Bear, Cheswold, and Wilmington. The company has reported to TRI since 2013. These facilities each reported on one chemical in 2015, lead, with on-site releases to air and land. Lead is reported as being processed as an impurity.

2015 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 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

HMA Heritage Concrete-Bear ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

HMA Heritage Concrete-Bear ranks 76th in on-site releases of lead for stone/clay/glass facilities (NAICS 327) (out of 835 facilities).

TRI FACILITY PROFILES

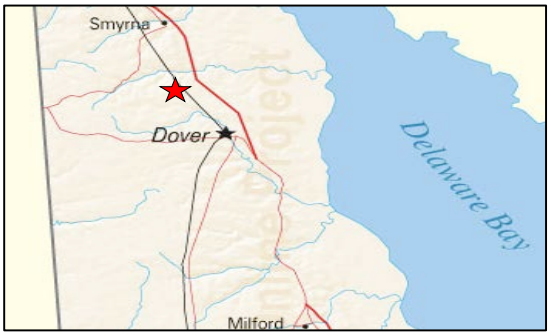
HMA HERITAGE CONCRETE-CHESWOLD

LOCATION/CONTACT:

Address: 376 Holly Oak Lane
Cheswold, DE 19936

Phone: (717)-236-7023

Contact: John Rice



FACILITY OVERVIEW:

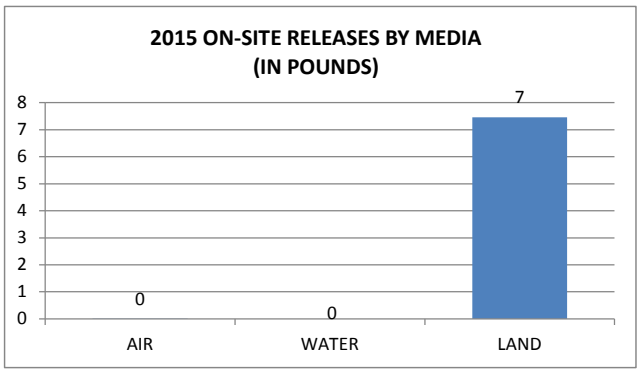
HMA Heritage Concrete reported under the North American Industrial Classification System (NAICS) as 327320, which covers ready-mix concrete manufacturing.

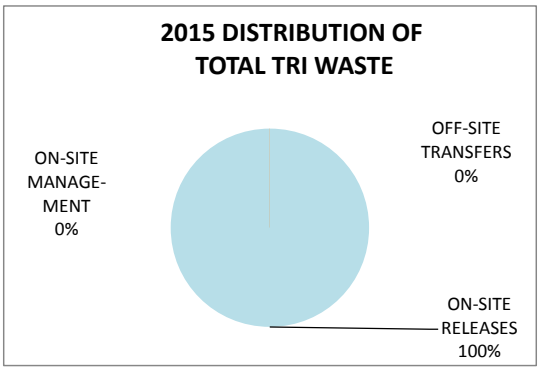
HMA Heritage Concrete has three facilities in Delaware that report to TRI located in Bear, Cheswold, and Wilmington. The company has reported to TRI since 2013. These facilities each reported on one chemical in 2015, lead, with on-site releases to air and land. Lead is reported as being processed as an impurity.

2015 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	7	0	0	YES	YES
TOTAL	0	0	7	7	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 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

HMA Heritage Concrete Cheswold ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

HMA Heritage Concrete-Cheswold ranks 67th in on-site releases of lead for stone/clay/glass facilities (NAICS 327) (out of 835 facilities).

TRI FACILITY PROFILES

HMA HERITAGE CONCRETE-HEALD STREET

LOCATION/CONTACT:

Address: 1100 Heald Street
Wilmington, DE 19801

Phone: (717)-236-7023

Contact: John Rice

FACILITY OVERVIEW:

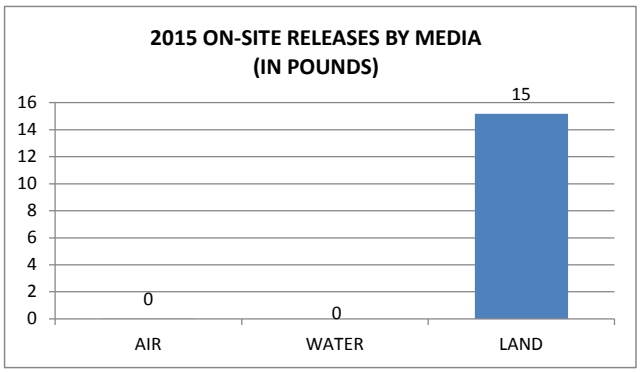
HMA Heritage Concrete reported under the North American Industrial Classification System (NAICS) as 327320, which covers ready-mix concrete manufacturing.

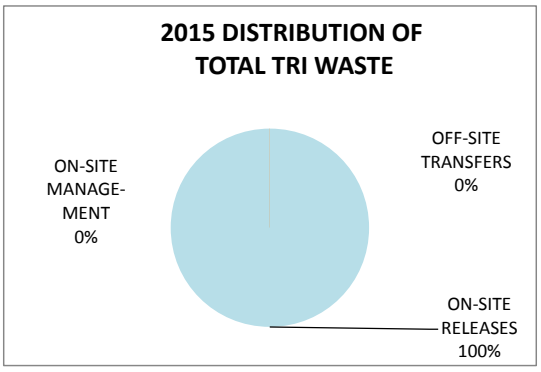
HMA Heritage Concrete has three facilities in Delaware that report to TRI located in Bear, Cheswold, and Heald Street in Wilmington. The company has reported to TRI since 2013. These facilities each reported on one chemical in 2015, lead, with on-site releases to air and land. Lead is reported as being processed as an impurity.

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	0	0	15	15	0	0	YES	YES
TOTAL	0	0	15	15	0	0		

GRAPHICAL INFORMATION:





HMA HERITAGE CONCRETE-HEALD STREET, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:

HMA Heritage Concrete-Heald Street ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

HMA Heritage Concrete-Heald Street ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

HMA Heritage Concrete-Heald Street ranks 46th in on-site releases of lead for stone/clay/glass facilities (NAICS 327) (out of 835 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 three TRI chemicals for 2015. All on-site releases were to air. Releases of boron trifluoride and hydrogen fluoride accounted for over 99% of the on-site releases, while releases of methanol accounted for less than 1%. The chemicals reported are utilized in the manufacture of fluorine based chemicals.

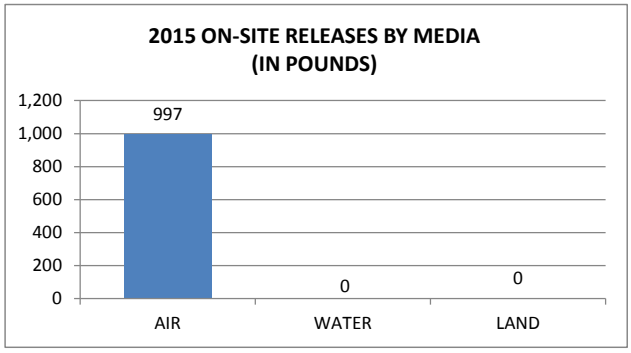
In 2013, Honeywell discontinued the use of hexane and ammonia at the facility resulting in significantly reducing on-site releases.

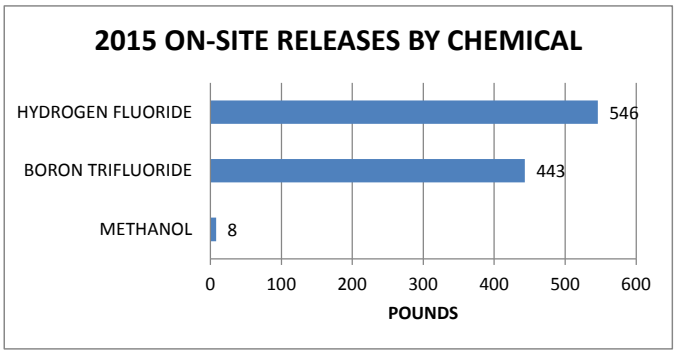
2015 TRI DATA (REPORTED IN POUNDS):

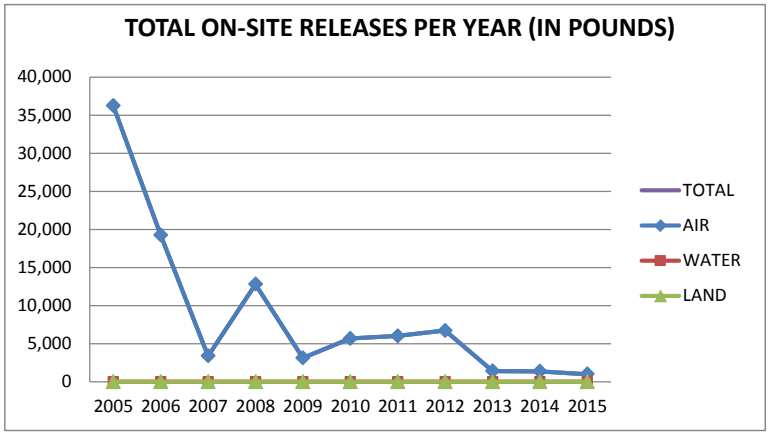
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
BORON TRIFLUORIDE	443	0	0	443	0	80,435	NO	NO
HYDROGEN FLUORIDE	546	0	0	546	0	146	NO	NO
METHANOL	8	0	0	8	840	0	NO	NO
TOTAL	997	0	0	997	840	80,581		

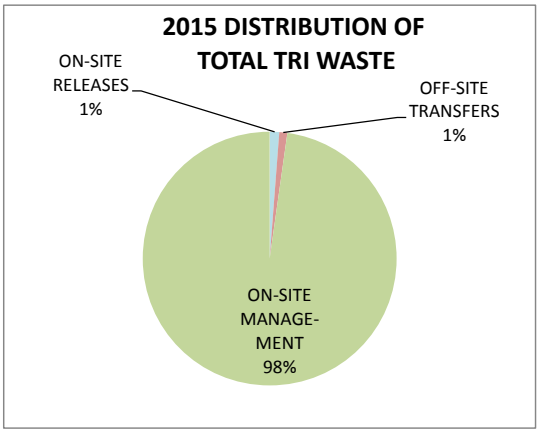
HONEYWELL, CONT.

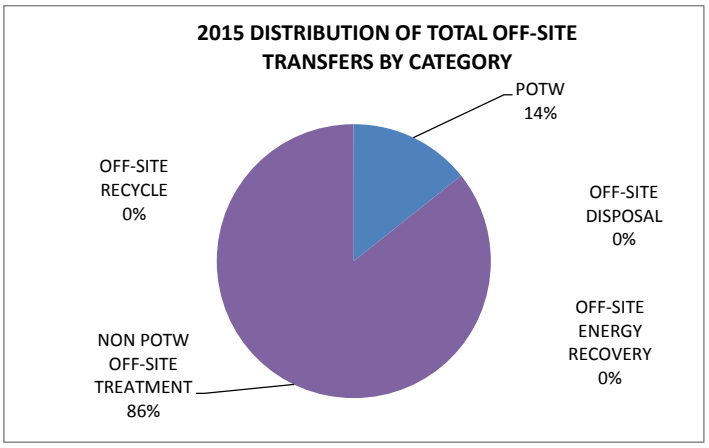
GRAPHICAL INFORMATION:

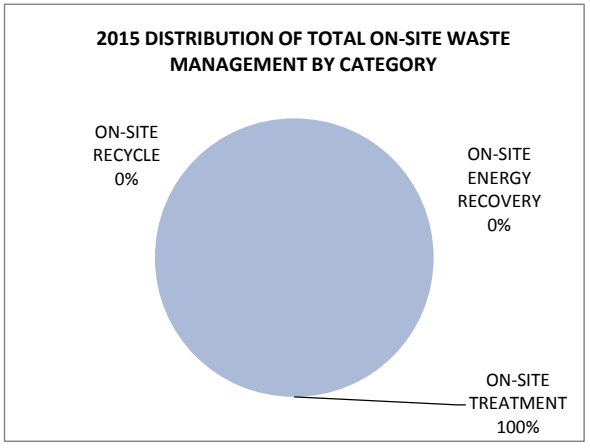






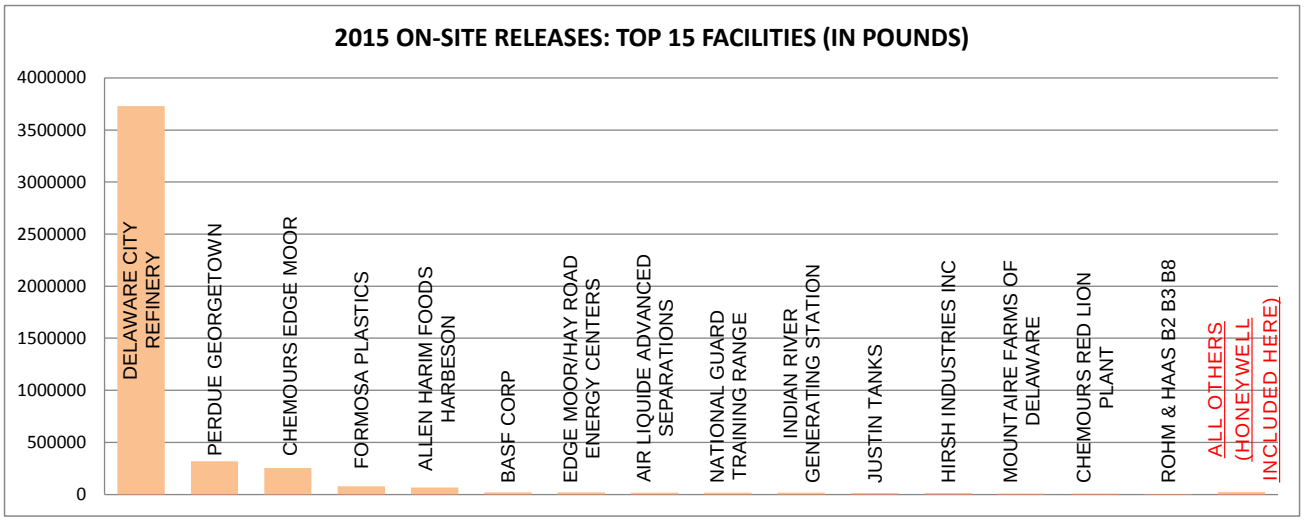






HONEYWELL, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



NOTABLE 2015 NATIONAL RANKINGS:

Honeywell ranks 3rd nationally in on-site releases of boron trifluoride (out of 22 facilities).

TRI FACILITY PROFILES

IKO

LOCATION/CONTACT:

Address: 120 Hay Road
Wilmington, DE 19809

Phone: (302) 764-3100

Contact: Mike Peterson

FACILITY OVERVIEW:

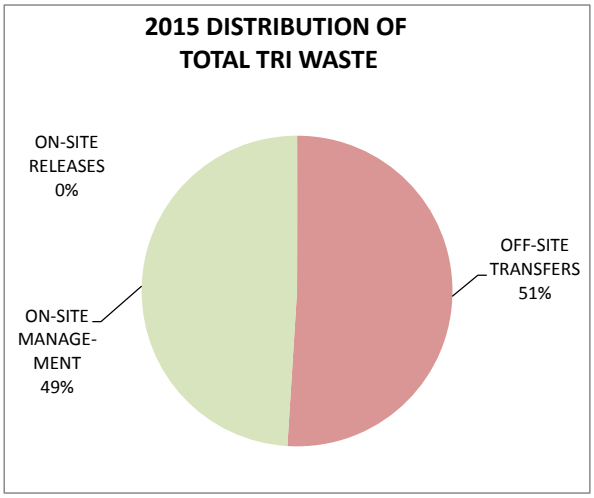
IKO Production, Inc. manufactures residential roofing products, mainly asphalt shingles, which are made from fiberglass mat coated with asphalt and finished with colored roofing granules.

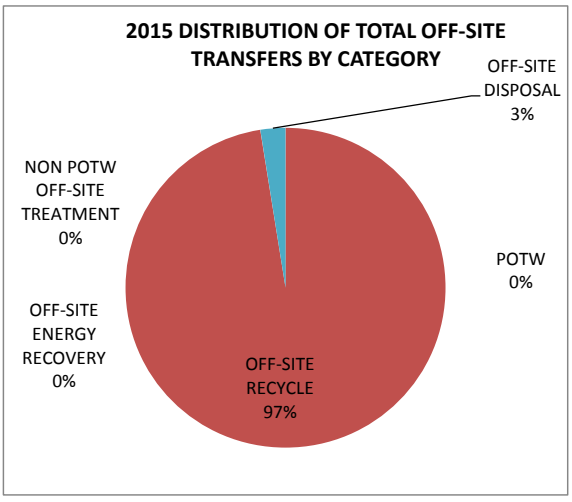
IKO has reported since 2000. The facility reported on one chemical in 2015, polycyclic aromatic compounds (PACs), with 99.9% of the waste being managed on and off-site. PACS are a byproduct of asphalt, which is a residual petroleum product from crude oil distillation.

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
POLYCYCLIC AROMATIC COMPOUNDS	1	0	0	1	396	382	YES	YES
TOTAL	1	0	0	1	396	382		

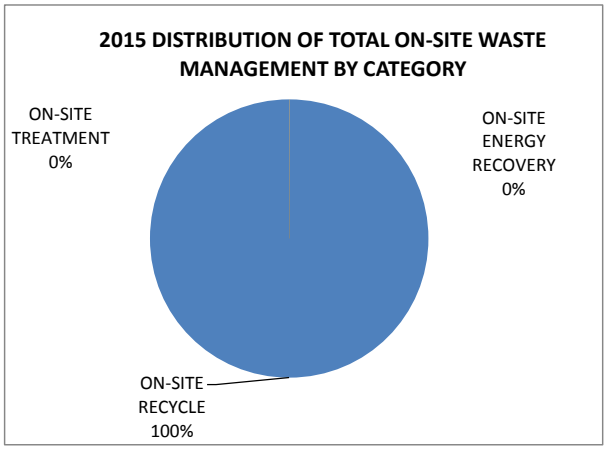
GRAPHICAL INFORMATION:





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 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

IKO ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

IKO ranks 57th in the nation for on-site recycling of polycyclic aromatic compounds (out of 1,700 facilities).

INDIAN RIVER GENERATING STATION

LOCATION/CONTACT:

Address: 29416 Power Plant Road
Dagsboro, DE 19939

Phone: (609)-524-4529

Contact: David Gaier

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 SO2 reduction, Activated Carbon Injection (ACI) for Mercury reductions, and Selective Non-Catalytic Reduction (SNCR) for NOx 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 SO2 and HCl, metals, and particulate matter and Selective Catalytic Reduction (SCR) for NOx 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 99.6% compared to 2003.

The Indian River Generating Station reported on seven TRI chemicals for 2015. Three of these were metal compounds, three were acid gases, and the remaining one 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 and naphthalene is in the oil consumed at the facility.

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 19% of the on-site releases for 2015 compared to 98% in 2011. On-site releases for acid gases in 2015 decreased by 98% 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.

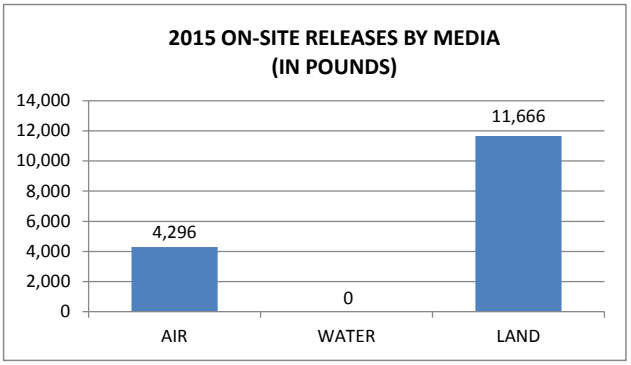
Metal compounds, formed as a result of impurities in the coal, are largely captured (99%) in the fly ash and bottom ash. The majority of coal ash is disposed of in the on-site landfill, which includes a liner system and leachate collection. For 2015, chromium, copper, manganese, vanadium, and zinc were below the reporting threshold.

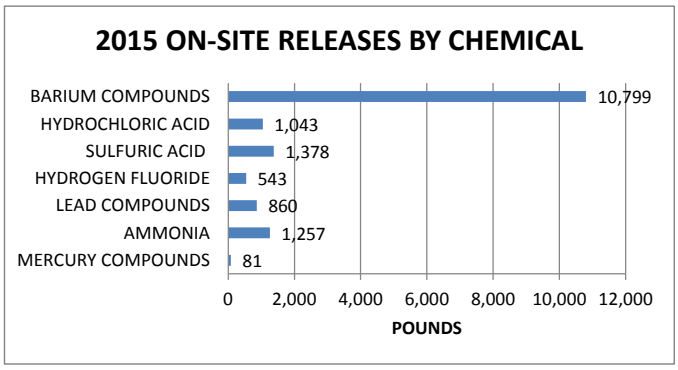
INDIAN RIVER GENERATING STATION, CONT.

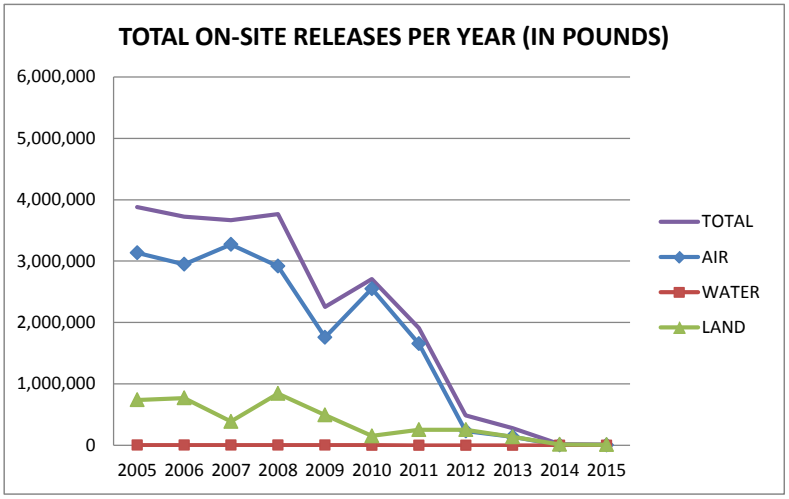
2015 TRI DATA (REPORTED IN POUNDS):

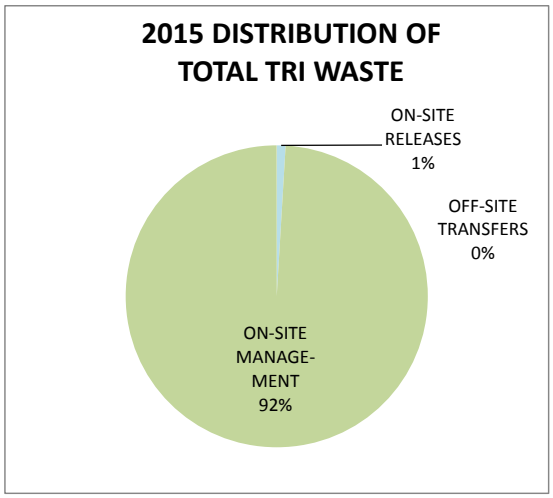
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	1,257	0	0	1,257	0	74,605	NO	NO
BARIUM COMPOUNDS	57	0	10,742	10,799	0	0	NO	NO
HYDROCHLORIC ACID	1,043	0	0	1,043	0	801,045	NO	NO
HYDROGEN FLUORIDE	543	0	0	543	0	40,286	NO	NO
LEAD COMPOUNDS	16	0	844	860	0	0	YES	YES
MERCURY COMPOUNDS	1.9000	0.0000	79.2000	81.1000	0.0000	0.0000	YES	NO
SULFURIC ACID	1,378	0	0	1,378	0	763,582	NO	NO
TOTAL	4,296	0	11,666	15,961	0	1,679,518		

GRAPHICAL INFORMATION:



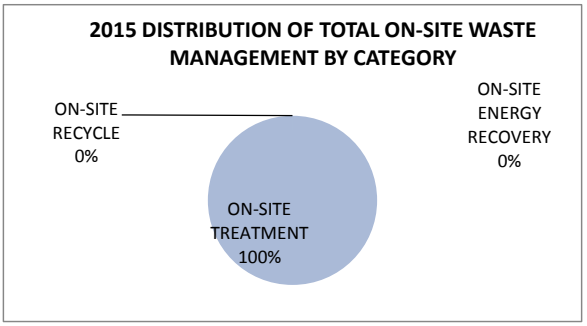




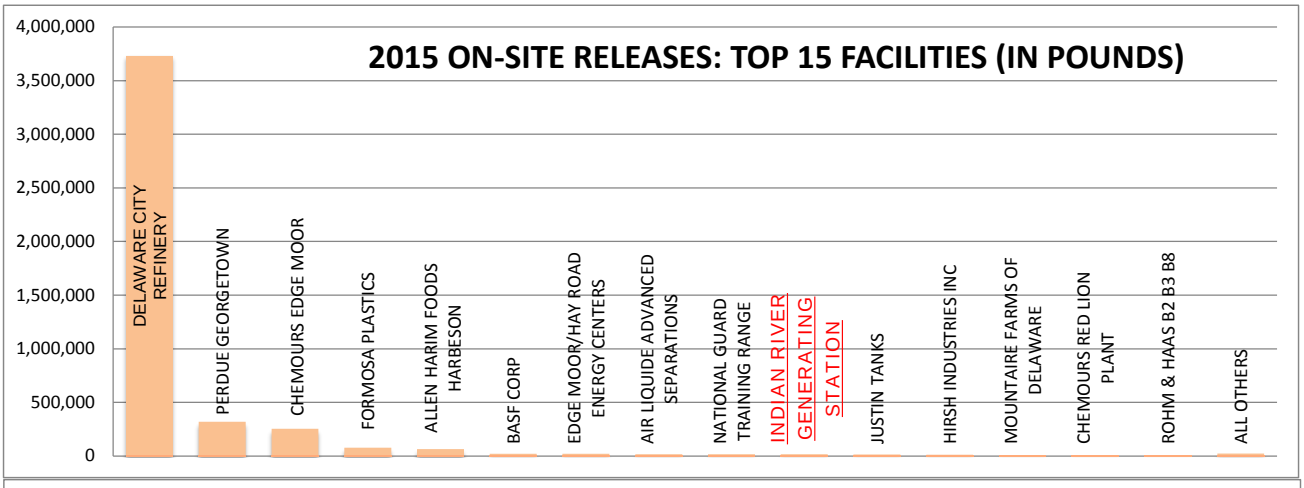


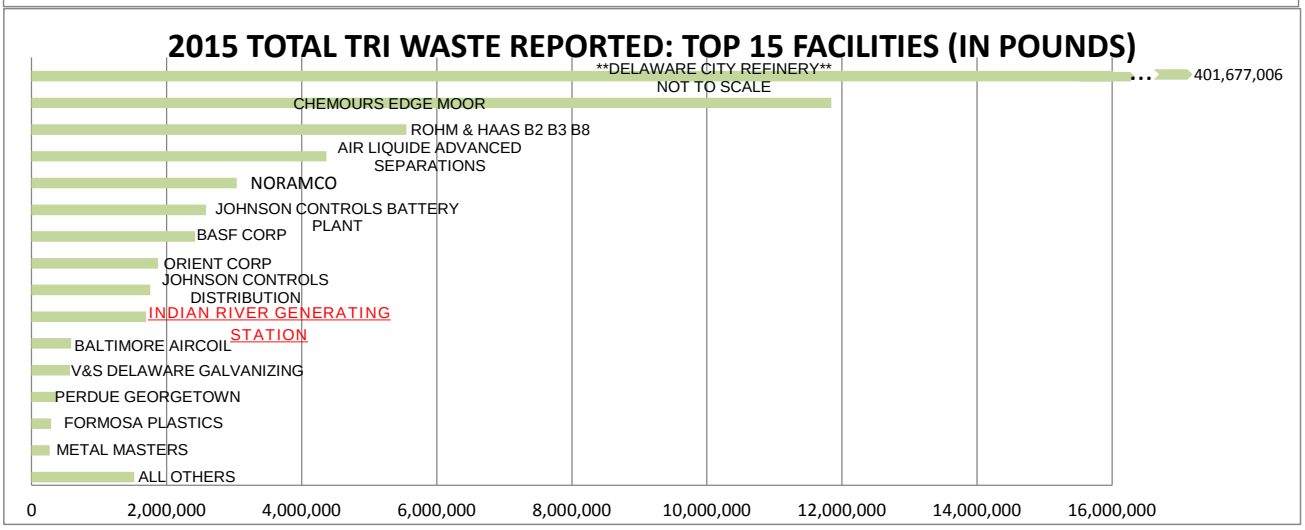
INDIAN RIVER GENERATING STATION, CONT.

GRAPHICAL INFORMATION CONT.:



COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

The Indian River Generating Station ranks 98th in on-site treatment of sulfuric acid aerosol by electric utility facilities (NAICS 2211) (out of 286 facilities).

The Indian River Generating Station ranks 88th in on-site treatment of hydrochloric acid aerosol by electric utility facilities (NAICS 2211) (out of 311 facilities).

TRI FACILITY PROFILES

INTERVET

LOCATION/CONTACT:

Address: 29160 Intervet Lane
Millsboro, DE 19966

Phone: (302) 934-4265

Contact: Tom Bastian

FACILITY OVERVIEW:

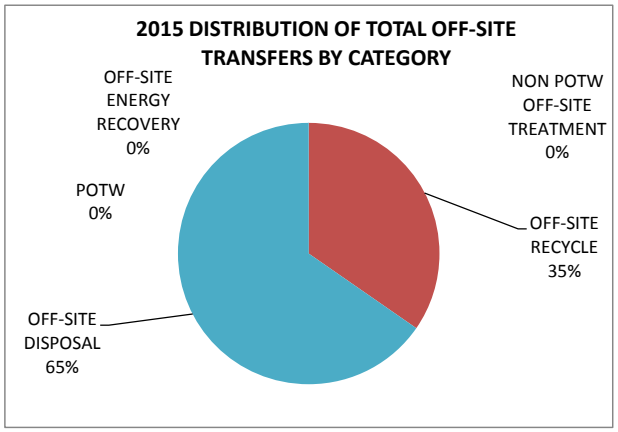
Intervet reported under the North American Industrial Classification System (NAICS) as 325414, which covers biological product manufacturing. The facility, located in Millsboro, is a fully integrated Animal Health site dedicated to the bio-manufacturing of animal vaccines.

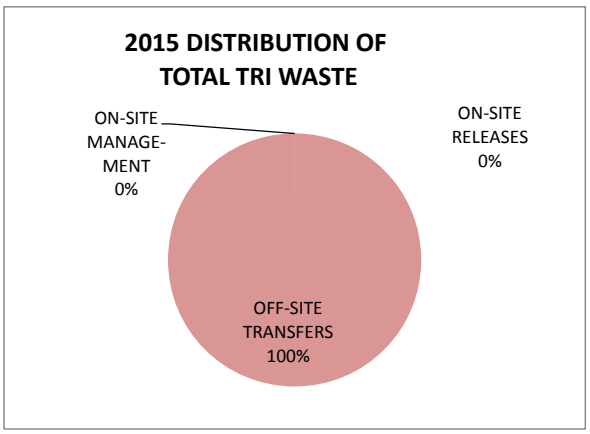
Intervet has reported since 2000. The facility reported on one chemical, mercury compounds. All waste reported for mercury compounds were transferred off-site for disposal. Mercury compounds are utilized in the production of vaccines (Thimerosal) as a preservative and mercury containing light bulbs are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

2015 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	1.4283	0.0000	YES	NO
TOTAL	0	0	0	0	1	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 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

Intervet ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

Intervet ranks 45th in the off-site transfer of mercury compounds for chemical facilities (NAICS 325) (out of 99 facilities).

TRI FACILITY PROFILES

JOHNSON CONTROLS BATTERY PLANT

LOCATION/CONTACT:

Address: 700 N. Broad Street
Middletown, DE 19709

Phone: (302)-376-4001

Contact: Todd Treybal

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 2015, with on-site releases from lead compounds to air and water, and from antimony compounds to air. 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 are recycled off-site. The facility assumes worst case for this impurity, which is 3% of all lead.

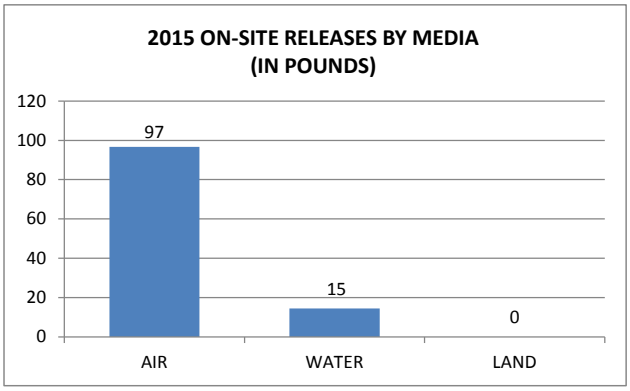
The majority of waste is sent off-site for recycling, with less than 0.01 % being released on-site. On-site releases for 2015 decreased by 13.7% compared to 2014 (see *Total On-site Releases Per Year Graph* on the next page).

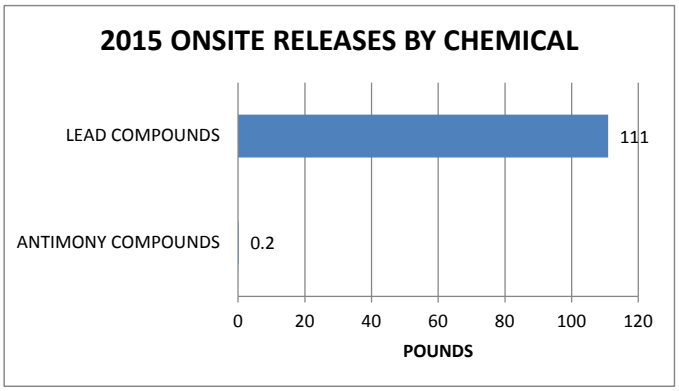
2015 TRI DATA (REPORTED IN POUNDS):

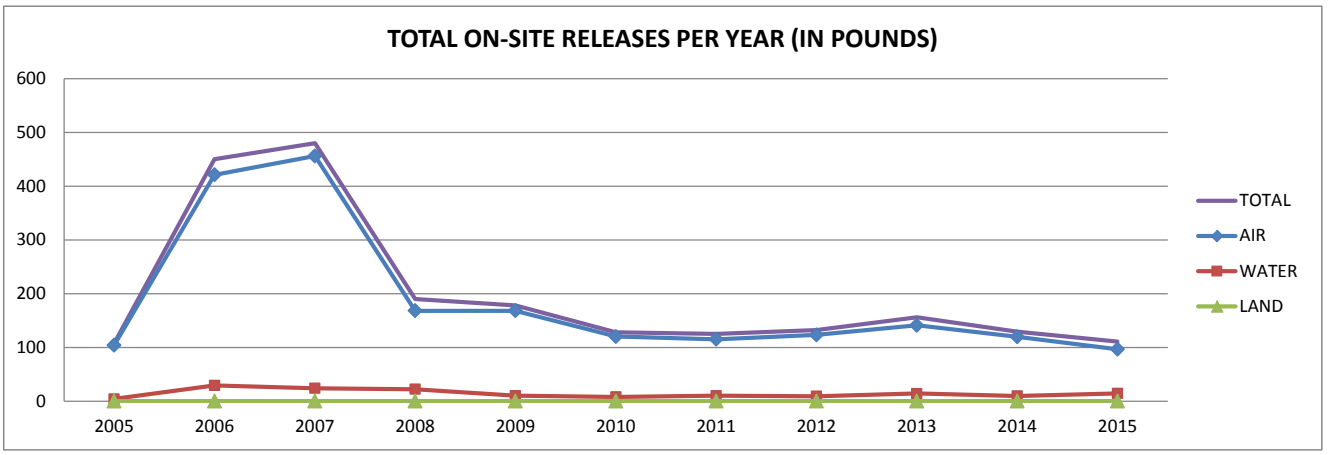
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ANTIMONY COMPOUNDS	0.2	0	0	0	10,496	0	NO	NO
LEAD COMPOUNDS	97	15	0	111	2,572,989	0	YES	YES
TOTAL	97	15	0	111	2,583,485	0		

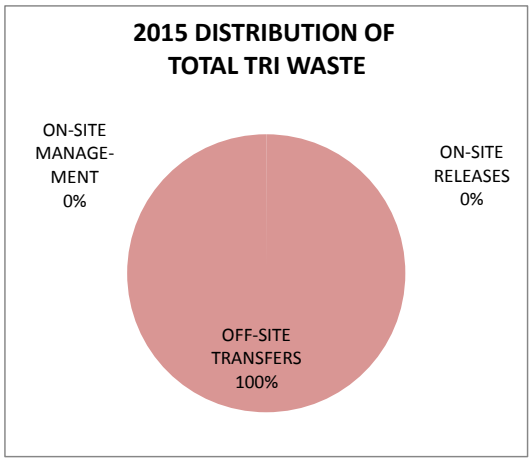
JOHNSON CONTROLS BATTERY PLANT, CONT.

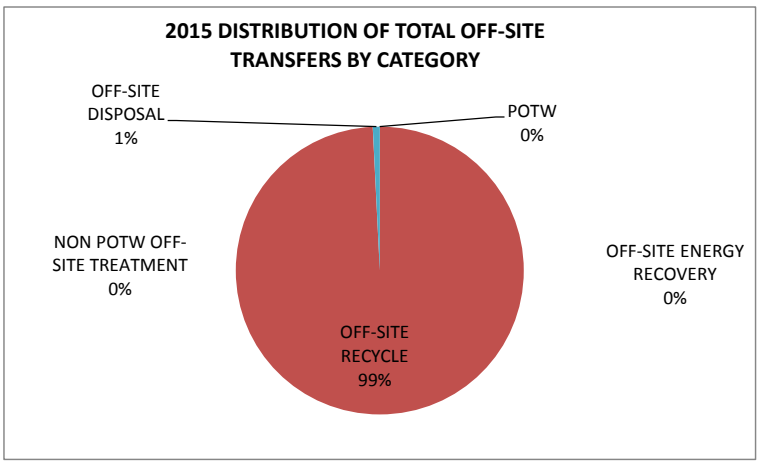
GRAPHICAL INFORMATION:





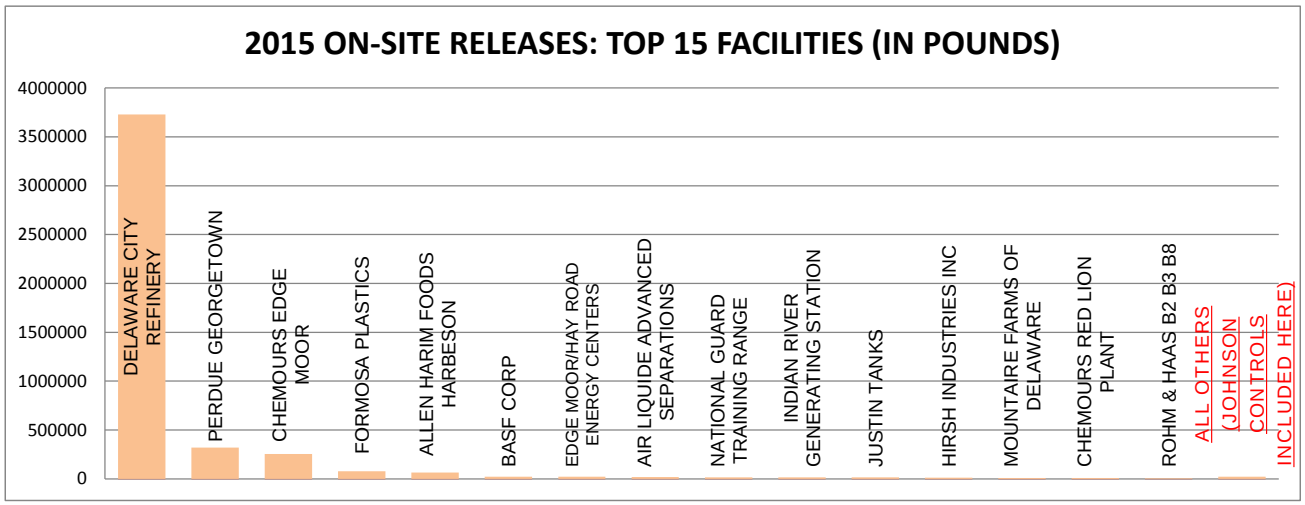


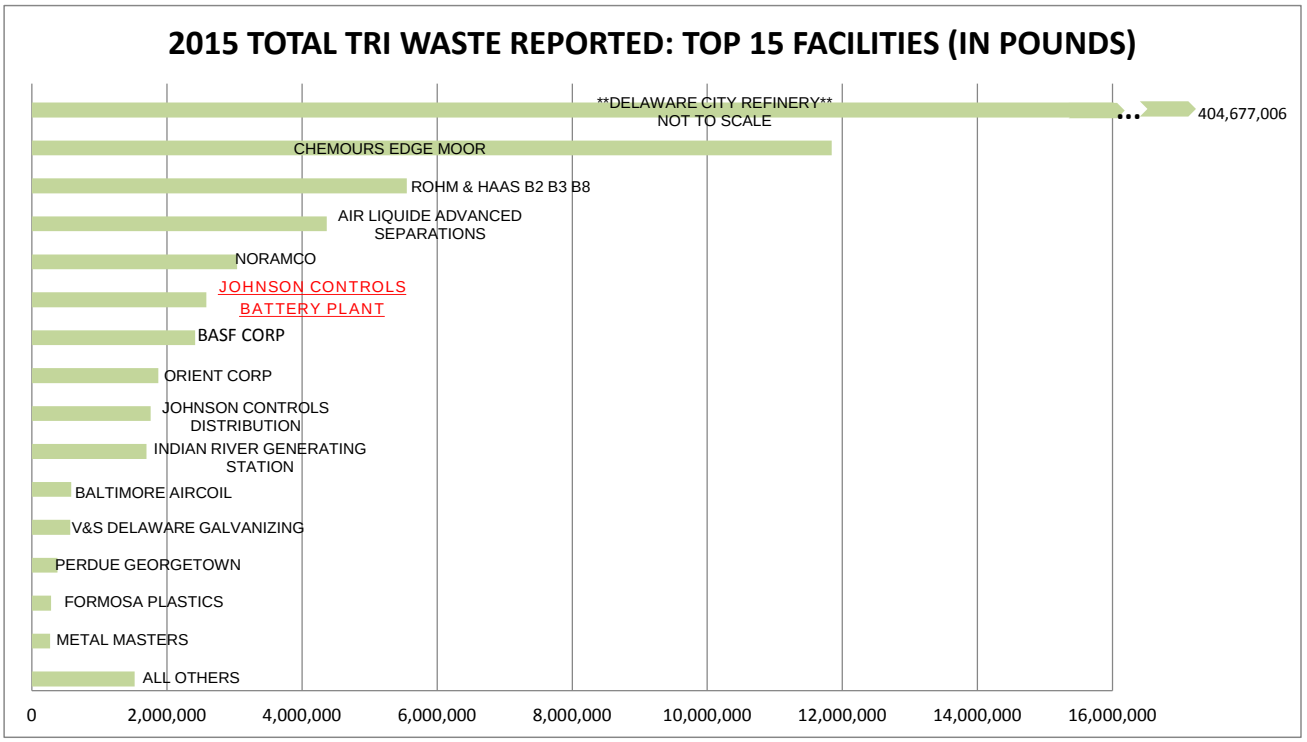




JOHNSON CONTROLS BATTERY PLANT, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

The Johnson Controls Battery Plant ranks 23rd in the nation for off-site transfers of lead compounds (out of 3,870 facilities).

TRI FACILITY PROFILES

JOHNSON CONTROLS DISTRIBUTION CENTER

LOCATION/CONTACT:

Address: 50 Patriot Drive
Middletown, DE 19709

Phone: (302)-696-3209

Contact: Tami Kemske

FACILITY OVERVIEW:

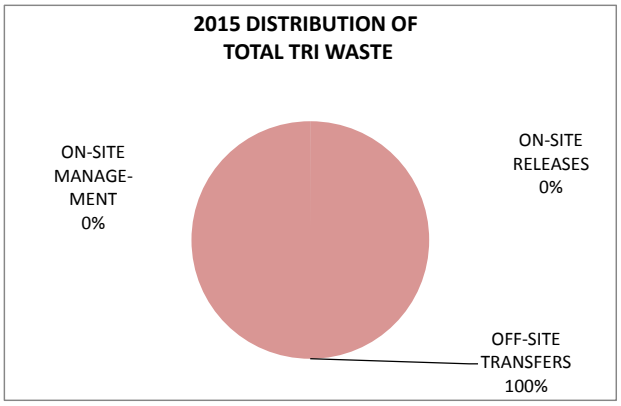
Johnson Controls Distribution Center forms and fills batteries, then prior to shipping; the batteries are washed and then labeled with the specified decal by the customer. From their battery plant, that is located 1.5 miles away in Middletown, the batteries are mostly shipped to customers within the 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.

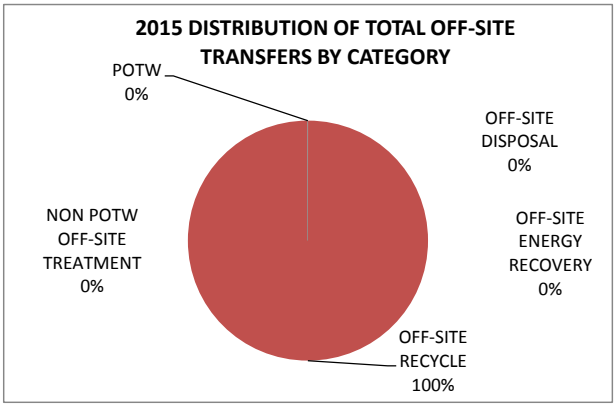
Johnson Controls Distribution Center has reported since 2011. The facility reported on one chemical in 2015, lead compounds. More than 99.99% of the lead compounds reported are sent off-site for recycling. The Lead compounds that are shipped off-site for recycling, are from the in-plant junks and warranty returns from customers. Lead compounds are utilized in the construction of the batteries.

2015 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	1,759,032	0	YES	YES
TOTAL	0	0	0	0	1,759,032	0		

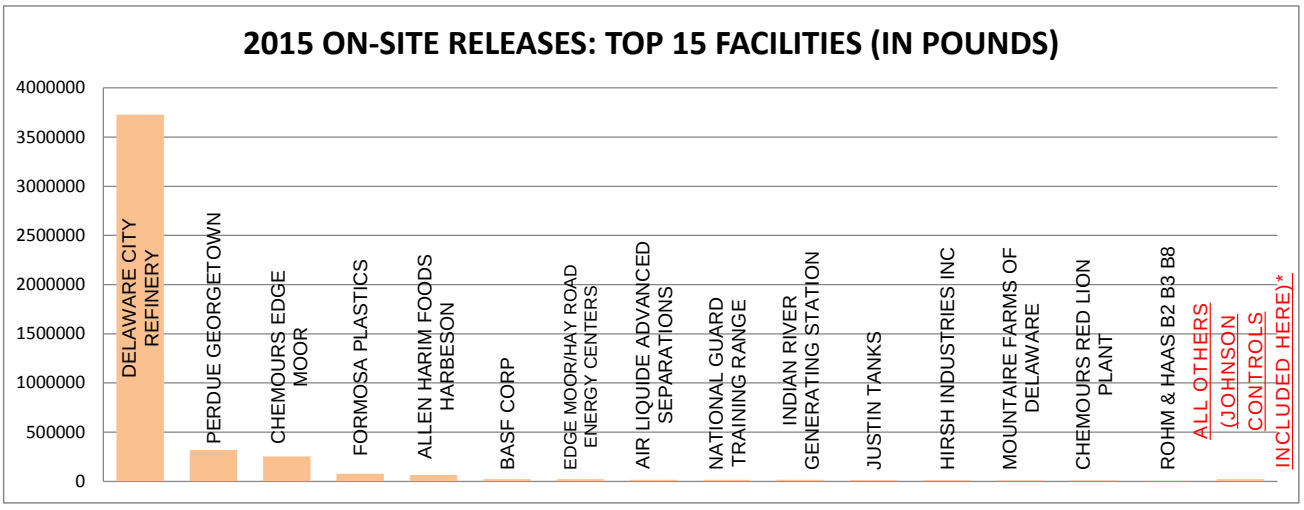
GRAPHICAL INFORMATION:



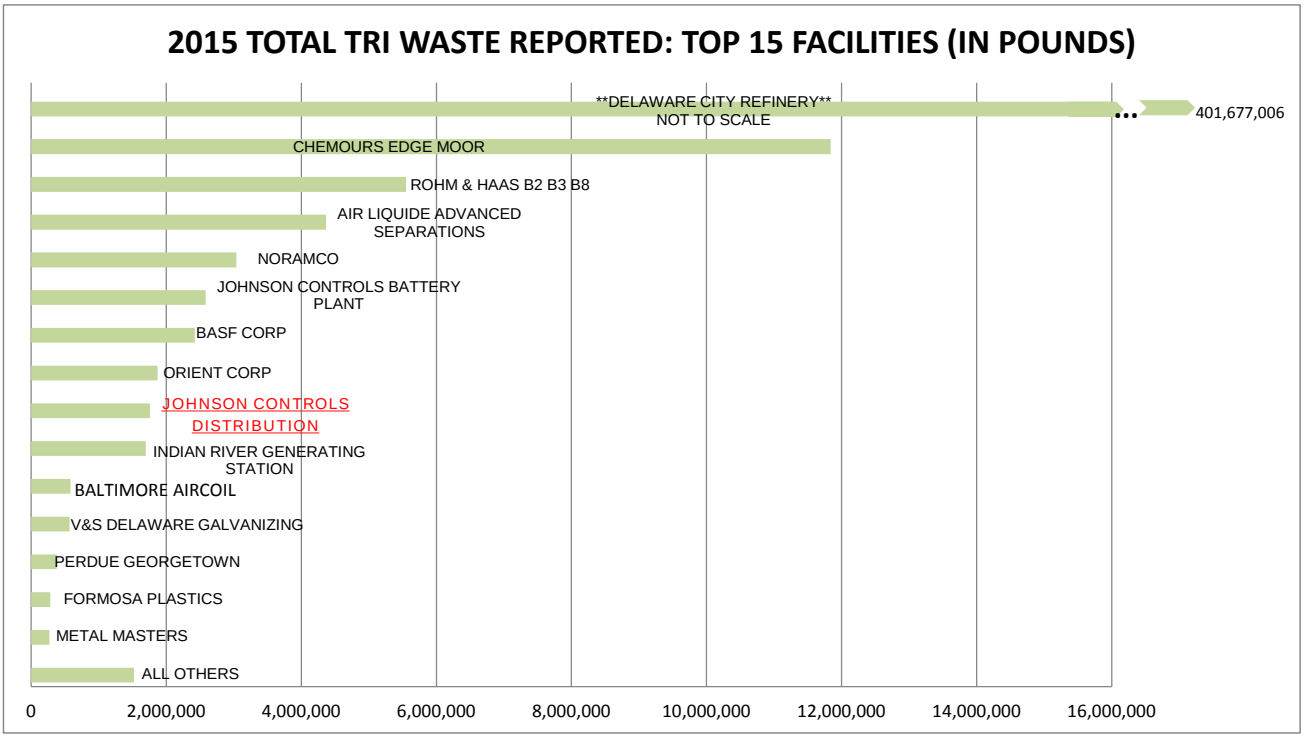


JOHNSON CONTROLS DISTRIBUTION CENTER, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



*The Johnson Controls Distribution Center ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site. Comparisons only include facilities reporting on Form R.



NOTABLE 2015 NATIONAL RANKINGS:

The Johnson Controls Distribution Center ranks 29th in off-site transfers of lead compounds (out of 3,870 facilities).

TRI FACILITY PROFILES

JUSTIN TANKS

LOCATION/CONTACT:

Address: 21413 Cedar Creek Ave.
Georgetown, DE 19947

Phone: (302)-856-3521

Contact: Edward Short

FACILITY OVERVIEW:

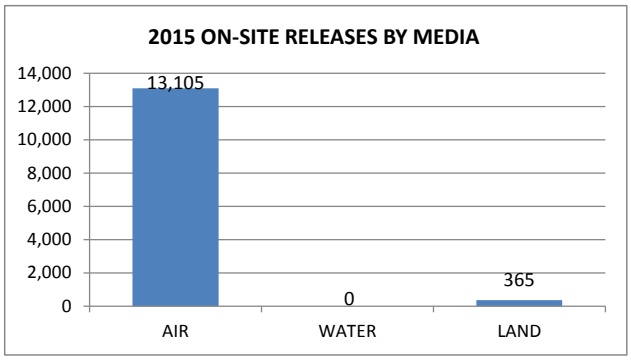
Justin Tanks, located in Georgetown, manufactures a wide variety of Fiberglass Reinforced Plastic (FRP) tanks for use in the chemical, agricultural, and food industries.

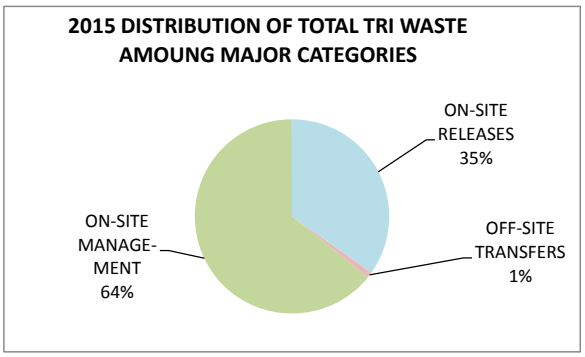
Justin Tanks has reported since 1987. The facility reported on one TRI chemical, styrene, for 2015. Styrene is used as a monomer in the polymerization of fiberglass resin. The majority of the styrene is released to the air during the process of applying fiberglass reinforcement to the tank. During polymerization 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 35% for 2015, compared to 2014, while production was up by 37% (see *Total On-site Releases Per Year Graph* on the next page).

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
STYRENE	13,105	0	365	13,470	365	24,840	NO	YES
TOTAL	13,105	0	365	13,470	365	24,840		

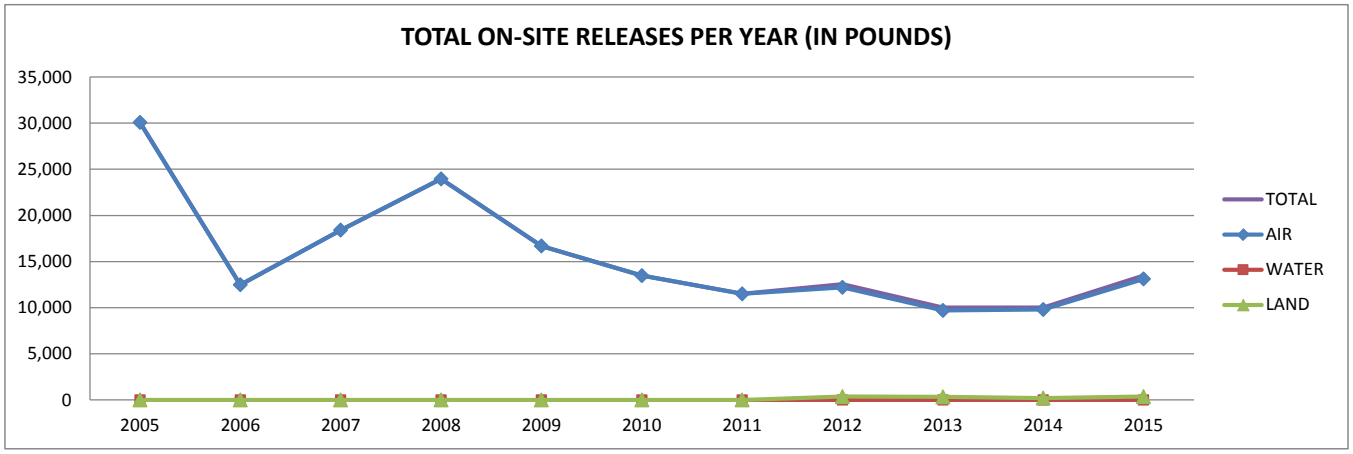
GRAPHICAL INFORMATION:

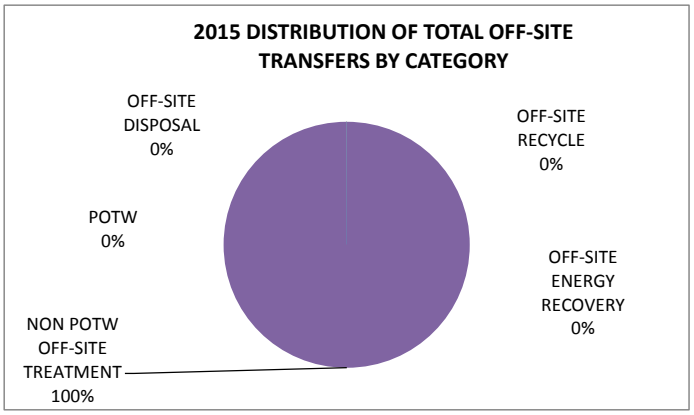


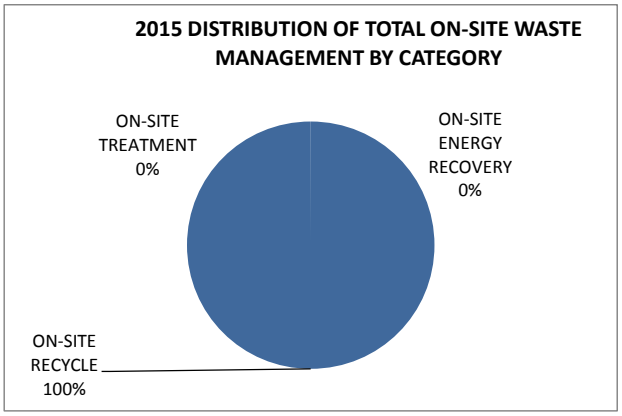


JUSTIN TANKS, CONT.

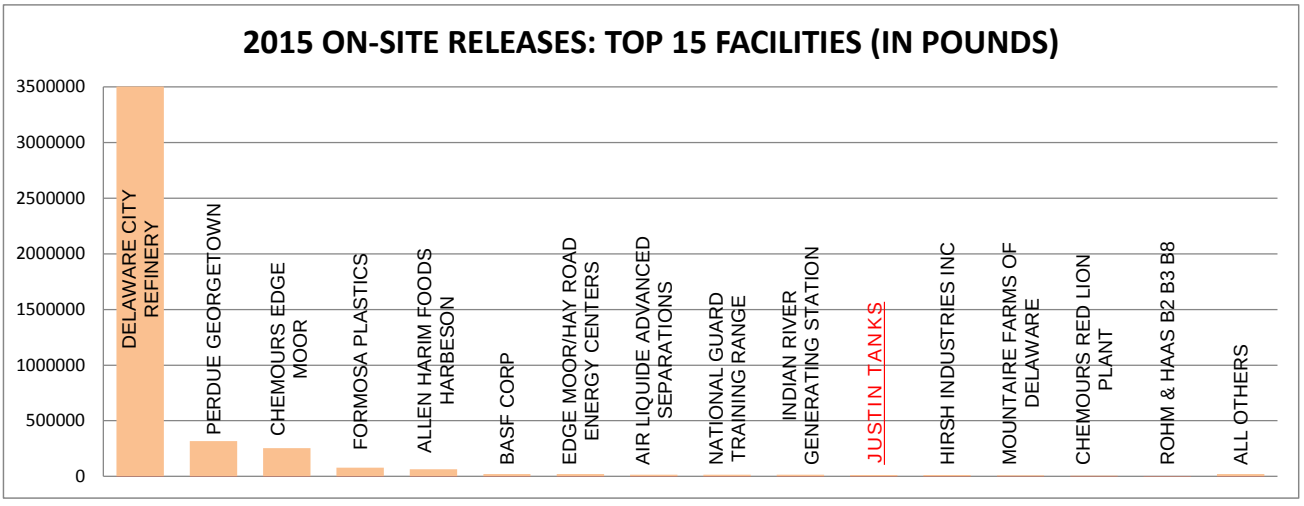
GRAPHICAL INFORMATION CONT.:





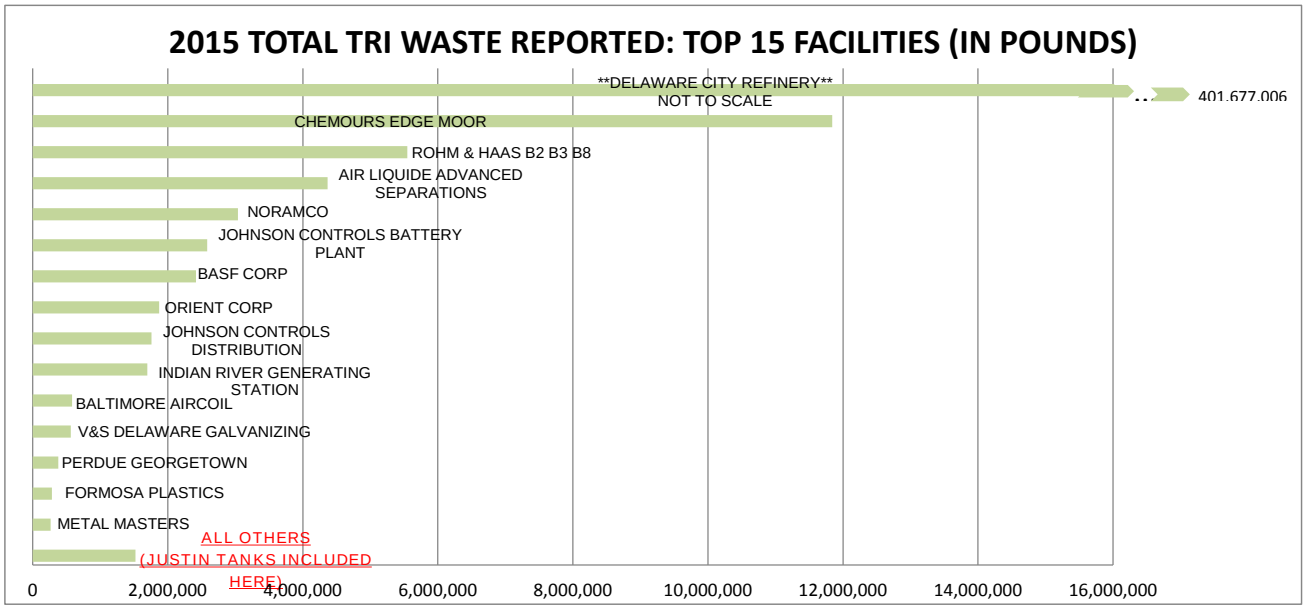


COMPARISON TO OTHER DELAWARE TRI FACILITIES:



JUSTIN TANKS, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT:



NOTABLE 2015 NATIONAL RANKINGS:

Justin Tanks ranks 10th in on-site recycling of styrene (out of 1,197 facilities).

TRI FACILITY PROFILES

KUEHNE

LOCATION/CONTACT:

Address: 1645 River Road
Delaware City, DE 19706

Phone: (302)-834-4557

Contact: Alan Rogers

FACILITY OVERVIEW:

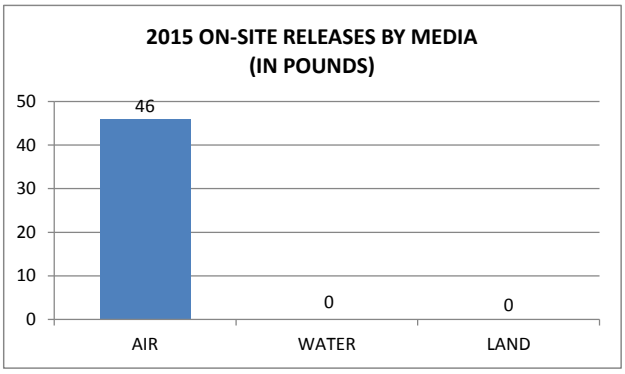
Kuehne reports under the North American Industrial Classification System (NAICS) as 325181, which covers the manufacturing of basic inorganic chemicals. Material produced at the facility is used primarily for municipal water and wastewater treatment.

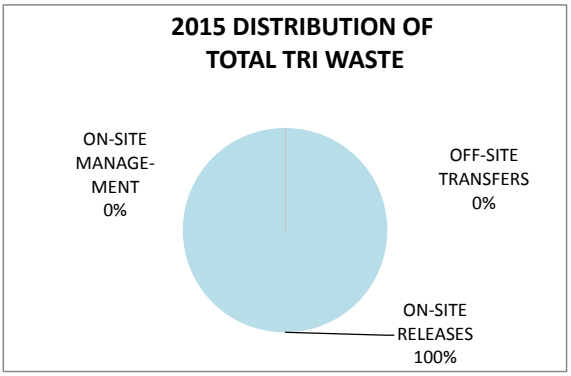
Kuehne has reported since 1987, previously reporting under the company Chloramone. For 2015, the facility reported on one chemical, chlorine, with all on-site releases being made to air. Chlorine releases have decreased by 91% since 2014, due to the installation of a higher efficiency scrubber. Chlorine is repackaged for sale and also used in the production of sodium hypochlorite (bleach).

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CHLORINE	46	0	0	46	0	0	NO	NO
TOTAL	46	0	0	46	0	0		

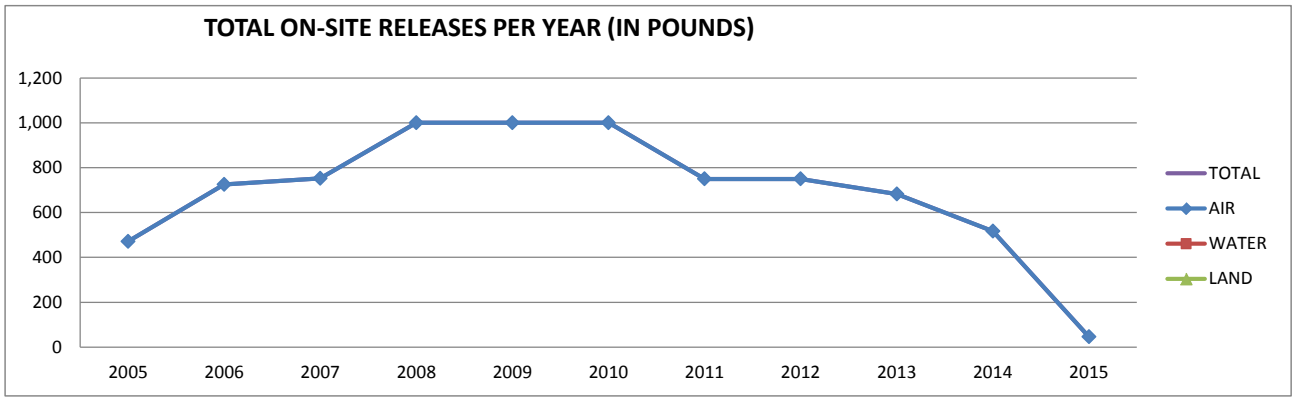
GRAPHICAL INFORMATION:



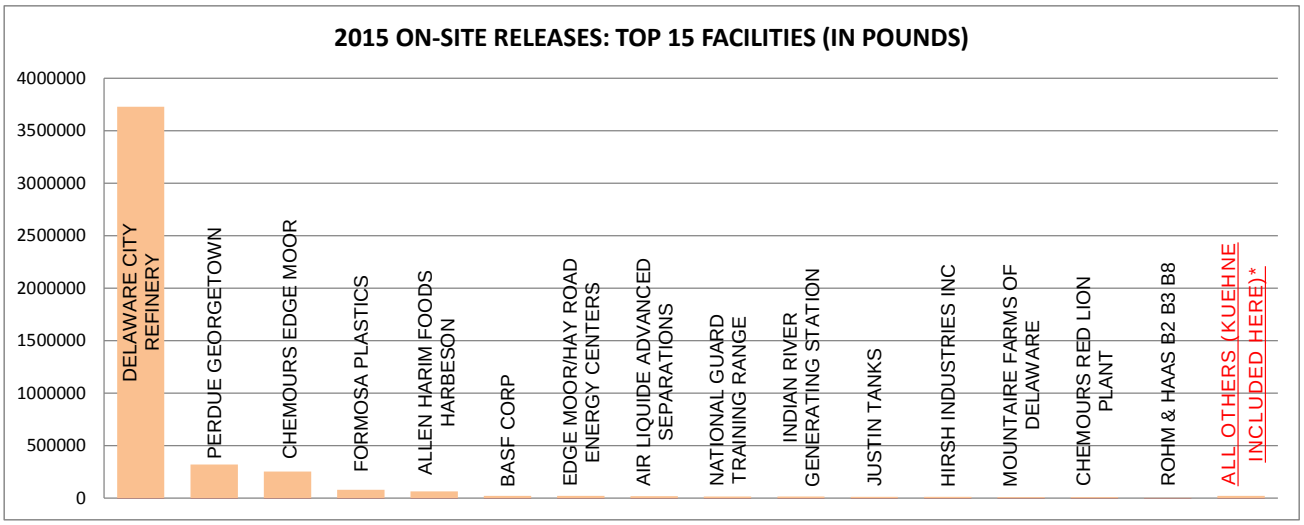


KUEHNE, CONT.

GRAPHICAL INFORMATION:



COMPARISON TO OTHER DELAWARE TRI FACILITIES:



*Kuehne ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

Kuehne ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

TRI FACILITY PROFILES

MACDERMID

LOCATION/CONTACT:

Address: 701 Industrial Drive
Middletown, DE 19709

Phone: (302)-378-3100

Contact: Ken McCullough

FACILITY OVERVIEW:

MacDermid, Inc., a Platform Specialty Products company, manufactures photopolymer resins for the graphic arts and printing industry. Photopolymer resin will crosslink when exposed to UV radiation and become rubber material suitable for use as flexible printing plates. MacDermid also manufactures a three component urethane-based coating system used in automotive applications. In addition MacDermid cuts to size and laminates coated film from rolls produced by MacDermid, UK.

The facility has reported since 1987, previously as Hercules-Middletown. MacDermid reported two chemicals in 2015, diisocyanates and toluene diisocyanates (mixed isomers), both on short Form A. Isocyanates are used in the manufacture of polyurethanes which are precursors to photopolymer resins. 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.)

2015 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	0	0	NO	NO
TOLUENE DIISOCYANATE (MIXED ISOMERS)*	0	0	0	0	0	0	NO	NO
TOTAL	0	0	0	0	0	0		

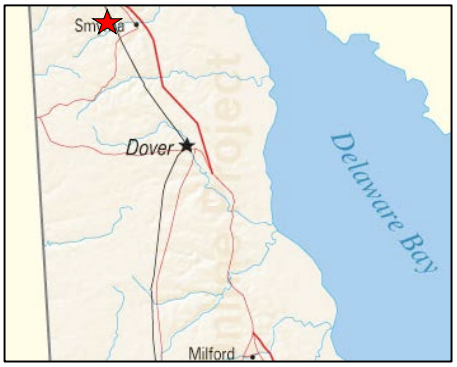
*Reported on short Form A

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.

TRI FACILITY PROFILES

METAL MASTERS



LOCATION/CONTACT:

Address: 100 Industrial Blvd.
Clayton, DE 19938

Phone: (302)-653-3000

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.

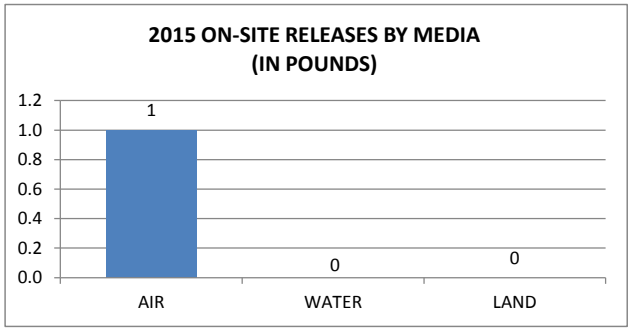
Metal Masters has reported since 2001. The facility reported on 2 chemicals in 2015, nickel and chromium, with on-site releases being only to air. These chemicals are component parts of the stainless steel and are released to air during the welding phase. These releases to air account for less than 0.01% 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.

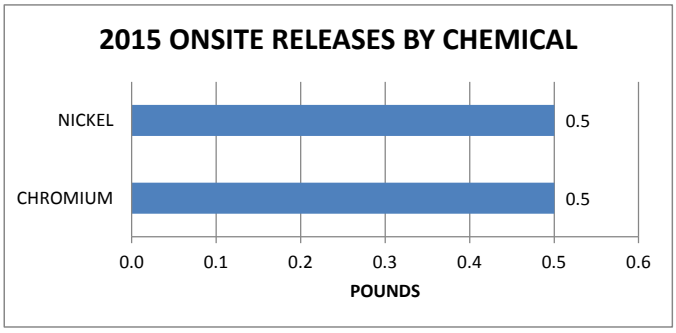
2015 TRI DATA (REPORTED IN POUNDS):

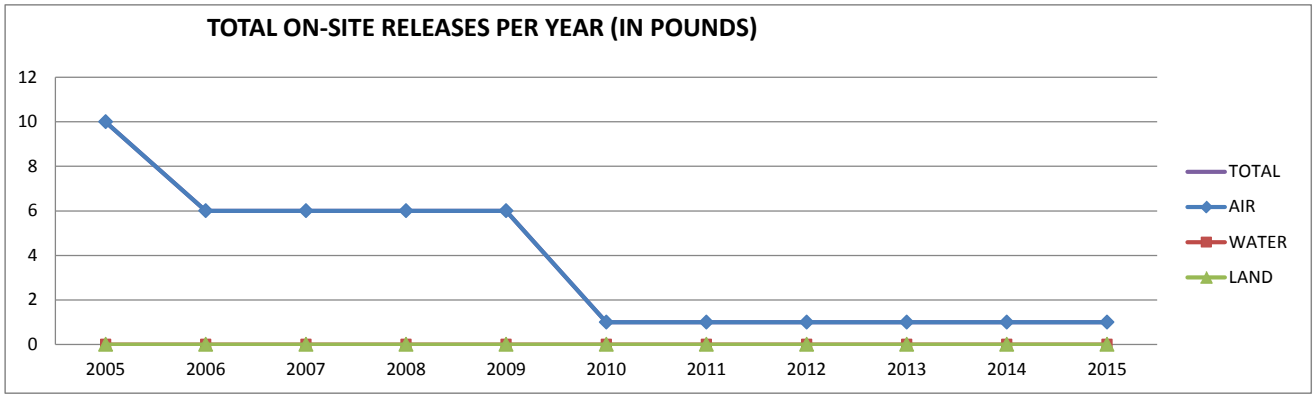
	ON-SITE RELEASES							
CHEMICAL	AIR	WATER	LAND	TOTAL	OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
CHROMIUM	0.5	0	0	0.5	201,714	0	NO	NO
NICKEL	0.5	0	0	0.5	66,027	0	NO	YES
TOTAL	1	0	0	1	267,741	0		

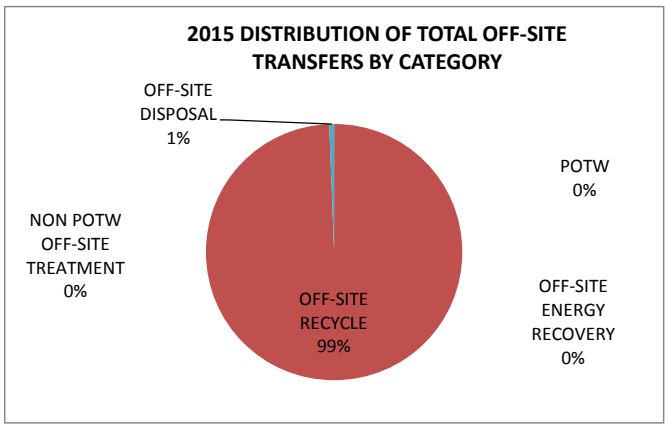
METAL MASTERS, CONT.

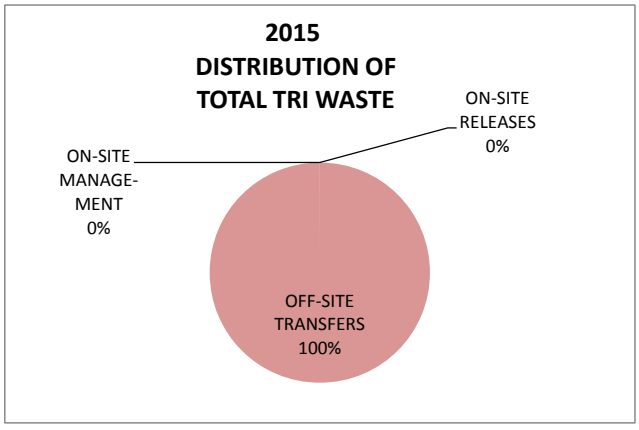
GRAPHICAL INFORMATION:





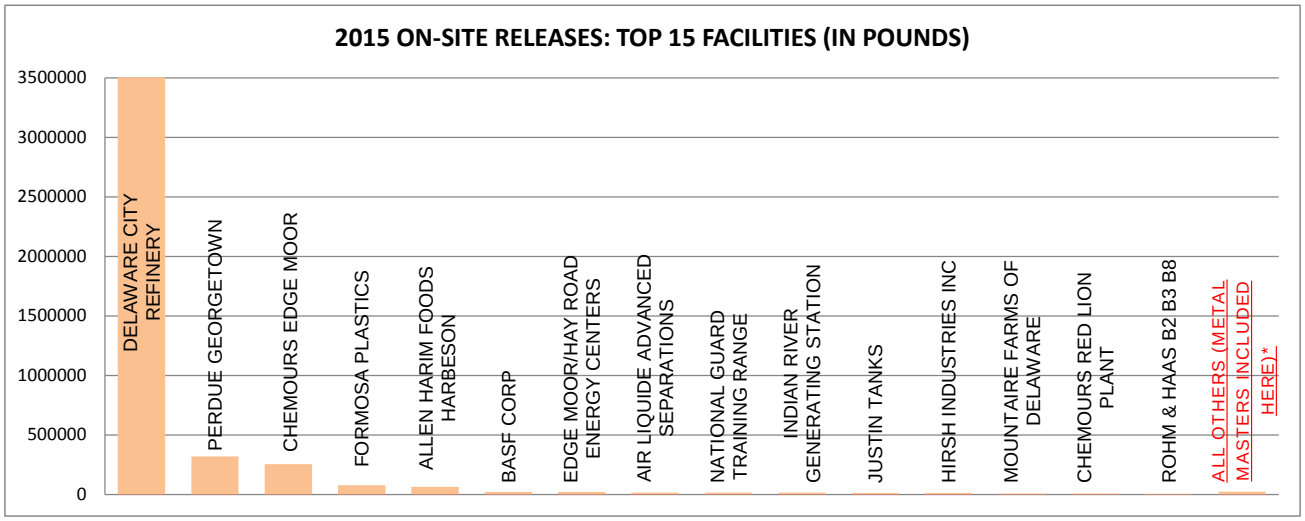




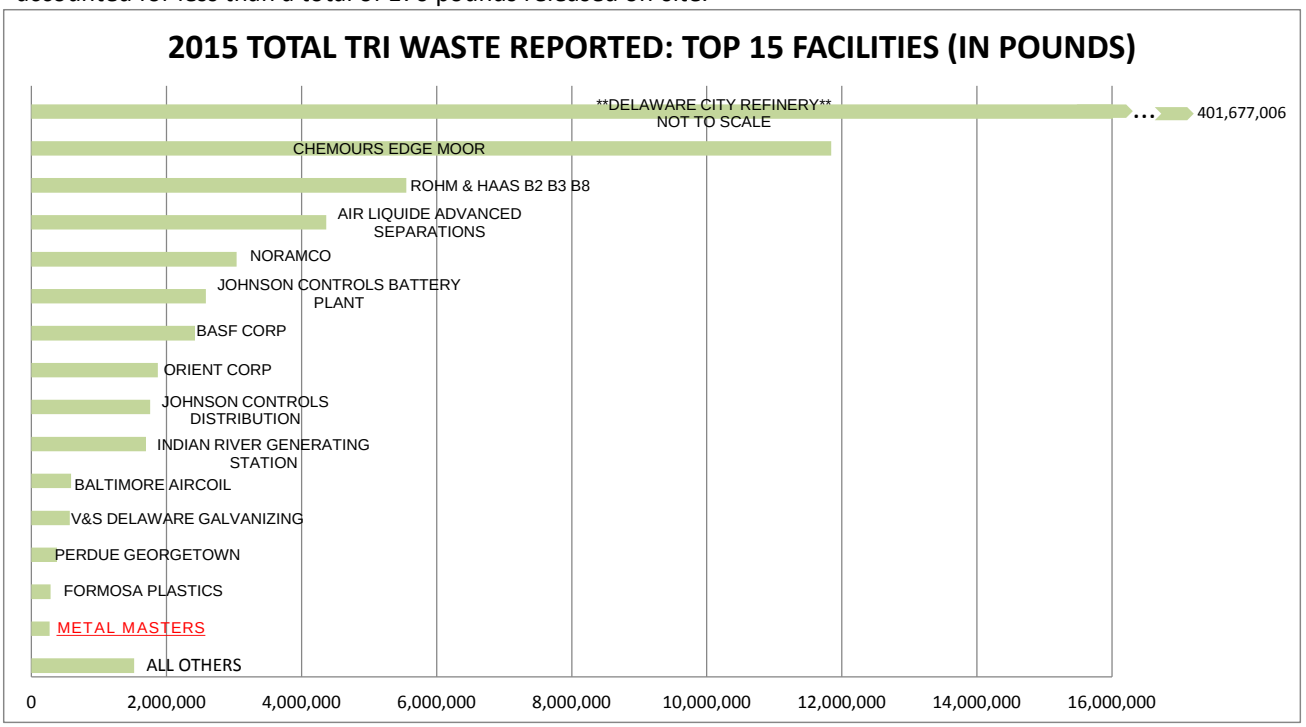


METAL MASTERS, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



*Metal Masters ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.



NOTABLE 2015 NATIONAL RANKINGS:

Metal Masters ranks 60th in off-site recycling of chromium for fabricated metal facilities (NAICS 332) (out of 920 facilities).

TRI FACILITY PROFILES

MOUNTAIRE FARMS OF DELAWARE

LOCATION/CONTACT:

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

Phone: (302)-934-3123

Contact: Sean McKeon

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 2015, 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 2015.

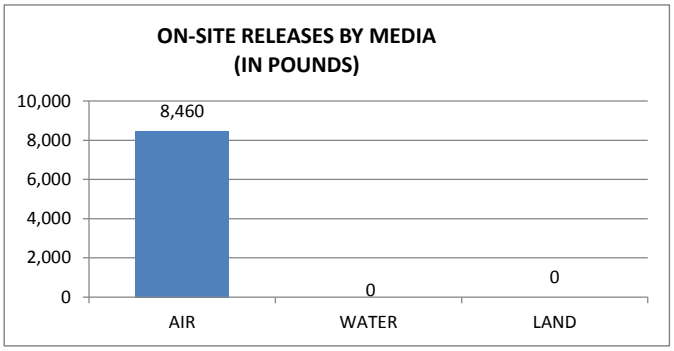
2015 TRI DATA (REPORTED IN POUNDS):

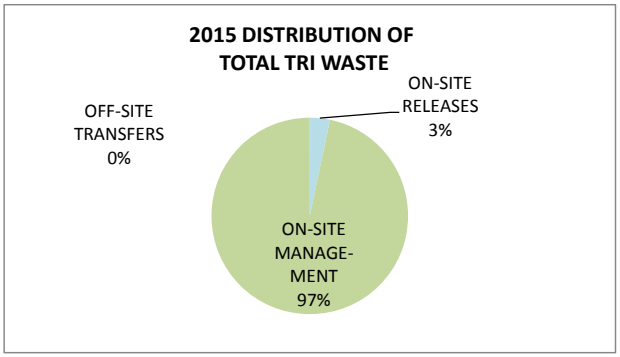
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
COPPER COMPOUNDS*	0	0	0	0	0	0	NO	NO
HYDROGEN SULFIDE	8,193	0	0	8,193	0	119,589	NO	NO
MANGANESE COMPOUNDS*	0	0	0	0	0	0	NO	NO
PERACETIC ACID	267	0	0	267		128,850	NO	NO
ZINC COMPOUNDS*	0	0	0	0	0	0	NO	NO
TOTAL	8,460	0	0	8,460	0	248,439		

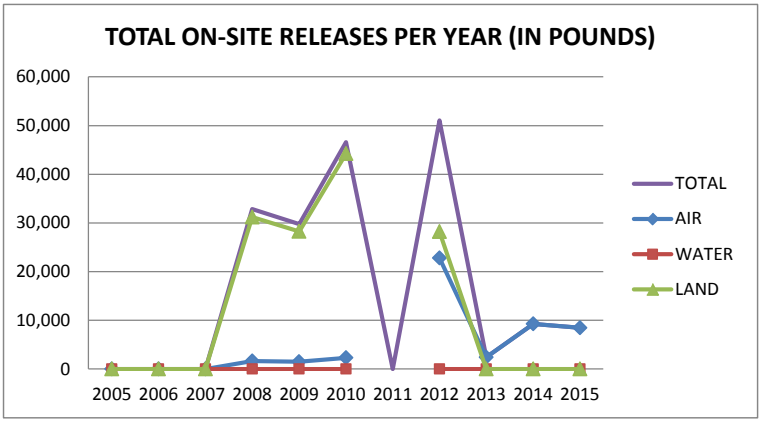
*Reported on short Form A

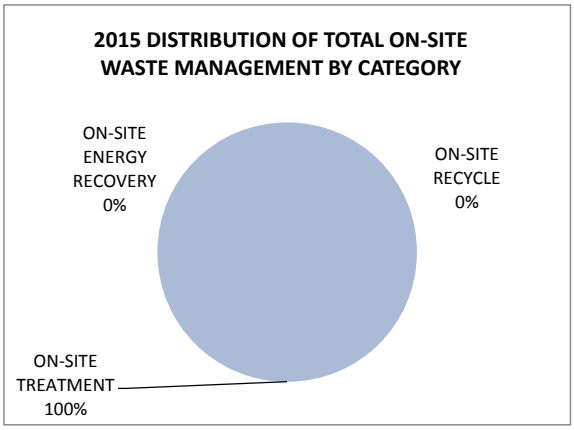
MOUNTAIRE FARMS OF DELAWARE, CONT.

GRAPHICAL INFORMATION CONT.:

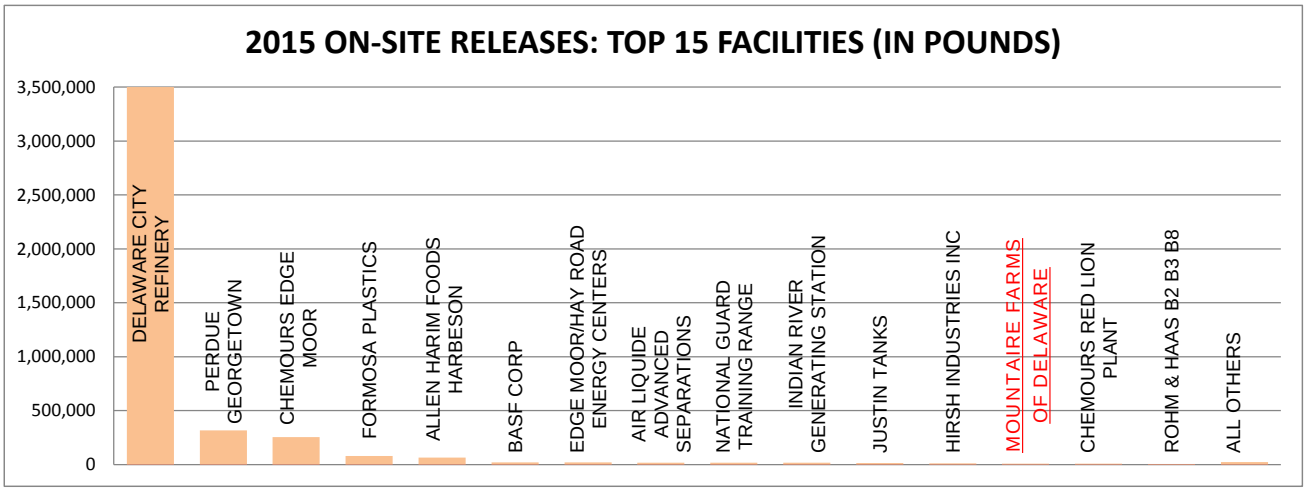






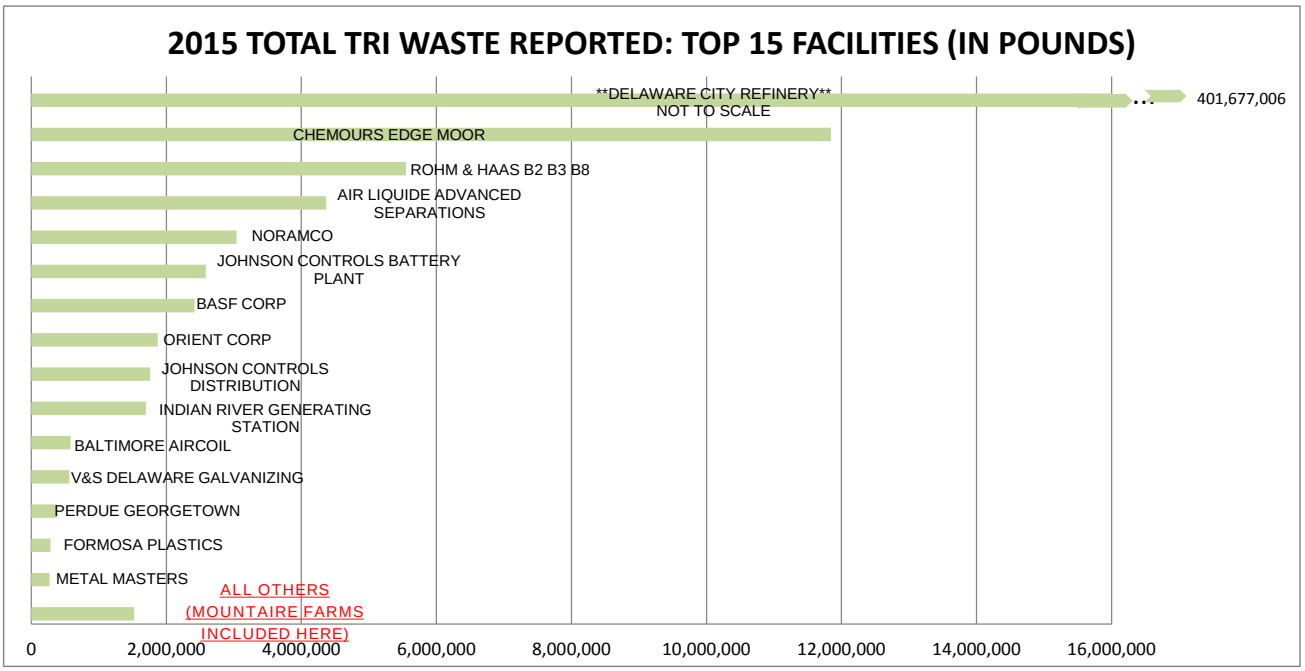


COMPARISON TO OTHER DELAWARE TRI FACILITIES:



MOUNTAIRE FARMS OF DELAWARE, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:



NOTABLE 2015 NATIONAL RANKINGS:

Mountaire Farms of Delaware ranks 17th in the on-site treatment of hydrogen sulfide by food/beverage facilities (NAICS 311) (out of 82 facilities).

Mountaire Farms of Delaware ranks 20th in the on-site treatment of peracetic acid by food/beverage facilities (NAICS 311) (out of 200 facilities).

TRI FACILITY PROFILES

MOUNTAIRE FARMS- FRANKFORD

LOCATION/CONTACT:

Address: 11 Daisey Street
Frankford, DE 19945

Phone: (302)-934-3123

Contact: Sean McKeon

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 2015, 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. The facility recently converted to using natural gas in their boilers, resulting in PACs no longer being reported as released on-site.

2015 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.

TRI FACILITY PROFILES

MOUNTAIRE SELBYVILLE

LOCATION/CONTACT:

Address: Hoosier Street & Railroad Avenue
Selbyville, DE 19975

Phone: (302)-934-3123

Contact: Sean McKeon

FACILITY OVERVIEW:

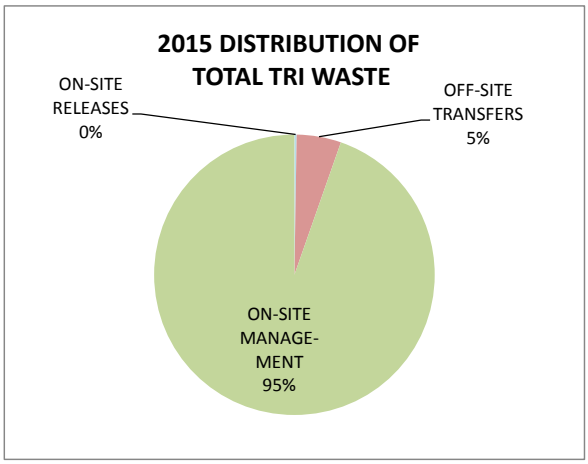
Mountaire Farms in Selbyville is a producer of poultry products. The facility processes chickens for sale to the retail market.

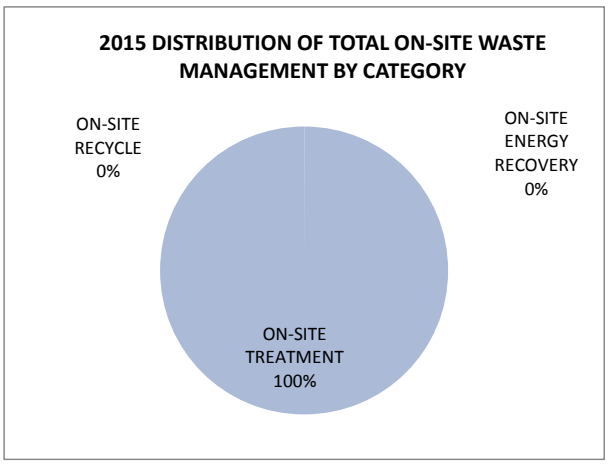
Mountaire Farms-Selbyville has reported since 1989, previously as Mountaire Farms of Delmarva; but was below the reporting threshold for about half of the years since 1989, so TRI Reports were not filed for those years. For 2015, the facility reported on two chemicals, ammonia and peracetic acid. Peracetic 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.

2015 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	9,355	26,776	NO	NO
PERACETIC ACID	467	0	0	467	0	146,598	NO	NO
TOTAL	467	0	0	467	9,355	173,374		

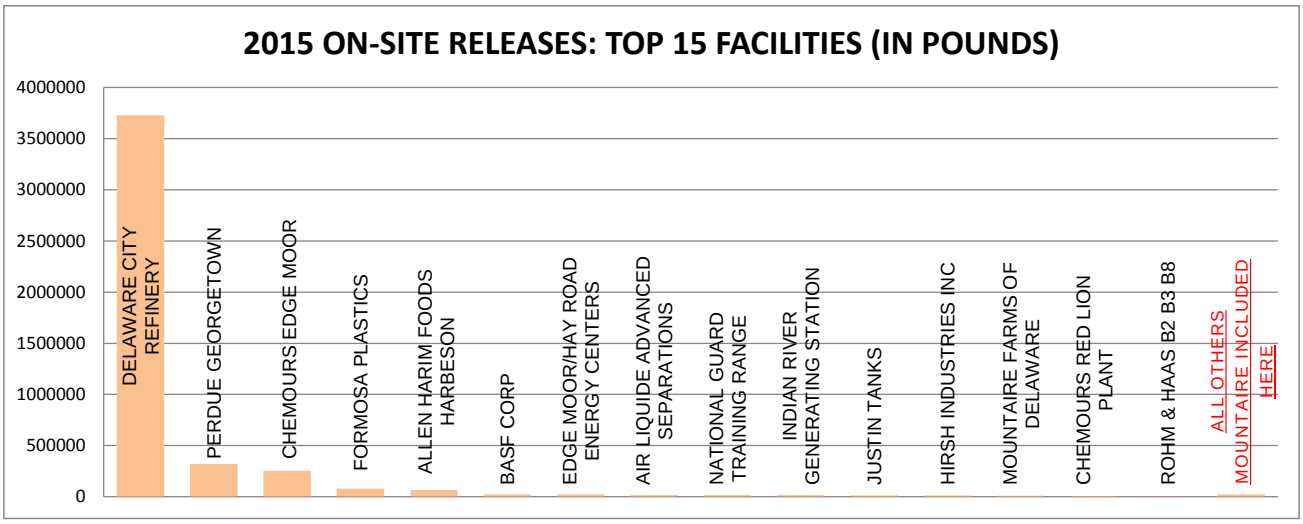
GRAPHICAL INFORMATION:

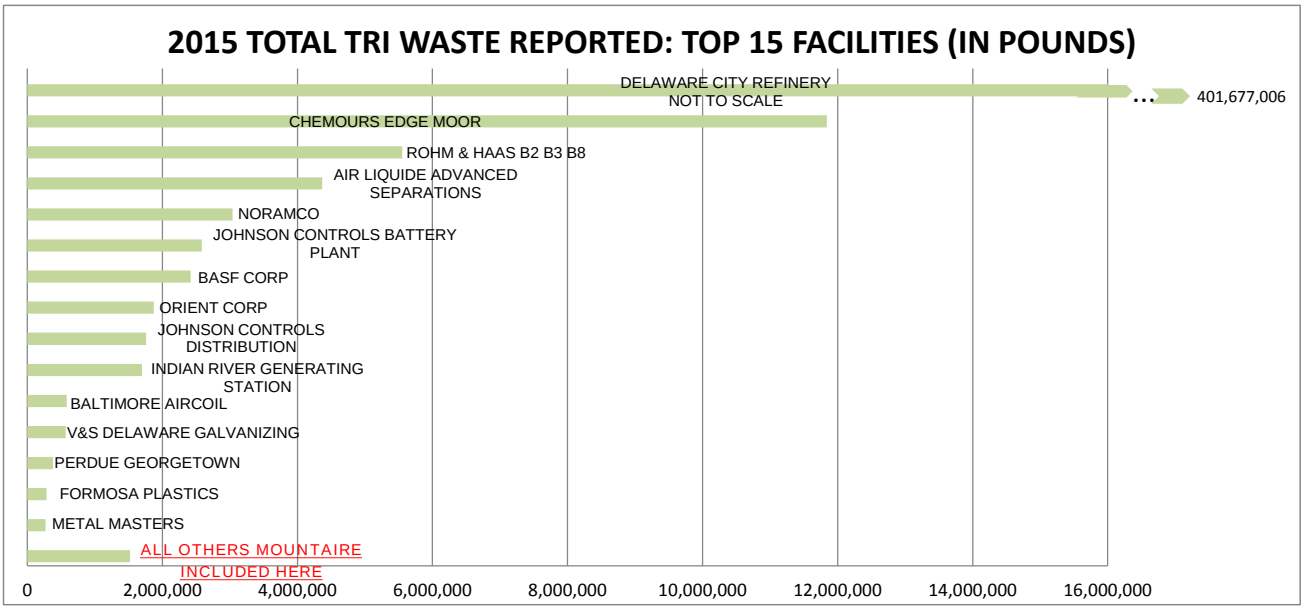




MOUNTAIRE SELBYVILLE, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

Mountaire Selbyville ranks 17th for on-site treatment of peracetic acid (out of 200 facilities).

TRI FACILITY PROFILES

NATIONAL GUARD TRAINING RANGE

LOCATION/CONTACT:

Address: 1197 River Road
New Castle, DE 19720

Phone: (302)-326-7490

Contact: Sgt. Sean Maynard

FACILITY OVERVIEW:

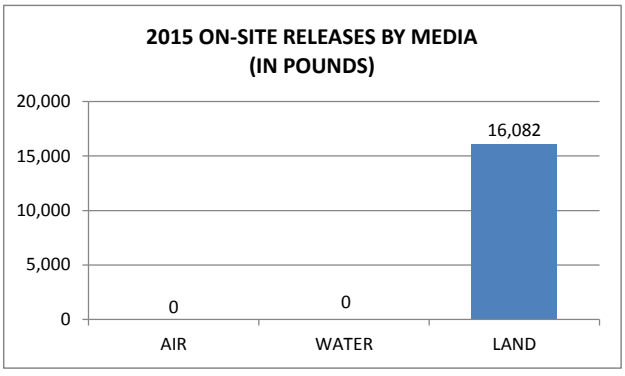
The U.S. Army's National Guard Training Site Range is a military installation that reports under the Federal Facility reporting requirements.

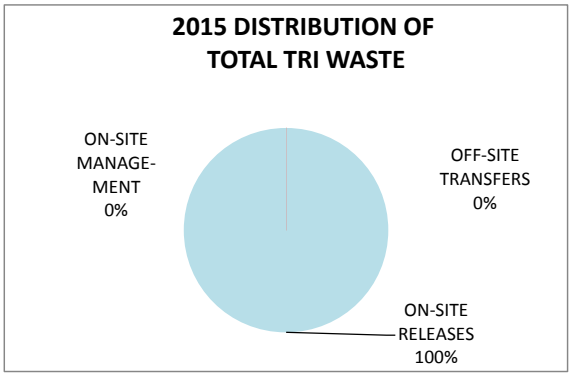
The National Guard Training Site Range reported for the first time in 2015, because they fell below the reporting threshold in prior years. Lead from ammunition is deposited in the earth berm at the site's firing range. Due to heavy deployments in recent years, the site's range had not been used extensively until 2015. The firing range is also used occasionally by local law enforcement agencies.

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	0	0	16,082	16,082	0	0	YES	YES
TOTAL	0	0	16,082	16,082	0	0		

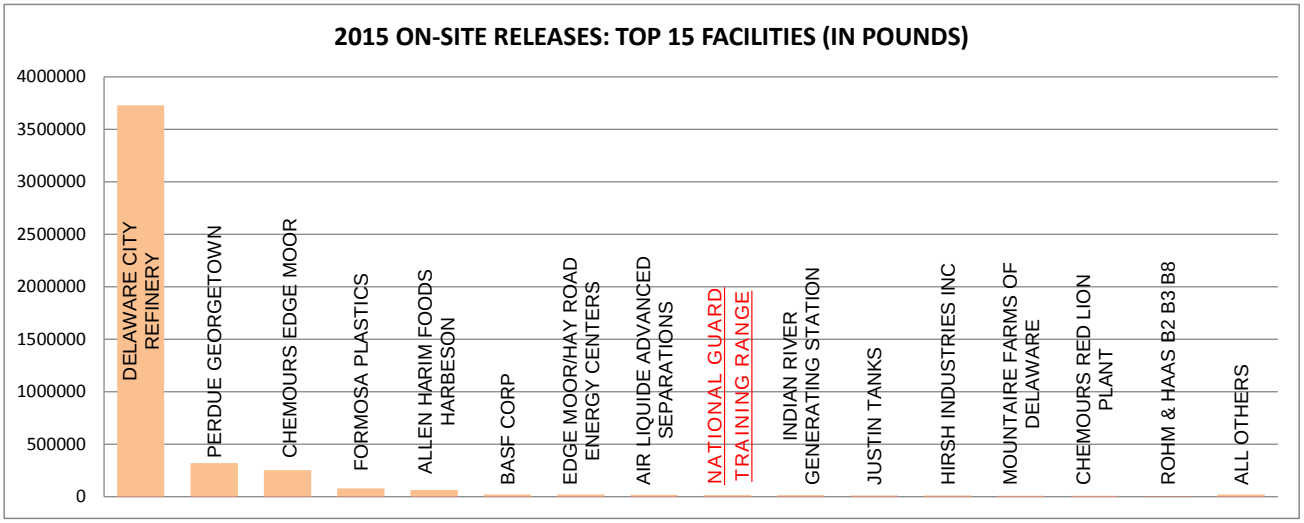
GRAPHICAL INFORMATION:





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 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

TRI FACILITY PROFILES

NORAMCO

LOCATION/CONTACT:

Address: 500 Swedes Landing Road
Wilmington, DE 19801

Phone: (302)-888-4477

Contact: John Daly

FACILITY OVERVIEW:

Noramco, Inc. is the North American Chemical Operations subsidiary of Johnson & Johnson. Noramco manufactures and markets Active Pharmaceutical Ingredients (APIs) and fine chemicals for other Johnson & Johnson affiliated companies and to third-party trade customers. The majority of such trade sales consist of controlled substance pain management active pharmaceutical ingredients.

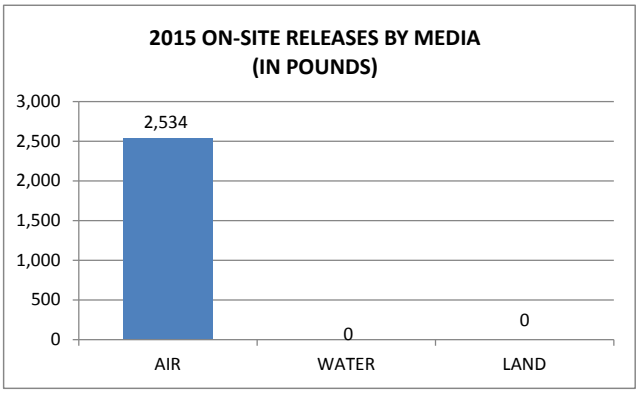
The facility has reported since 1987. Noramco reported eight chemicals in 2015, and all on-site releases of these chemicals were to the air. The chemicals reported are comprised mainly of solvents that are used in the separation, synthesis, and purification of small molecule APIs made from natural plant 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 decreased by 47% since 2005, the result of utilizing lean manufacturing programs to reduce waste and unneeded chemical processing and leveraging new technologies and sustainable chemistry initiatives (see *Total On-site Releases Per Year Graph* on the next page).

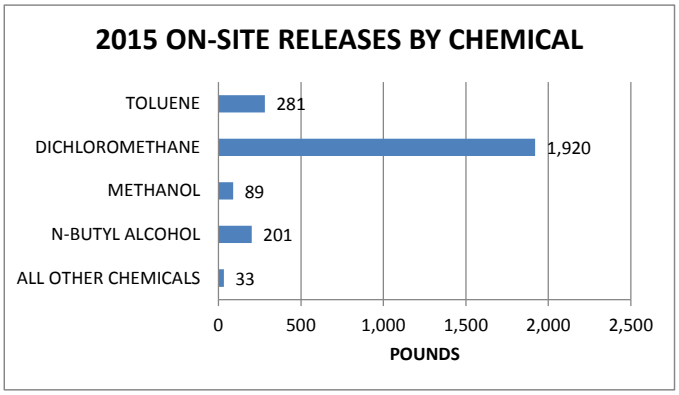
2015 TRI DATA (REPORTED IN POUNDS):

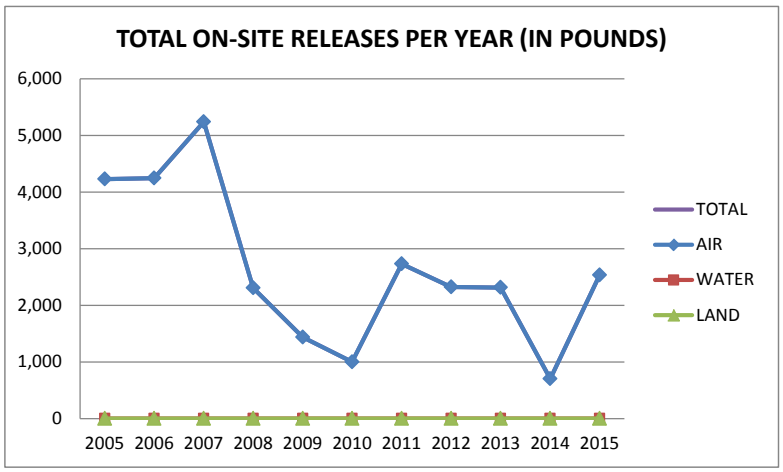
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
DICHLOROMETHANE	1,920	0	0	1,920	13,213	13,213	NO	YES
ETHYLENE GLYCOL	10	0	0	10	6,330	0	NO	NO
FORMIC ACID	13	0	0	13	0	18,641	NO	NO
METHANOL	89	0	0	89	110,616	110,615	NO	NO
N,N-DIMETHYLFORMAMIDE	0	0	0	0	8,350	0	NO	NO
N-BUTYL ALCOHOL	201	0	0	201	676,819	676,819	NO	NO
PERACETIC ACID	10	0	0	10	0	35,845	NO	NO
TOLUENE	291	0	0	291	682391	682391	NO	NO
TOTAL	2,534	0	0	2,534	1,497,719	1,537,524		

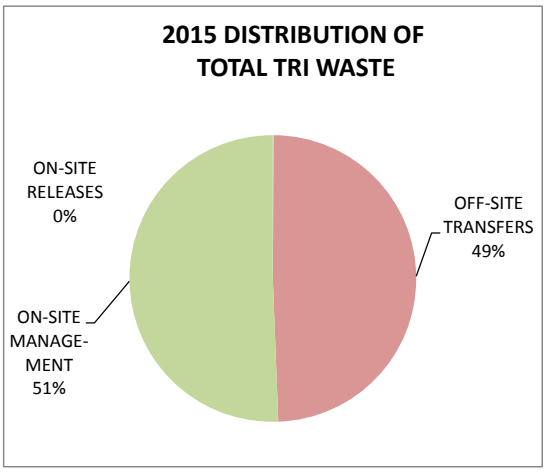
NORAMCO, CONT.

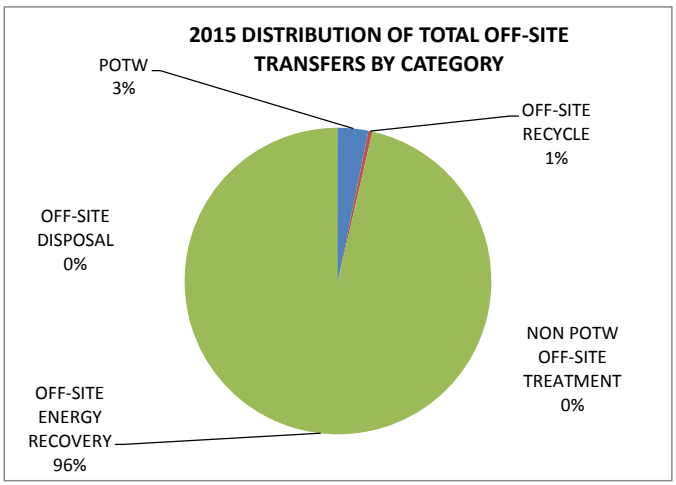
GRAPHICAL INFORMATION:

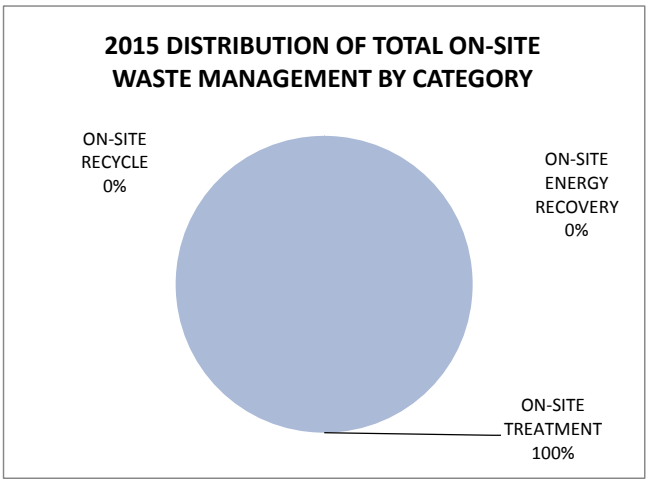






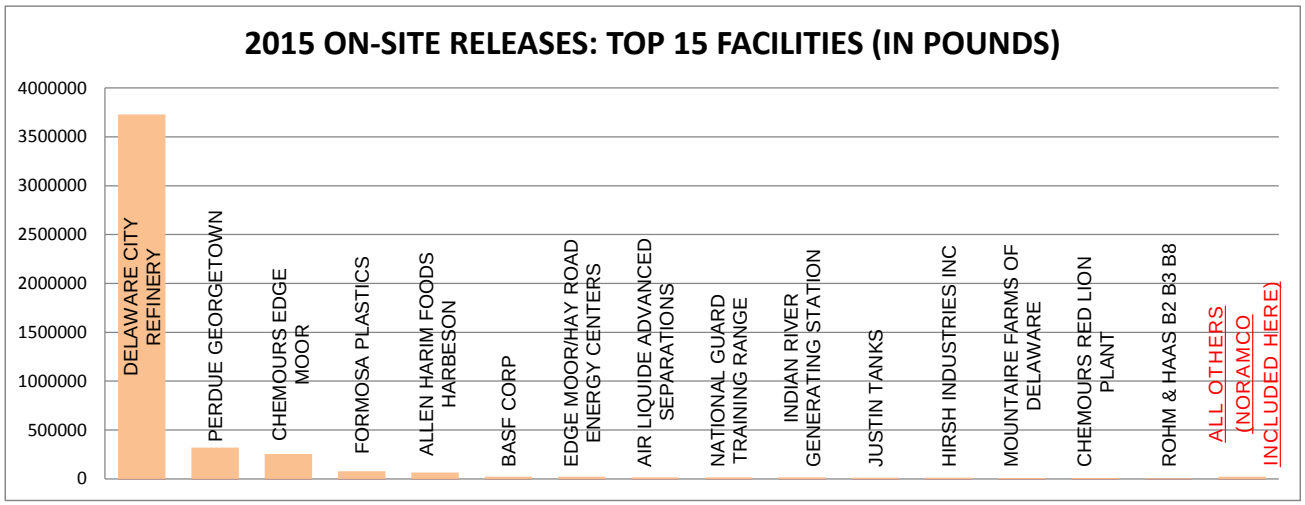


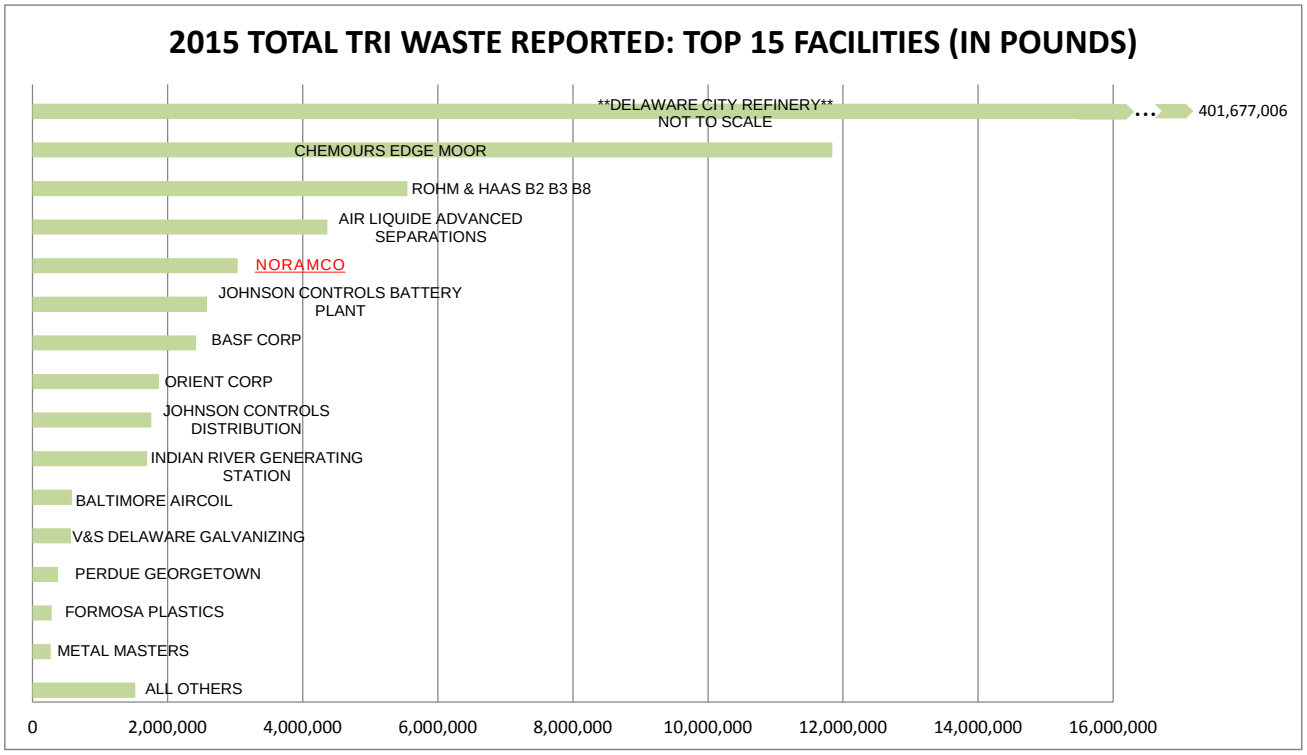




NORAMCO, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

Noramco ranks 4th in the nation for off-site transfers of n-butyl alcohol (out of 725 facilities).

Noramco ranks 8th in the nation for on-site treatment of n-butyl alcohol (out of 725 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 four chemicals in 2015, with <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.

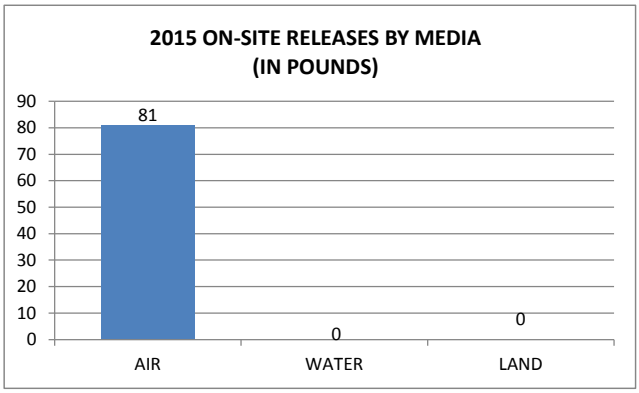
In 2011, TRI reports included more detailed calculations and analytical testing that were not used in previous years, resulting in higher releases reported. Since 2012, a thermal oxidizer has been used for the destruction of aniline, which resulted in a decrease in on-site releases of 99% compared to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

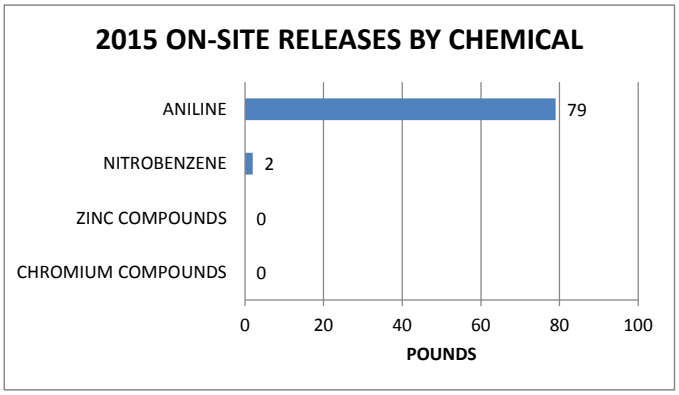
2015 TRI DATA (REPORTED IN POUNDS):

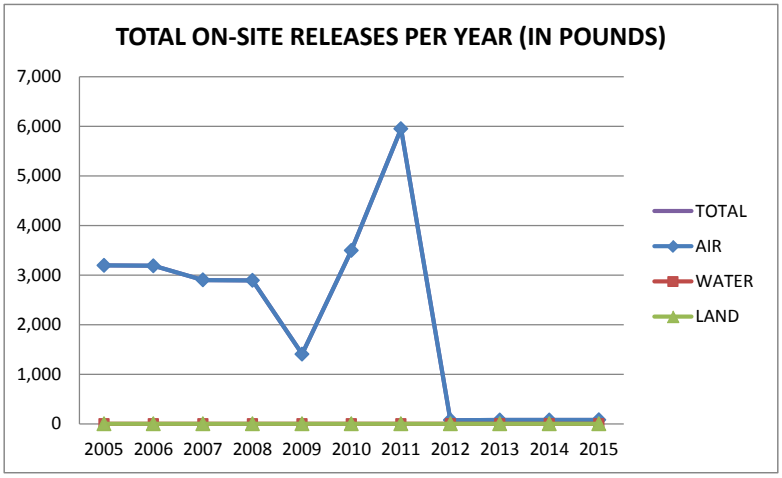
	ON-SITE RELEASES							
CHEMICAL	AIR	WATER	LAND	TOTAL	OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
ANILINE	79	0	0	79	1,982	1,870,000	NO	NO
CHROMIUM COMPOUNDS	0	0	0	0	0	0	NO	YES
NITROBENZENE	2	0	0	2	0	0	NO	YES
ZINC COMPOUNDS	0	0	0	0	0	0	NO	NO
TOTAL	81	0	0	81	1,982	1,870,000		

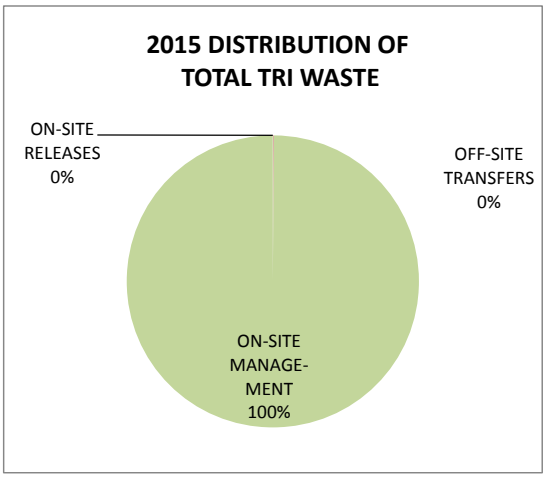
ORIENT CORPORATION, CONT.

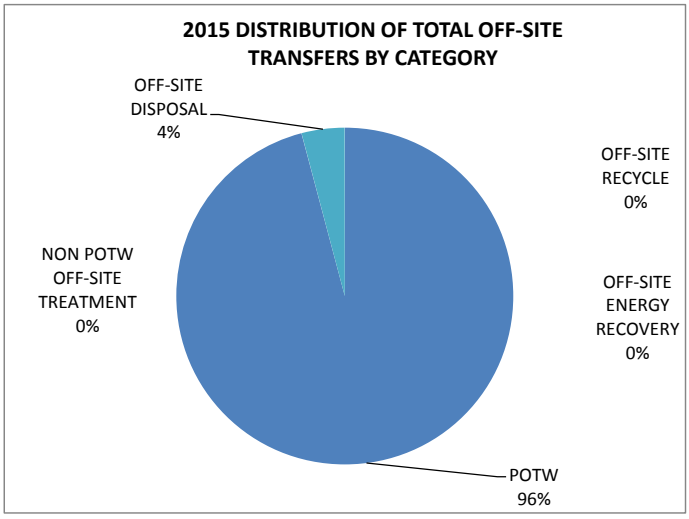
GRAPHICAL INFORMATION:

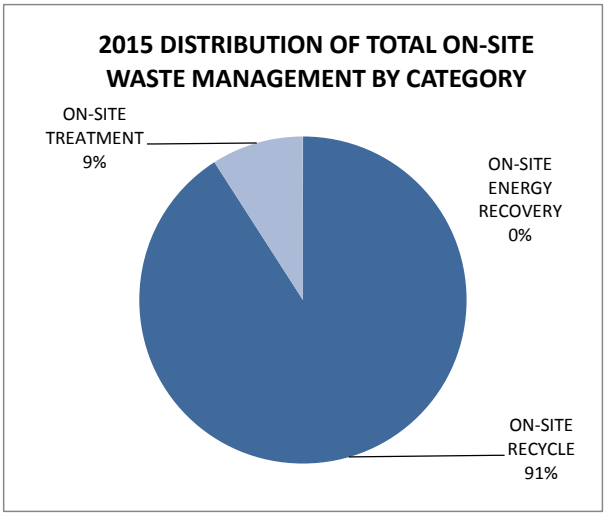






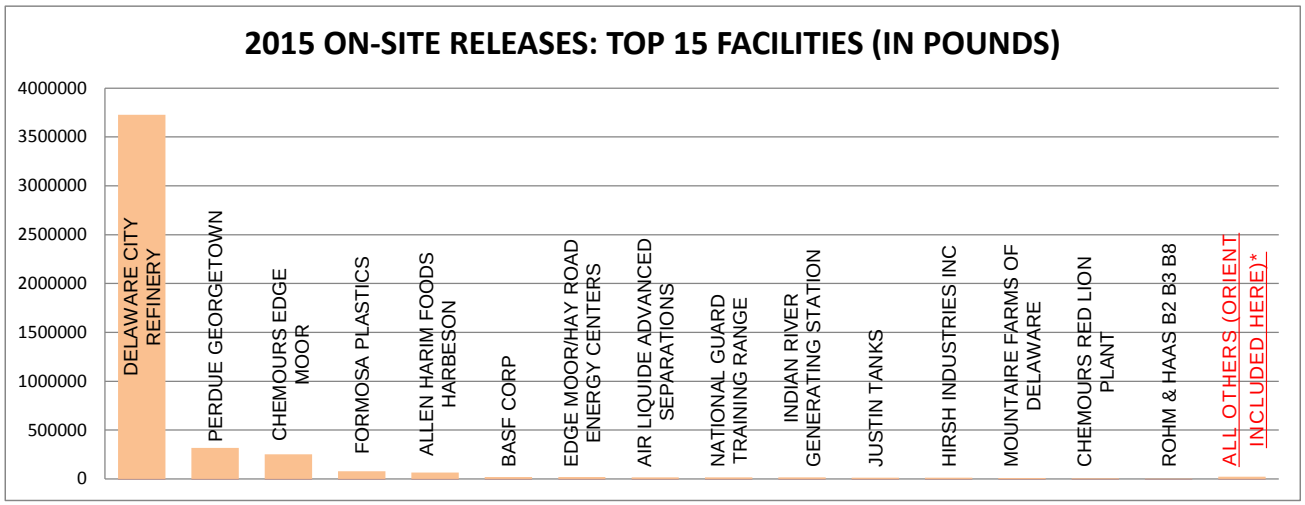


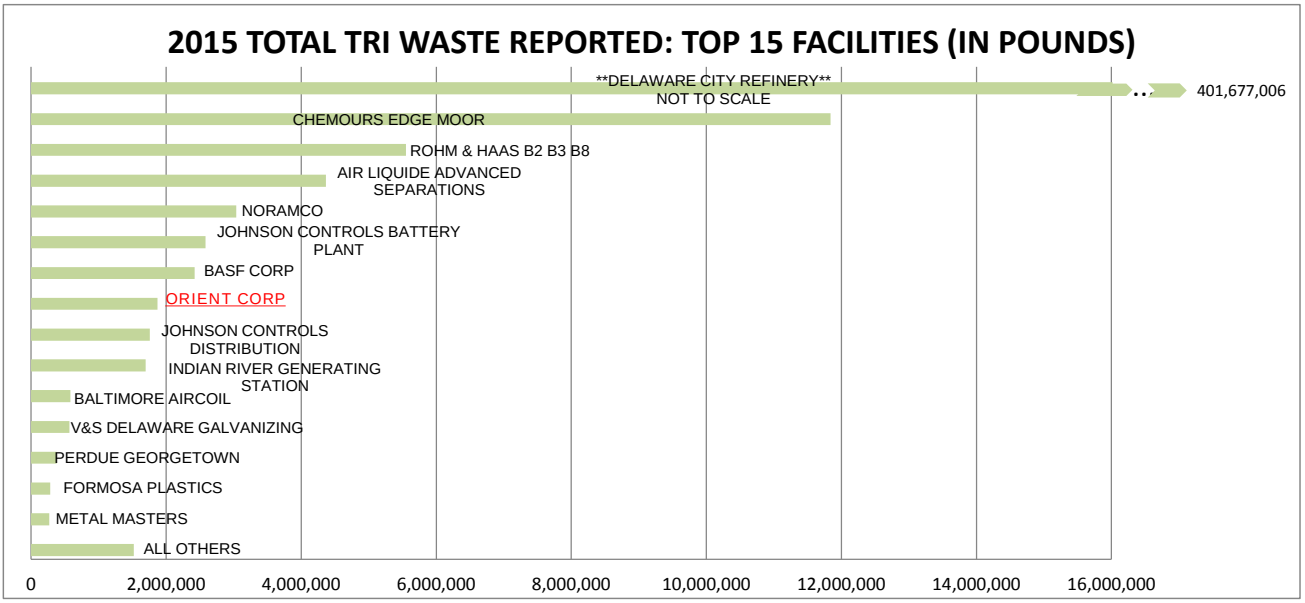




ORIENT, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES





NOTABLE 2015 NATIONAL RANKINGS:

Orient ranks 2nd in the nation for on-site recycling of aniline (out of 47 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:

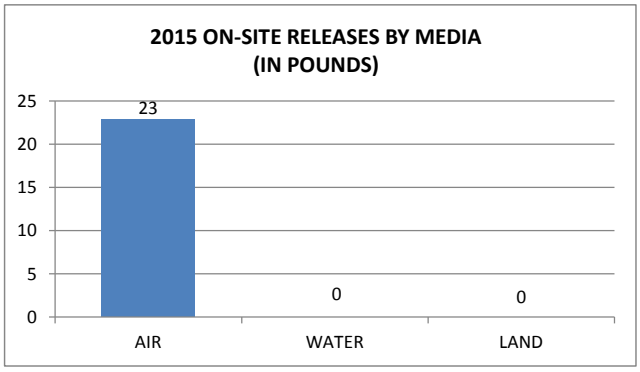
Owen Steel Company reported under the North American Industrial Classification System (NAICS) as 332312, which covers fabricated structural metal manufacturing.

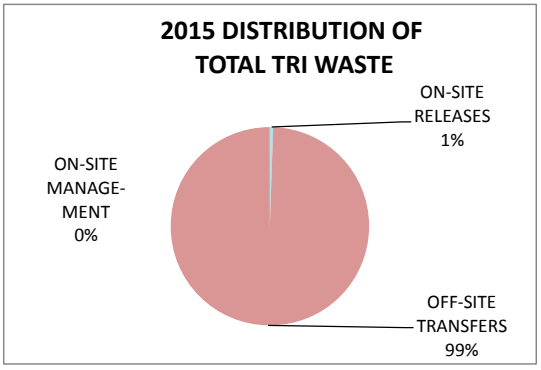
Owen Steel Company, located in Wilmington, reported to TRI for the first time in 2015. The facility reported on three chemicals in 2015, lead compounds, manganese compounds, and nickel compounds. Off-site transfers for recycling accounted for 99 % of the facility's total reportable waste, with on-site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

2015 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	110	0	YES	YES
MANGANESE COMPOUNDS	22	0	0	22	1,300	0	NO	NO
NICKEL COMPOUNDS	1	0	0	1	2,800	0	NO	YES
TOTAL	23	0	0	23	4,210	0		

GRAPHICAL INFORMATION:





OWEN STEEL COMPANY, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:

The Owen Steel Company ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

The Owen Steel Company ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

TRI FACILITY PROFILES

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 2015, 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.)

2015 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.

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 two TRI chemicals for 2015: nitrate compounds and hydrogen sulfide. Perdue's wastewater treatment plant digests ammonia and production waste from the poultry processing plant's wastewater stream and converts some of these wastes to nitrate compounds, 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.

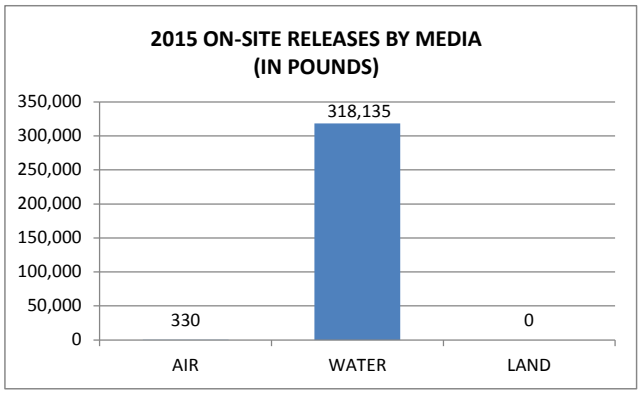
These reported on-site release amounts have varied in recent years because of changes in plant operation and in the way the amount of nitrate compounds released are estimated. Additional processing procedures beyond straight ice-packed shipping add additional organics to be treated. Therefore, product mix, processing and wastewater treatment plant operations, temperatures and other fluctuating factors affect the final release results. (see *Total On-site Releases Per Year Graph* on the next page).

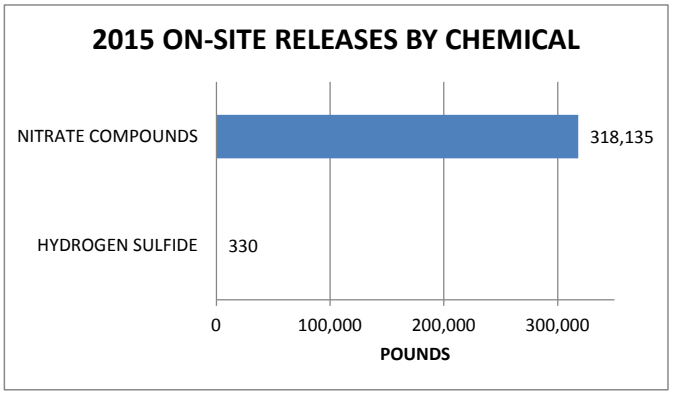
2015 TRI DATA (REPORTED IN POUNDS):

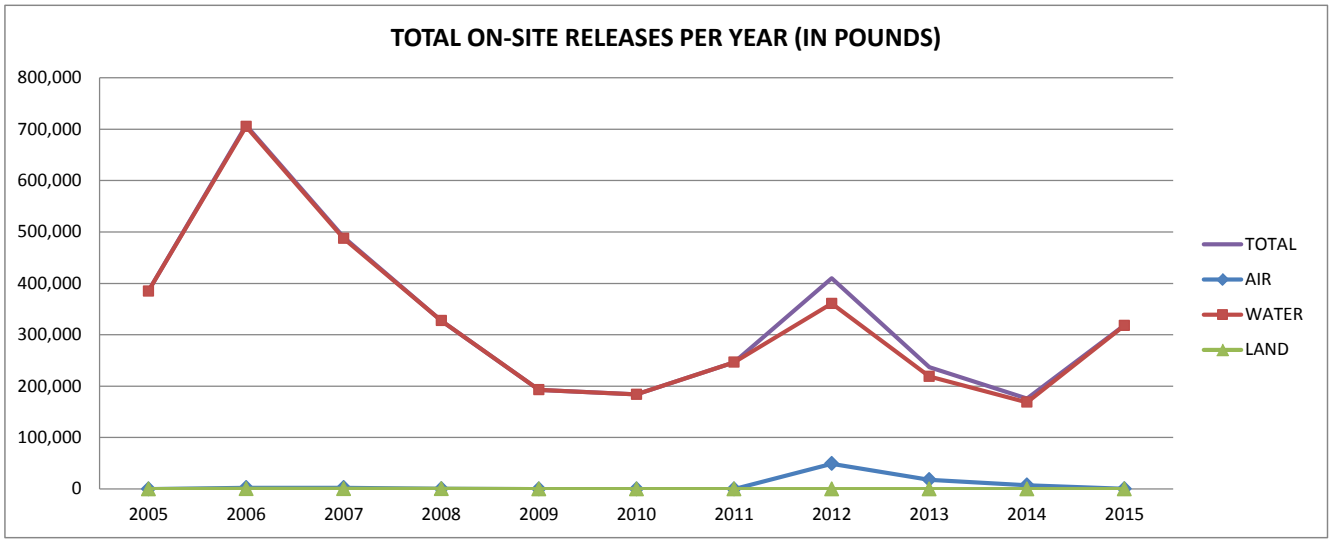
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
HYDROGEN SULFIDE	330	0	0	330	0	58,700	NO	NO
NITRATE COMPOUNDS	0	318,135	0	318,135	90	0	NO	NO
TOTAL	330	318,135	0	318,465	90	58,700		

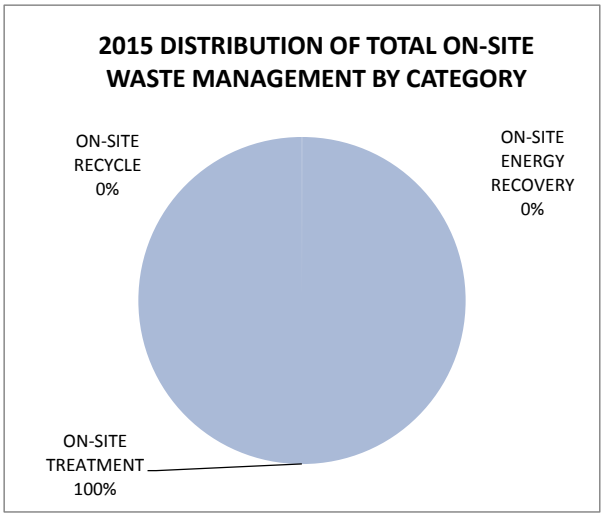
PERDUE GEORGETOWN, CONT.

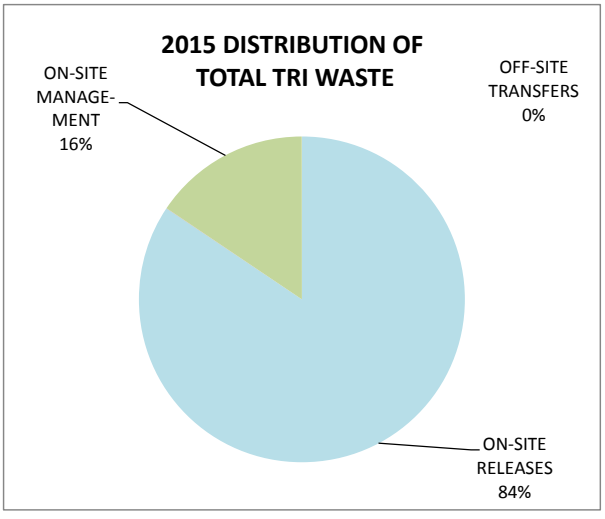
GRAPHICAL INFORMATION:





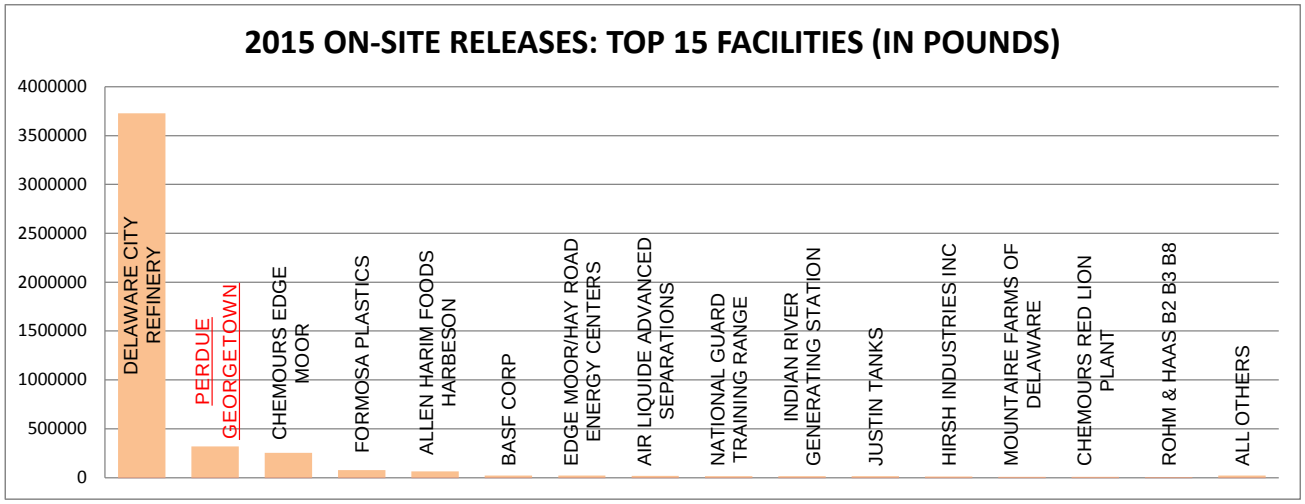


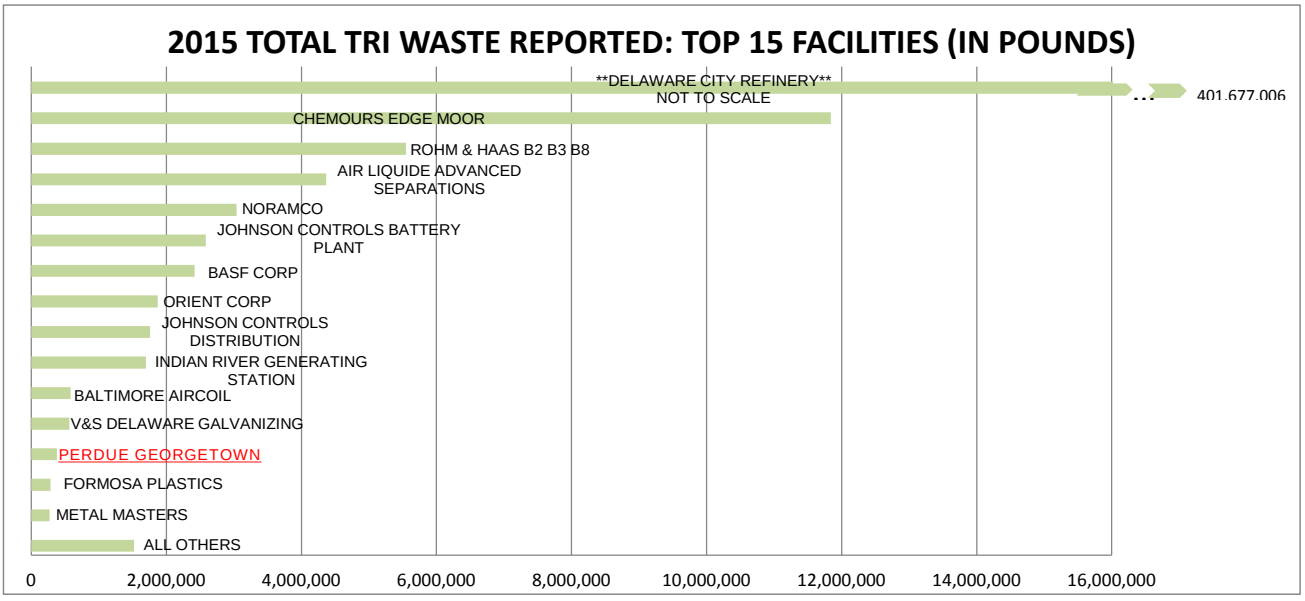




PERDUE GEORGETOWN, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

Perdue Georgetown ranks 49th in on-site release of nitrate compounds by food/beverage facilities (NAICS 311) (out of 537 facilities).

Perdue Georgetown ranks 31st in the on-site treatment of hydrogen sulfide by food/beverage facilities (NAICS 311) (out of 82 facilities).

TRI FACILITY PROFILES

PERDUE MILFORD

LOCATION/CONTACT:

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

Phone: (410)-341-2755

Contact: Andrea Staub

FACILITY OVERVIEW:

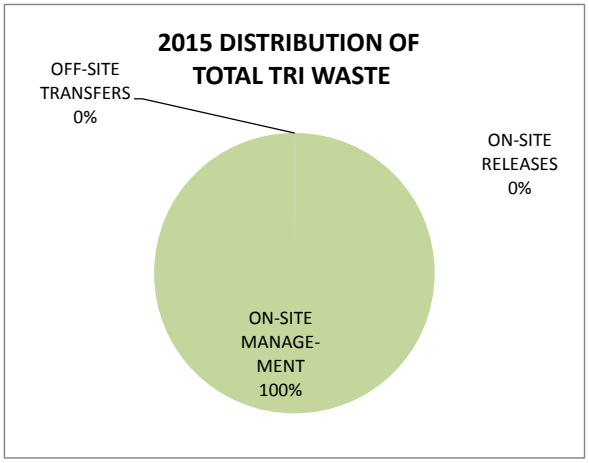
Perdue Farms is a producer of poultry products. The Milford facility processes chickens for sale to the retail market, and is an organic certified plant.

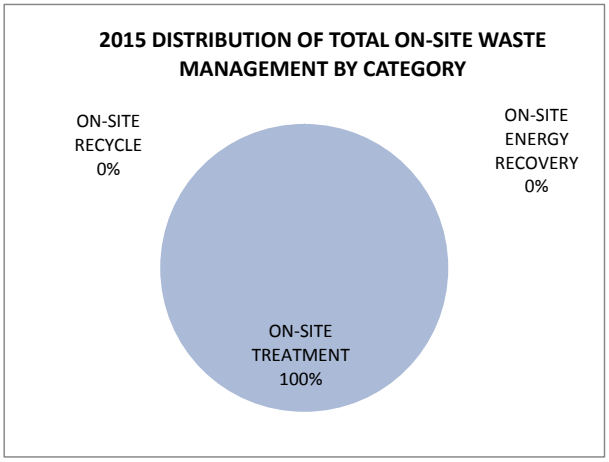
Perdue Milford has reported since 1991, previously as Conagra Broiler. From 1999 through 2006, the facility was below the reporting threshold, and no TRI reports were filed. For 2015, the facility reported on one chemical, peracetic acid, which is completely managed on-site. Peracetic acid is found in 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.

2015 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	23	46,000	NO	NO
TOTAL	0	0	0	0	23	46,000		

GRAPHICAL INFORMATION:

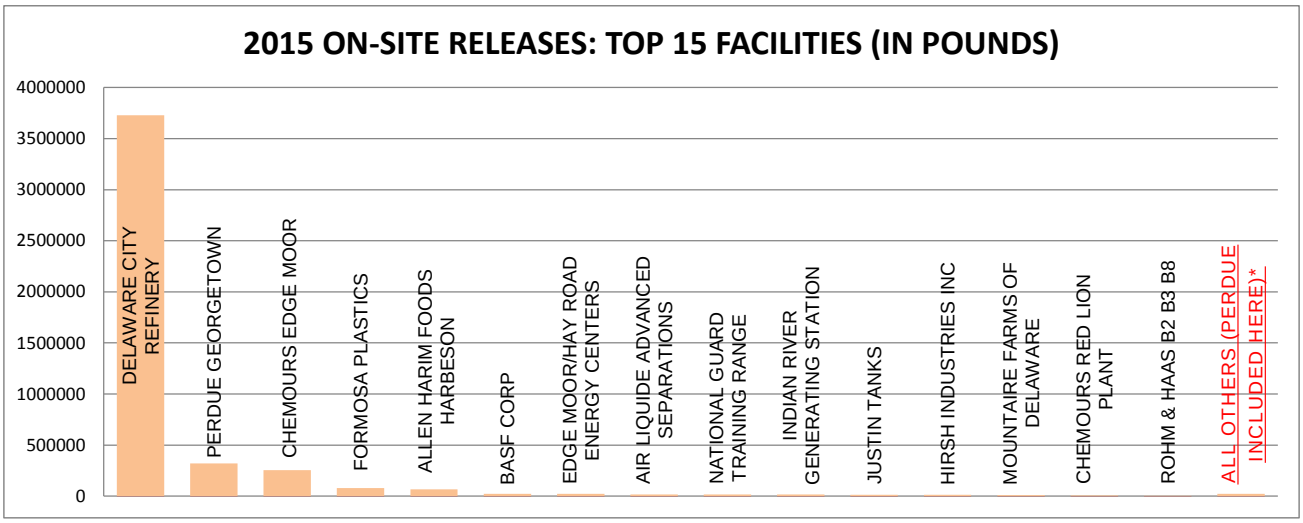




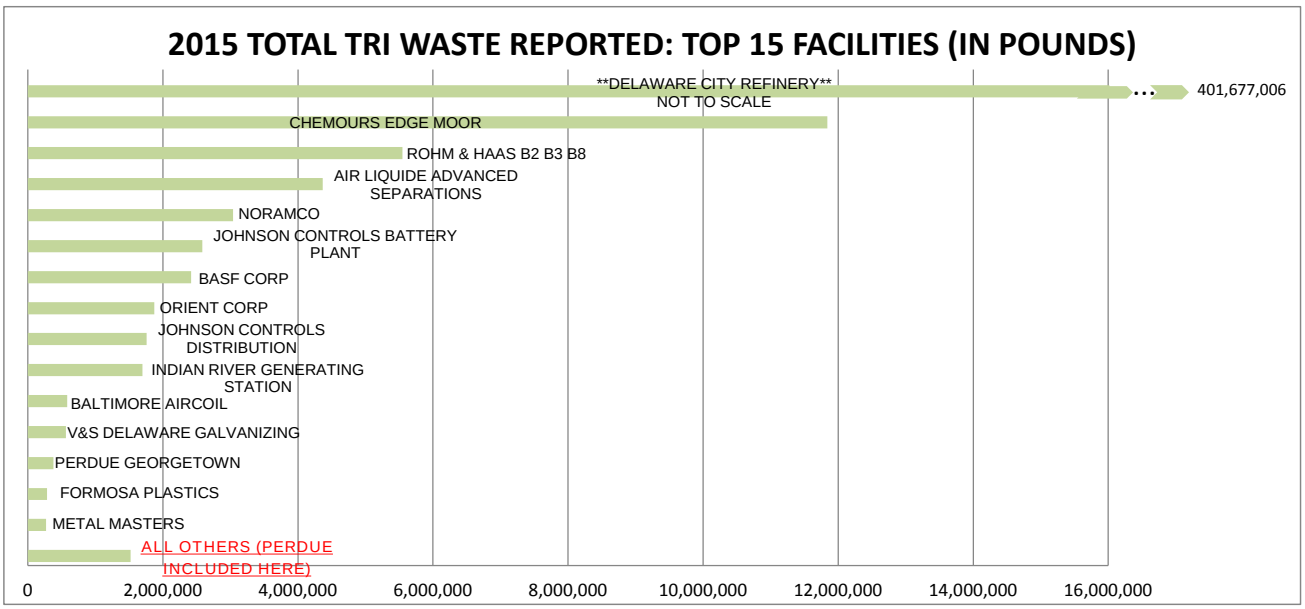
TOXICS RELEASE INVENTORY

PERDUE MILFORD, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



* Perdue Milford ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.



NOTABLE 2015 NATIONAL RANKINGS:

Perdue Milford ranks 67th for on-site treatment of peracetic acid (out of 200 facilities).

TRI FACILITY PROFILES

PICTSWEET

LOCATION/CONTACT:

Address: 18215 Wesley Church Road
Bridgeville, DE 19933

Phone: (731)-663-7600

Contact: Allen Watts

FACILITY OVERVIEW:

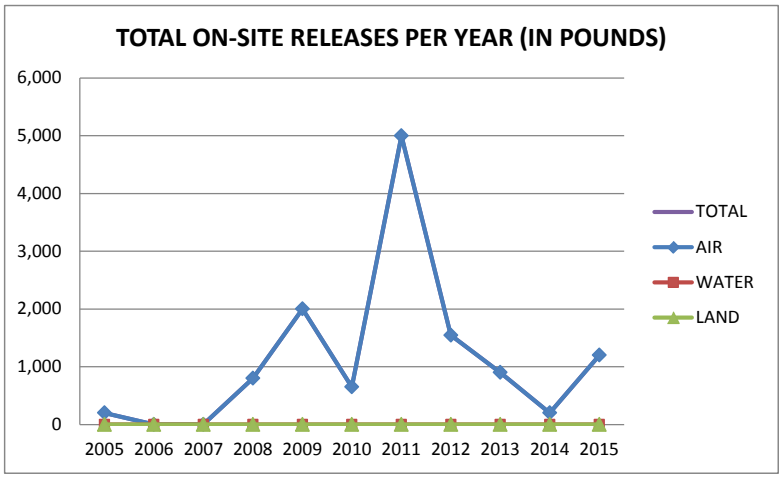
Pictsweet reports under the North American Industrial Classification System (NAICS) as 311411, which covers the manufacturing of frozen fruit, juice and vegetables.

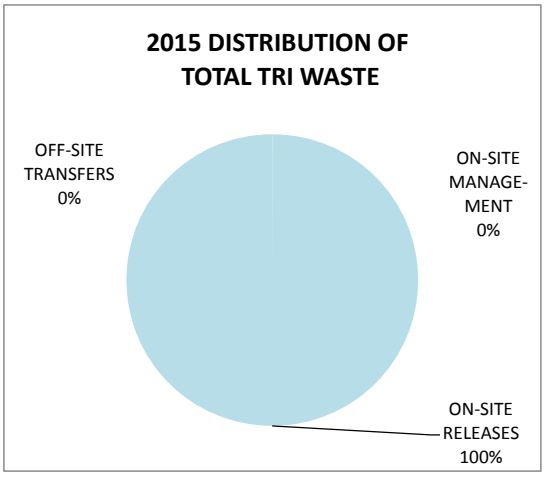
The facility has reported since 1989, previously as Birds Eye Foods and Agrilink Foods. Pictsweet reported one TRI chemical in 2015, ammonia. Ammonia is used in refrigeration equipment, and releases are typical through normal service maintenance, leaks, and other losses that occur in the system. On-site release amounts of ammonia have varied year to year (see *Total On-site Releases Per Year Graph*).

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
AMMONIA	1,200	0	0	1,200	0	0	NO	NO
TOTAL	1,200	0	0	1,200	0	0		

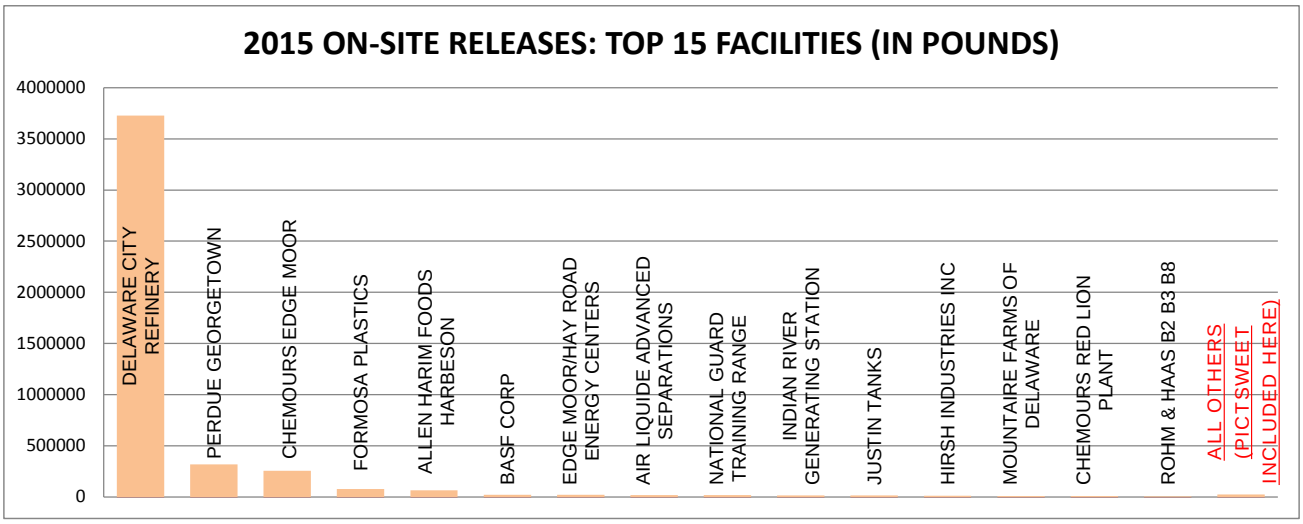
GRAPHICAL INFORMATION:





PICTSWEET, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:



Pictsweet ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

TRI FACILITY PROFILES

PPG INDUSTRIES

LOCATION/CONTACT:

Address: 1886 Lynnbury Woods Road
Dover, DE 19720

Phone: (302)-672-2161

Contact: Neal Nicastro

FACILITY OVERVIEW:

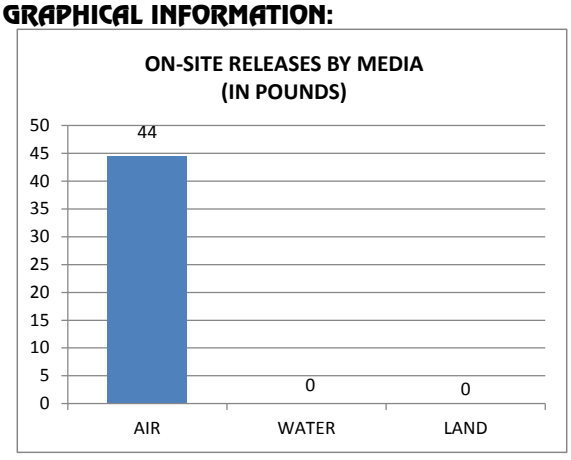
PPG Industries reported under the North American Industrial Classification System (NAICS) as 325510, which covers paint and coating manufacturing.

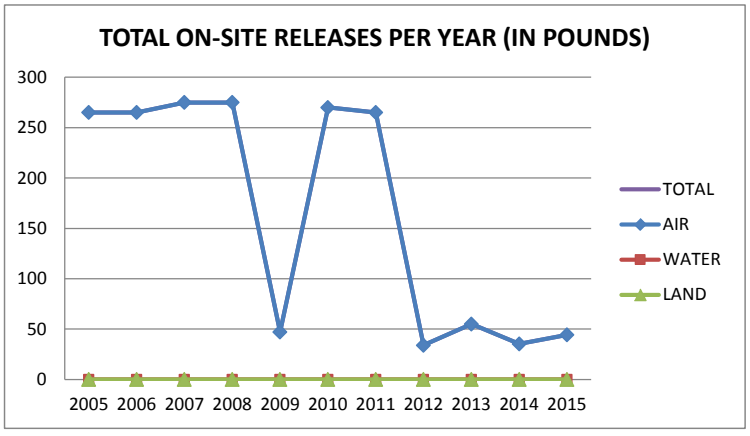
PPG Industries has reported since 1987. The facility reported on three chemicals in 2015, with on-site releases only to air. The chemicals reported are utilized as raw materials in the paint making process. The raw materials are mixed together to make architectural paint. On-site releases accounted for less than 1% of all waste activities in 2015. Releases for 2005 through 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).

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
CERTAIN GLYCOL ETHERS	0	0	0	0	5,139	0	NO	NO
ETHYLENE GLYCOL	0	0	0	0	1,932	0	NO	NO
LEAD COMPOUNDS	0	0	0	0	4,724	0	NO	NO
ZINC COMPOUNDS	44	0	0	44	4,968	0	NO	NO
TOTAL	44	0	0	44	16,763	0		

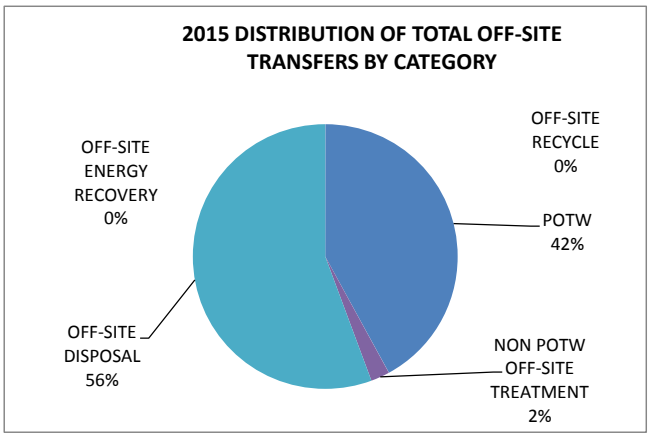
GRAPHICAL INFORMATION:

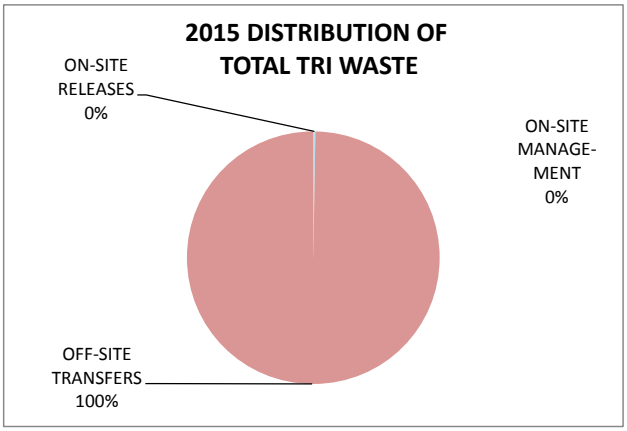




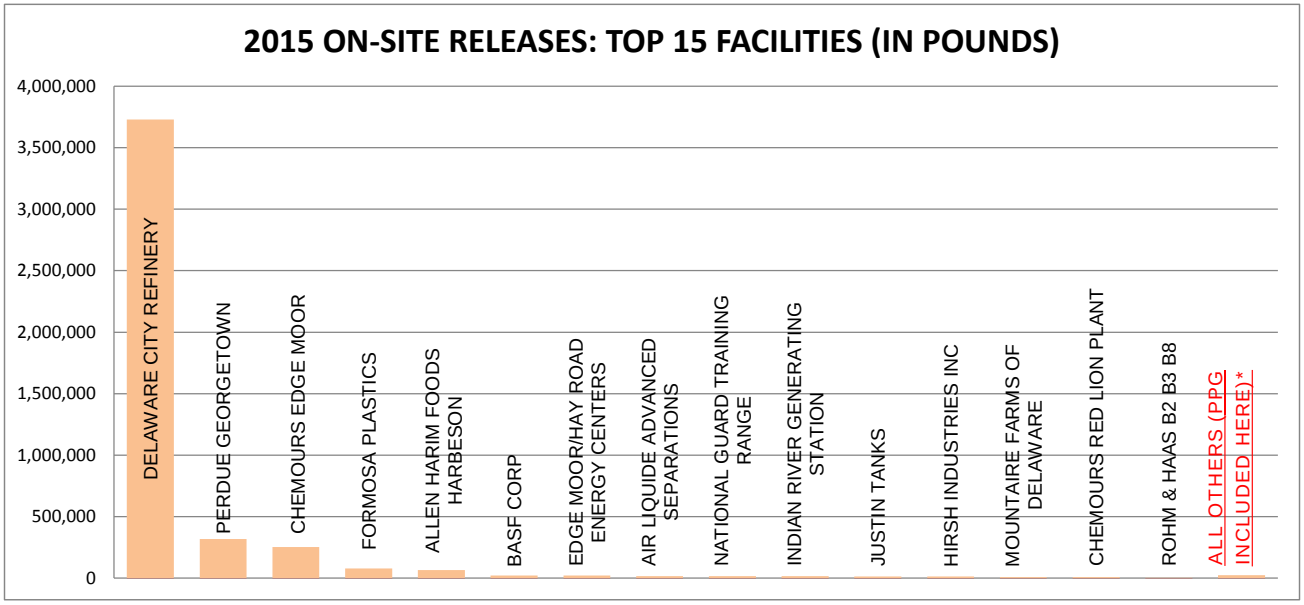
PPG INDUSTRIES, CONT.

GRAPHICAL INFORMATION CONT.:





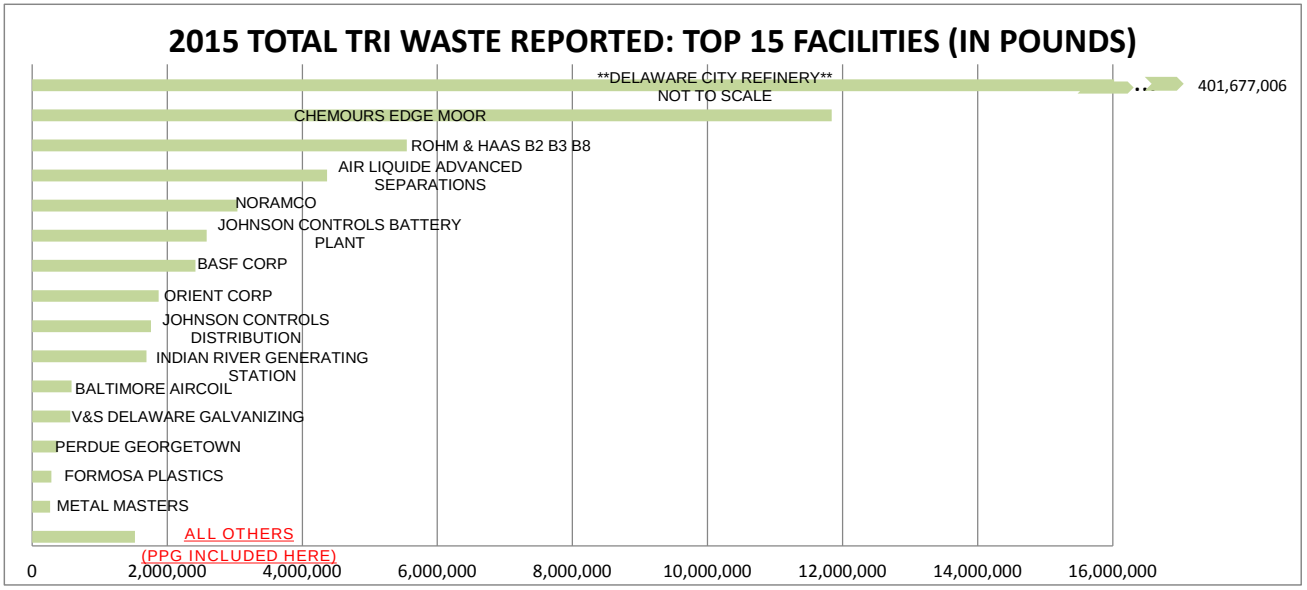
COMPARISON TO OTHER DELAWARE TRI FACILITIES:



*PPG Industries ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site. Comparisons only include facilities reporting on Form R.

PPG INDUSTRIES, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES CONT.:



PPG Industries ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.

NOTABLE 2015 NATIONAL RANKINGS:

PPG Industries ranks 19th in the off-site transfer of certain glycol ethers to publicly owned treatment works (POTW) for chemical facilities (NAICS 325) (out of 653 facilities).

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.

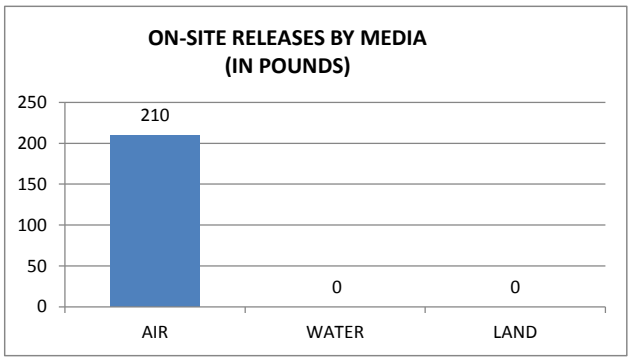
Prince Minerals LLC has reported since 1998, previously as American Minerals. The facility reported on 3 chemicals in 2015, all metal compounds, with on-site releases only to air. Reports for barium compounds and nickel compounds were submitted on Form A. Form A reports do not include waste management 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.)

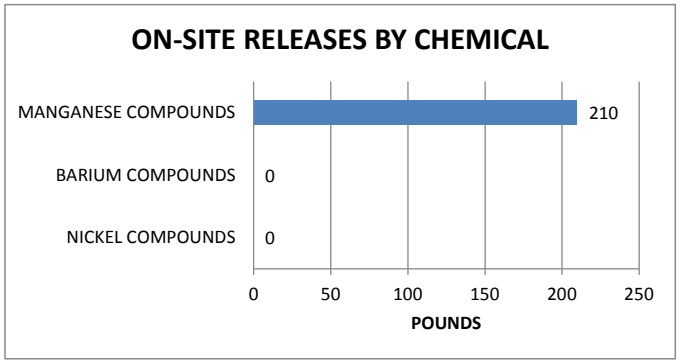
2015 TRI DATA (REPORTED IN POUNDS):

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	210	0	0	210	244	0	NO	NO
NICKEL COMPOUNDS*	0	0	0	0	0	0	NO	YES
TOTAL	210	0	0	210	244	0		

*Reported on short Form A

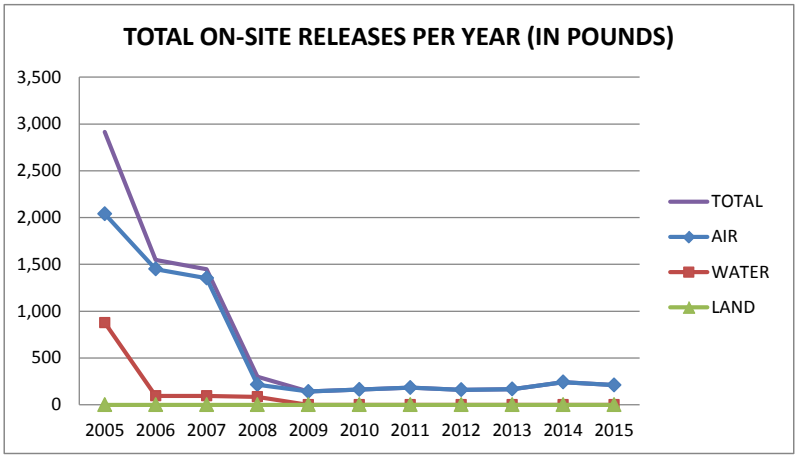
GRAPHICAL INFORMATION:

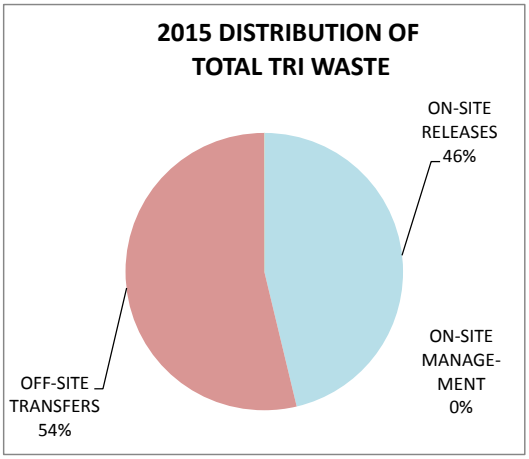




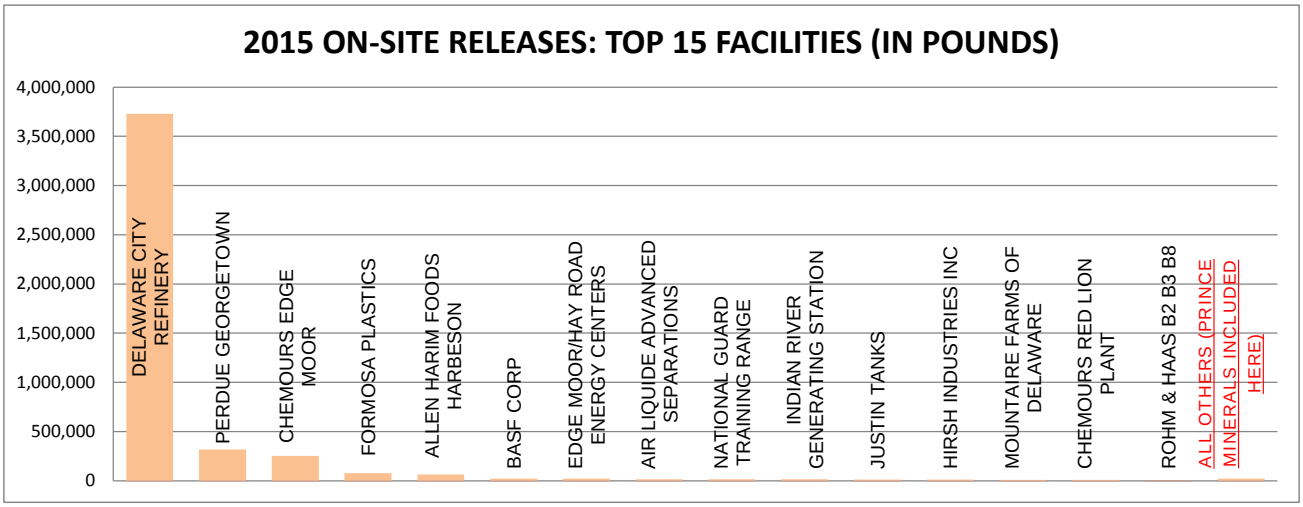
PRINCE MINERALS LLC, CONT.

GRAPHICAL INFORMATION CONT.:





COMPARISON TO OTHER DELAWARE TRI FACILITIES:



Prince Minerals LLC ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for less than 72,000 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 2015. 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.

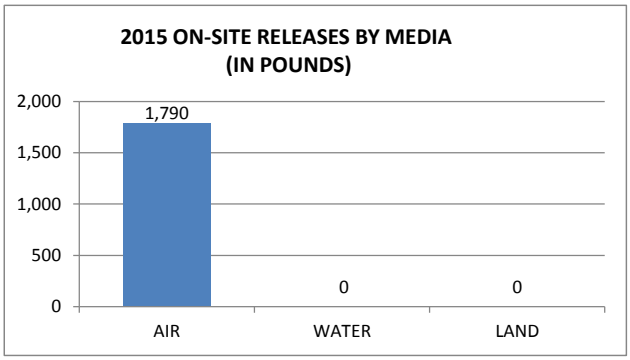
2015 TRI DATA (REPORTED IN POUNDS):

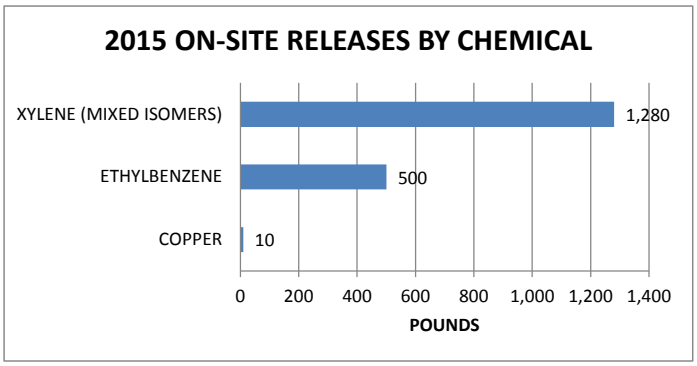
	ON-SITE RELEASES							
CHEMICAL	AIR	WATER	LAND	TOTAL	OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
COPPER	10	0	0	10	8,810	0	NO	NO
ETHYLBENZENE	500	0	0	500	1,200	24,000	NO	YES
XYLENE (MIXED ISOMERS)	1,280	0	0	1,280	4,600	96,000	NO	NO
TOTAL	1,790	0	0	1,790	14,610	120,000		

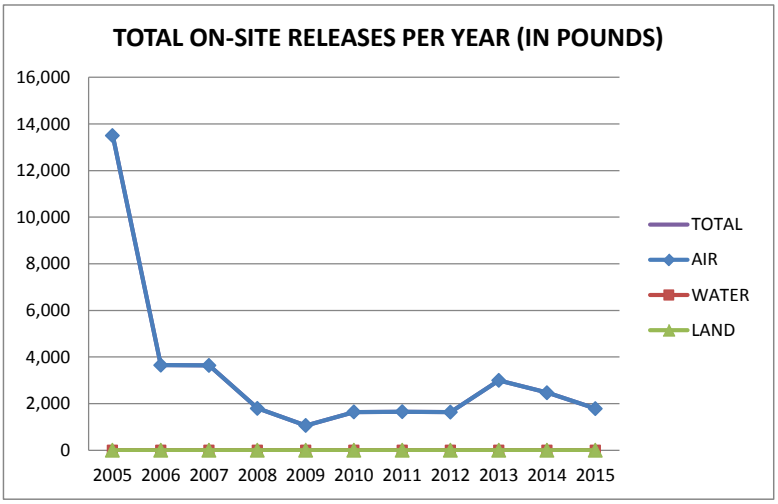
TOXICS RELEASE INVENTORY

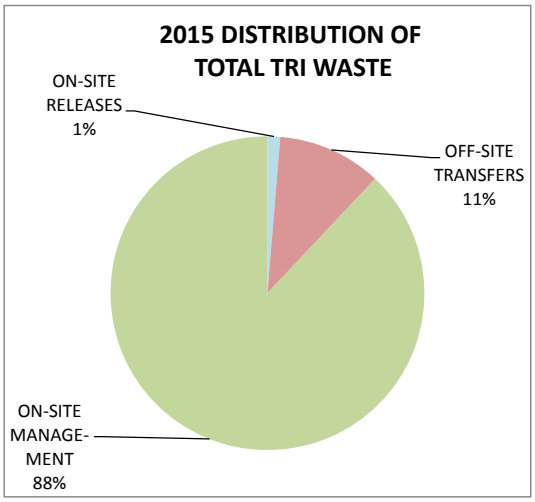
ROGERS CORP,

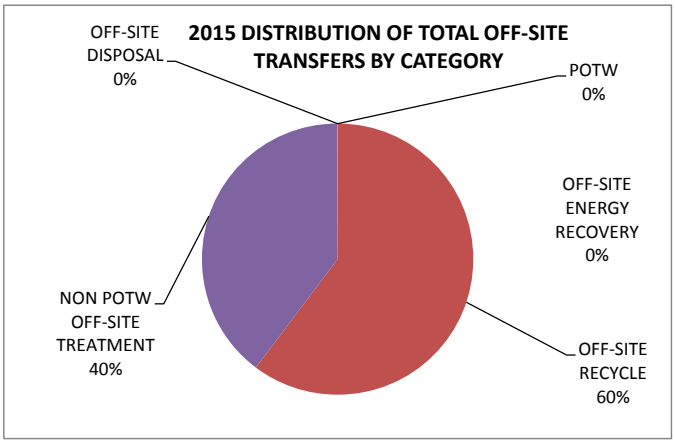
GRAPHICAL INFORMATION:

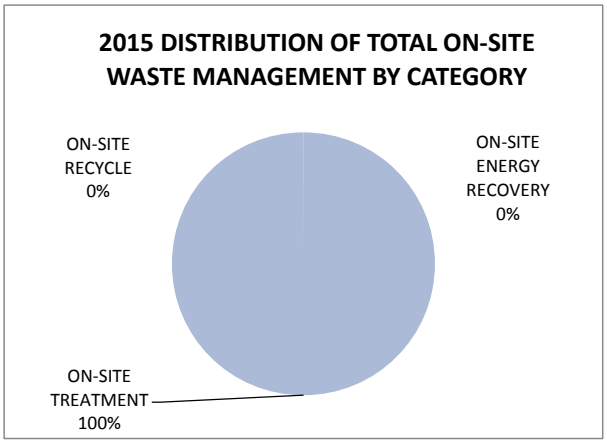






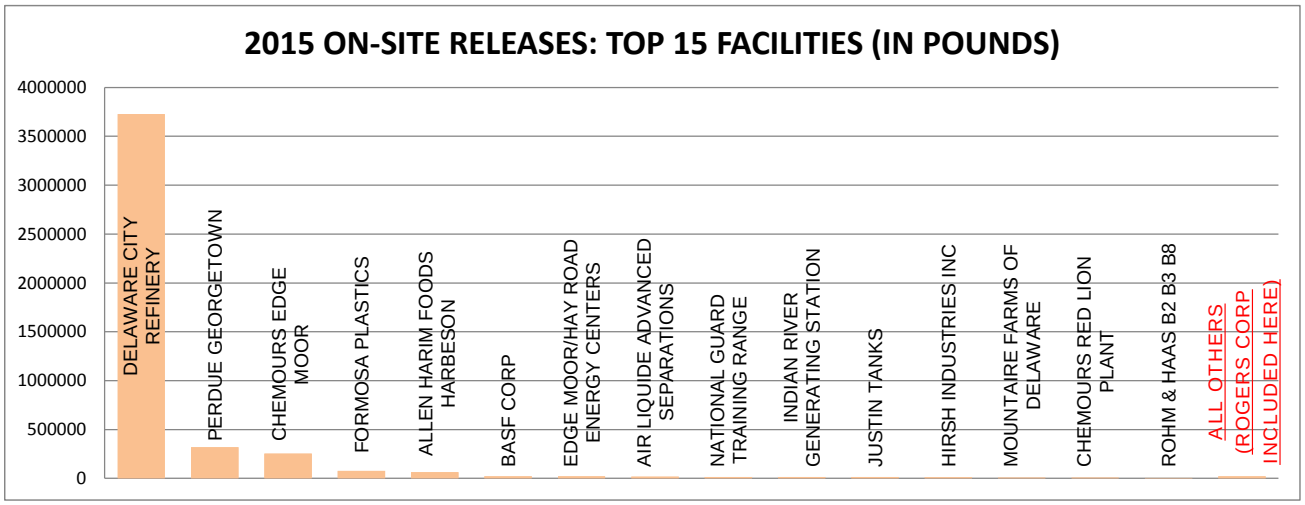


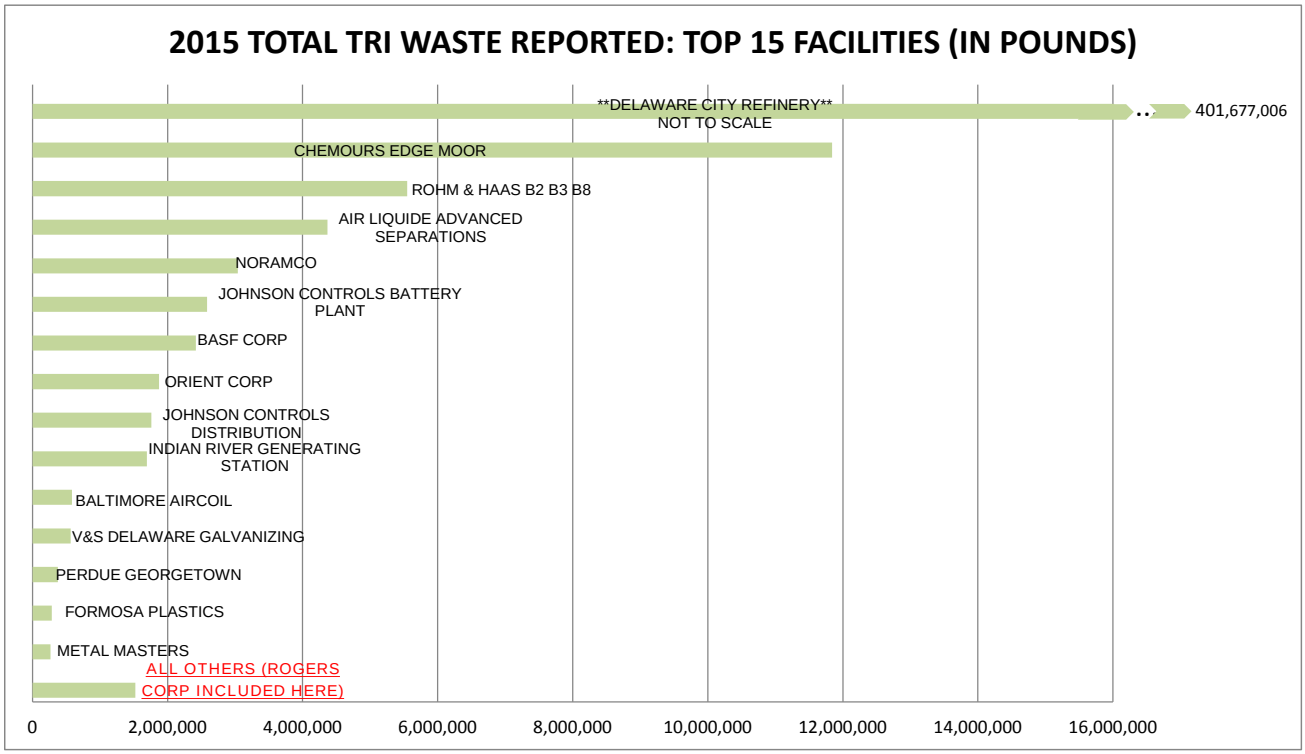




ROGERS CORP, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

Rogers Corp. ranks 14th in the on-site treatment of xylene (mixed isomers) for plastic and rubber manufacturing facilities (NAICS 326) (out of 65 facilities).

Rogers Corp. ranks 40th in on-site releases of xylene (mixed isomers) for plastic and rubber manufacturing facilities (NAICS 326) (out of 65 facilities).

TRI FACILITY PROFILES

ROHM & HAAS B2, B3, B8

LOCATION/CONTACT:

Address: 451 Bellevue Road
Newark, DE 19713

Phone: (302)-366-0500

Contact: Kelly Block

FACILITY OVERVIEW:

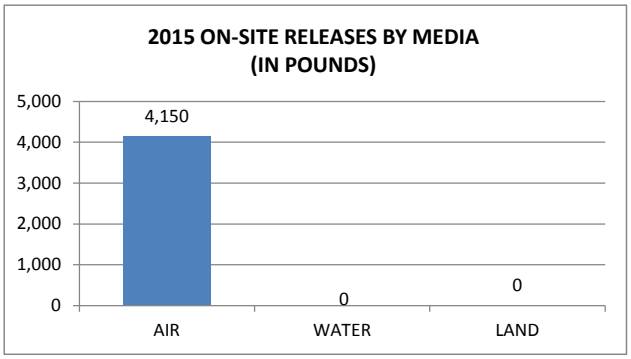
Rohm& Haas (Buildings 2, 3, and 8) manufactures polishing pads and slurries for the semiconductor, electronics, and glass industries.

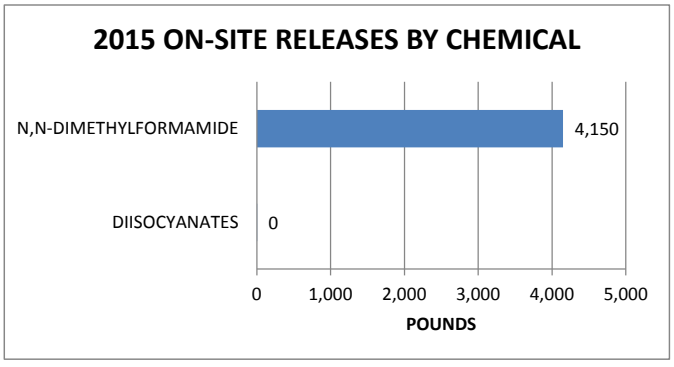
The facility has reported since 1987, previously as Rodel. Rohm and Haas reported on two TRI chemicals for 2015. N,N-Dimethylformamide (DMF) is used as a solvent carrier in the polishing pad manufacturing process, and accounted for virtually all of their on-site releases. Releases of DMF mostly occur 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).

2015 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	7,374	0	NO	NO
N,N-DIMETHYLFORMAMIDE	4,150	0	0	4,150	1,304,303	4,233,851	NO	NO
TOTAL	4,150	0	0	4,150	1,311,677	4,233,851		

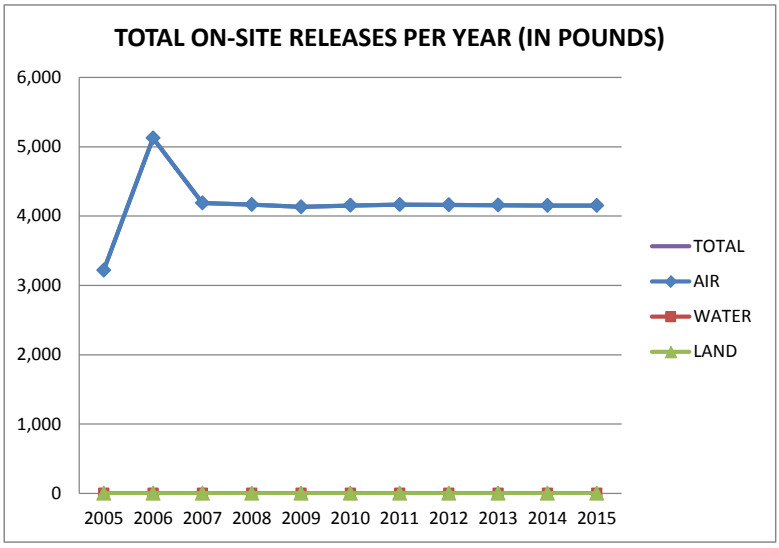
GRAPHICAL INFORMATION:

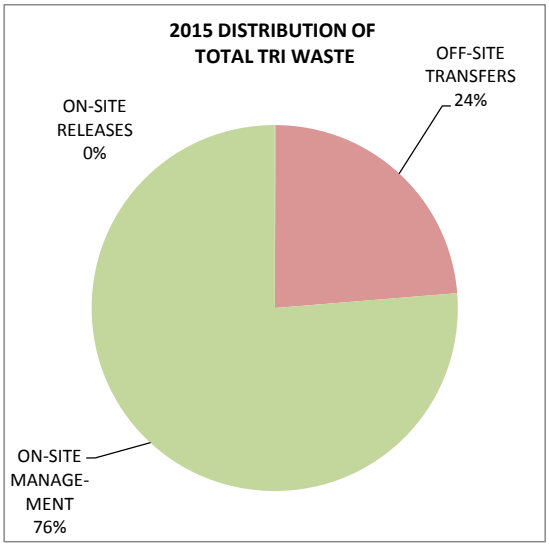


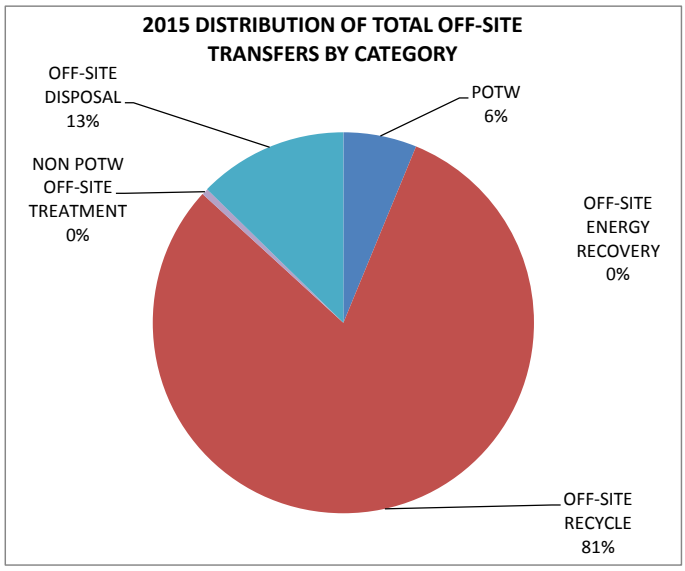


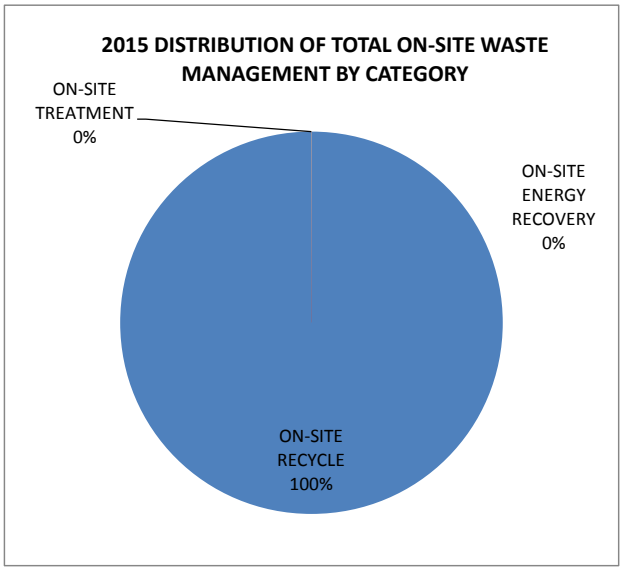
ROHM & HAAS B2, B3, B8, CONT.

GRAPHICAL INFORMATION:





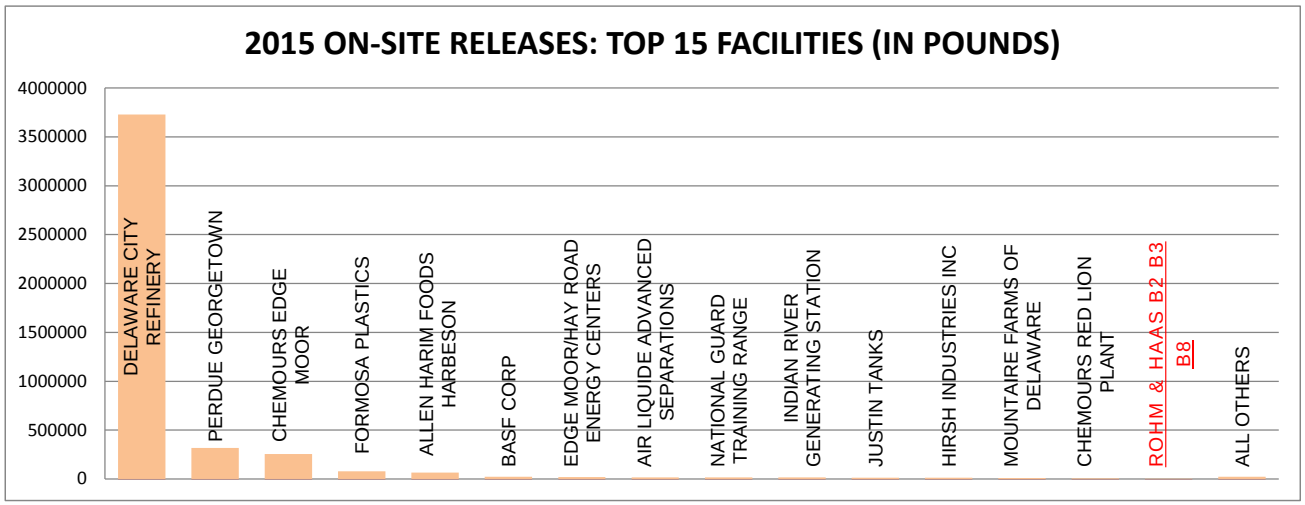


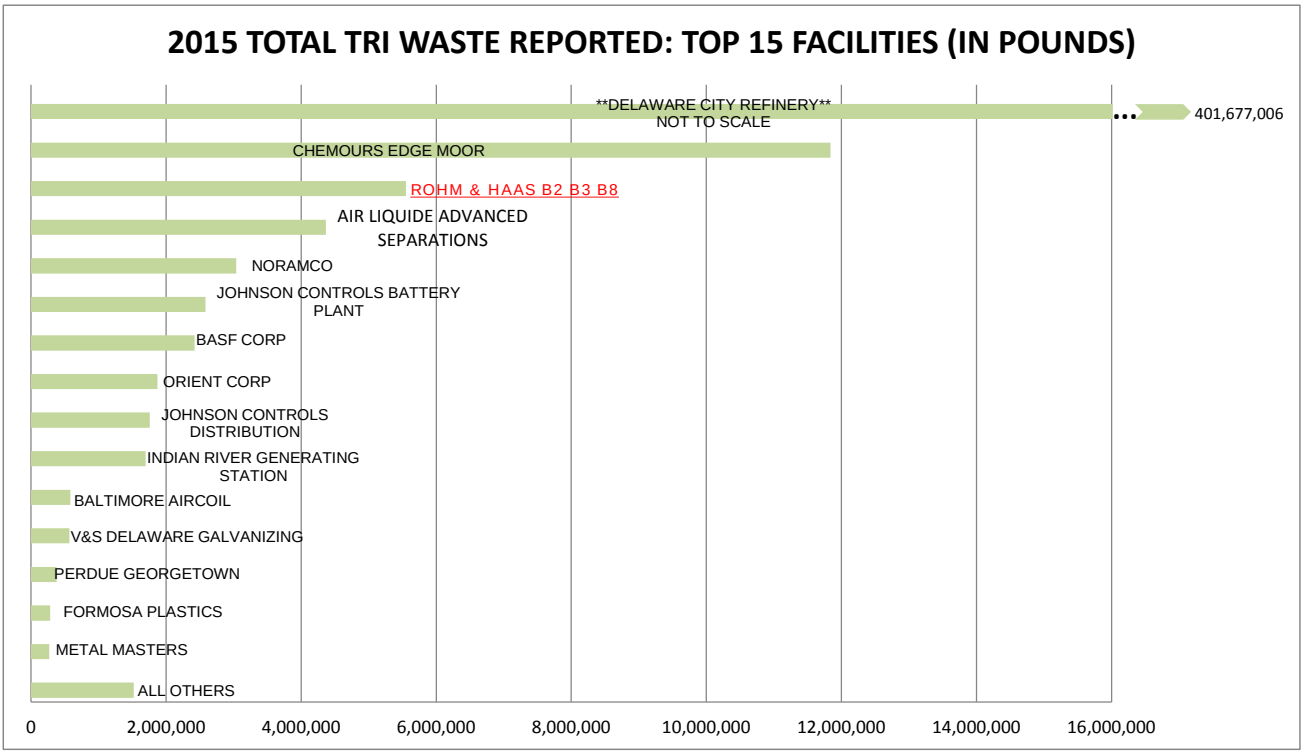


TRI FACILITY PROFILES

ROHM & HAAS B2, B3, B8, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

Rohm & Haas ranks 5th for off-site transfers of n,n-dimethylformamide (out of 155 facilities).

Rohm & Haas ranks 2nd for on-site recycling of n,n-dimethylformamide (out of 155 facilities).

TRI FACILITY PROFILES

ROHM & HAAS B5, B6

LOCATION/CONTACT:

Address: 351 Bellevue Road
Newark, DE 19713

Phone: (302)-366-0500

Contact: Kelly Block

FACILITY OVERVIEW:

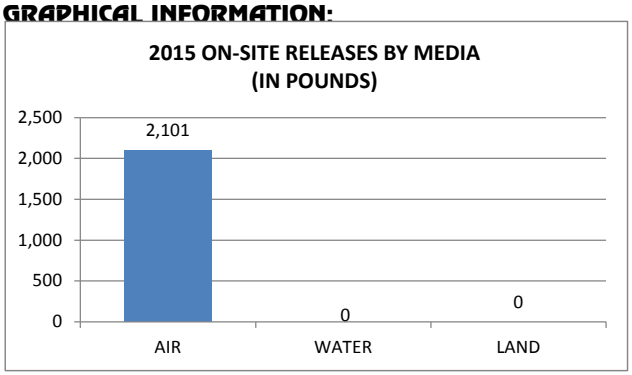
Rohm& Haas (Buildings 5 and 6) manufactures polishing pads for the semiconductor and electronics industries. Rohm & Haas (Buildings 5 and6) has reported since 1995, formerly as the Rodel Technical Center. For 2015, the facility reported 3 chemicals, with n-methyl-2-pyrrolidone (NMP) accounting for 99.9% 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 3% being released on-site to air.

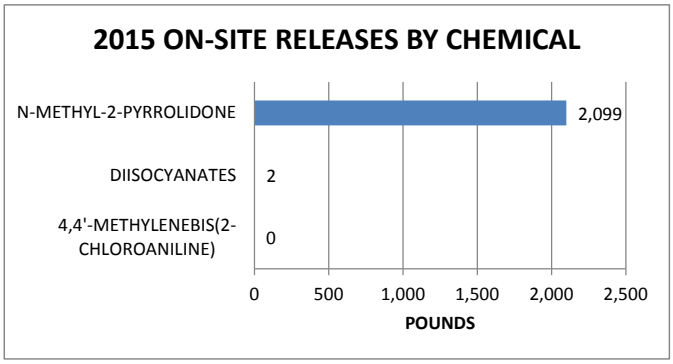
For 2015, off-site waste disposal activities went from RCRA incineration to waste to energy incineration which changed the mode of disposal to storage only now.

2015 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	2,786	0	NO	YES
DIISOCYANATES	2	0	0	2	15,503	0	NO	NO
N-METHYL-2-PYRROLIDONE	2,099	0	0	2,099	69,827	0	NO	NO
TOTAL	2,101	0	0	2,101	88,116	0		

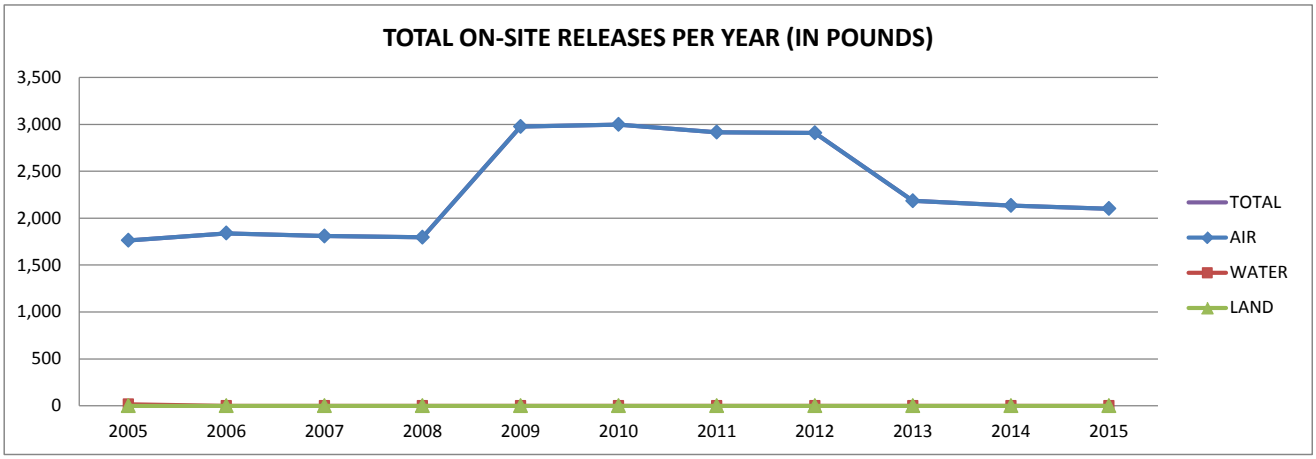
GRAPHICAL INFORMATION:

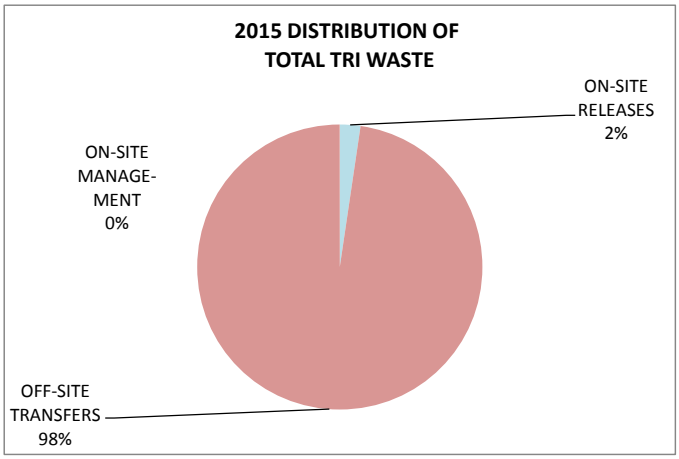


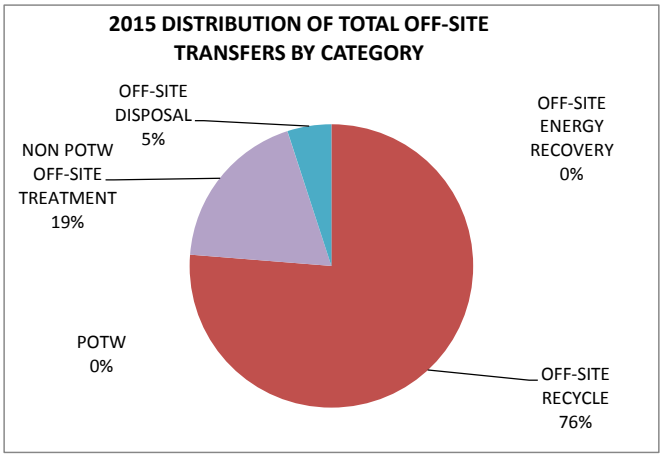


ROHM & HAAS B5, B6 CONT.

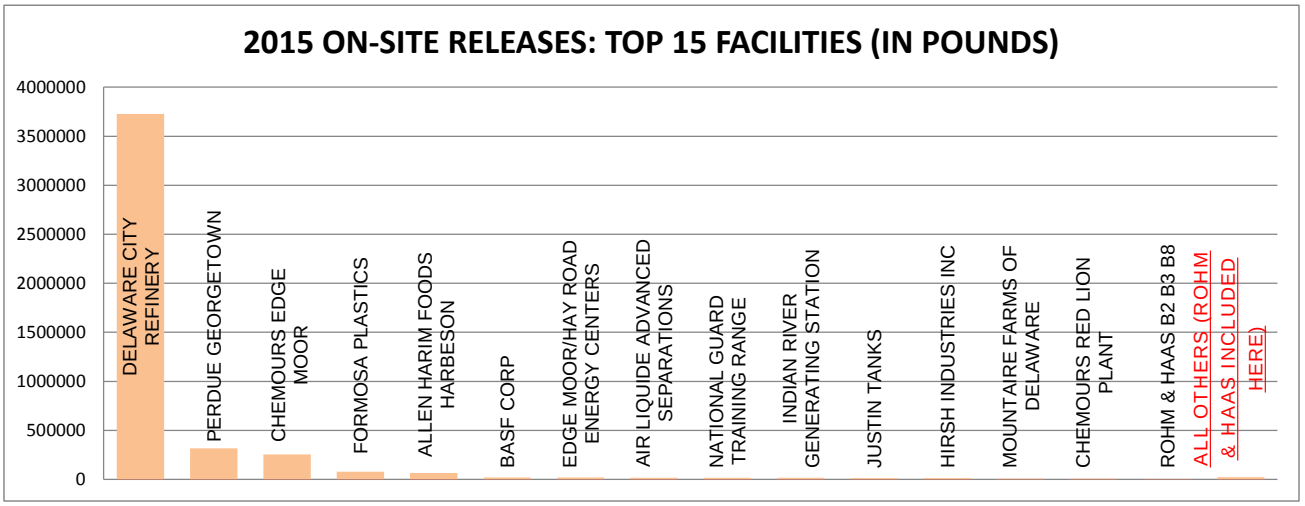
GRAPHICAL INFORMATION:





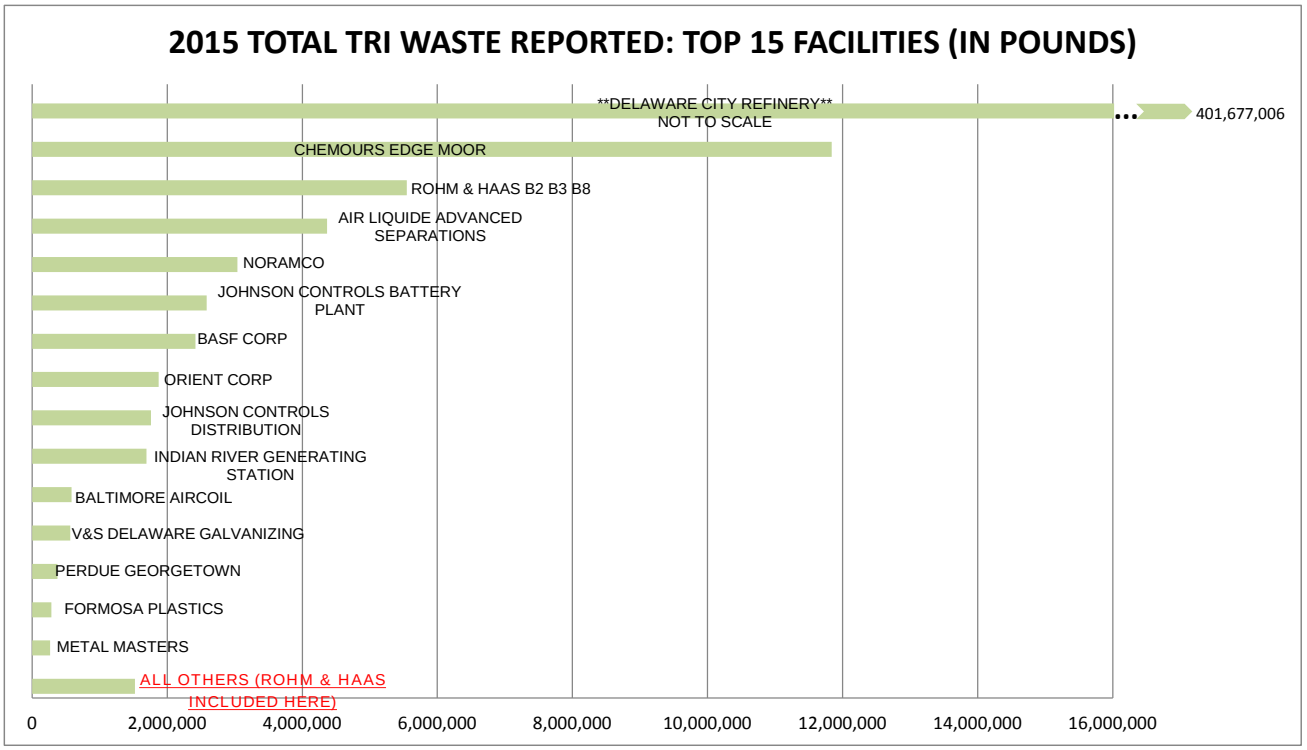


COMPARISON TO OTHER DELAWARE TRI FACILITIES:



ROHM & HAAS B5, B6 CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES, CONT.:



NOTABLE 2015 NATIONAL RANKINGS:

Rohm & Haas ranks 88th for on-site releases of n-methyl-2-pyrrolidone (out of 385 facilities).

Rohm & Haas ranks 71st for off-site transfers of n-methyl-2-pyrrolidone (out of 385 facilities).

TRI FACILITY PROFILES

ROHM & HAAS B7, B15

LOCATION/CONTACT:

Address: 50 Bellevue Road
Newark, DE 19713

Phone: (302)-366-0500

Contact: Kelly Block

FACILITY OVERVIEW:

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

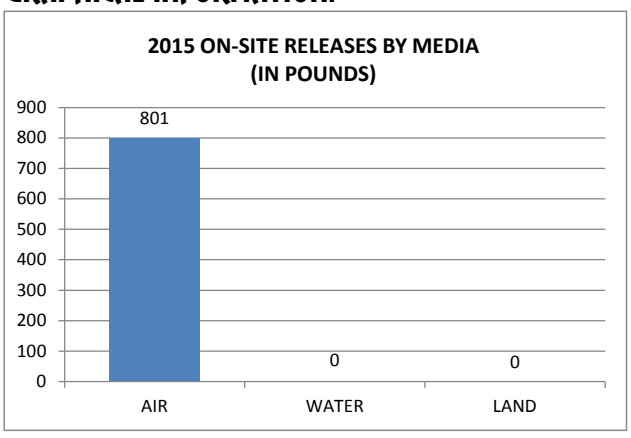
Rohm & Haas (Buildings 7 and B15) have reported since 2005, formerly as the Rodel Building 7. For 2015, the facility reported 2 chemicals, with n-methyl-2-pyrrolidone (NMP) accounting for >99% of all on-site releases. NMP is utilized in cleaning equipment used for manufacturing.

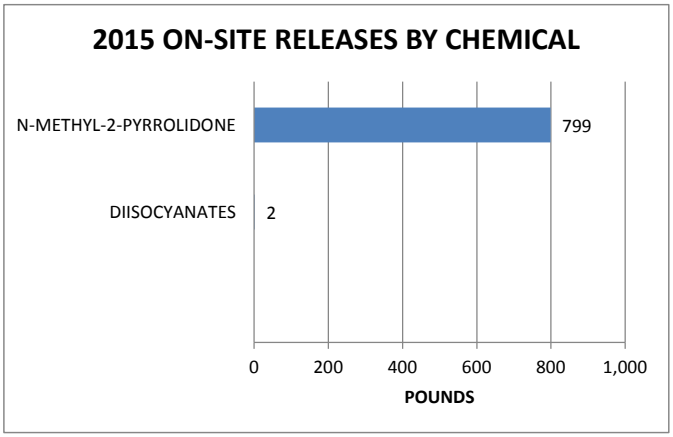
For 2015, off-site waste disposal activities went from RCRA incineration to waste to energy incineration which changed the mode of disposal to storage only now.

2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
DIISOCYANATES	2	0	0	2	18,626	0	NO	NO
N-METHYL-2-PYRROLIDONE	799	0	0	799	18,566	0	NO	NO
TOTAL	801	0	0	801	37,192	0		

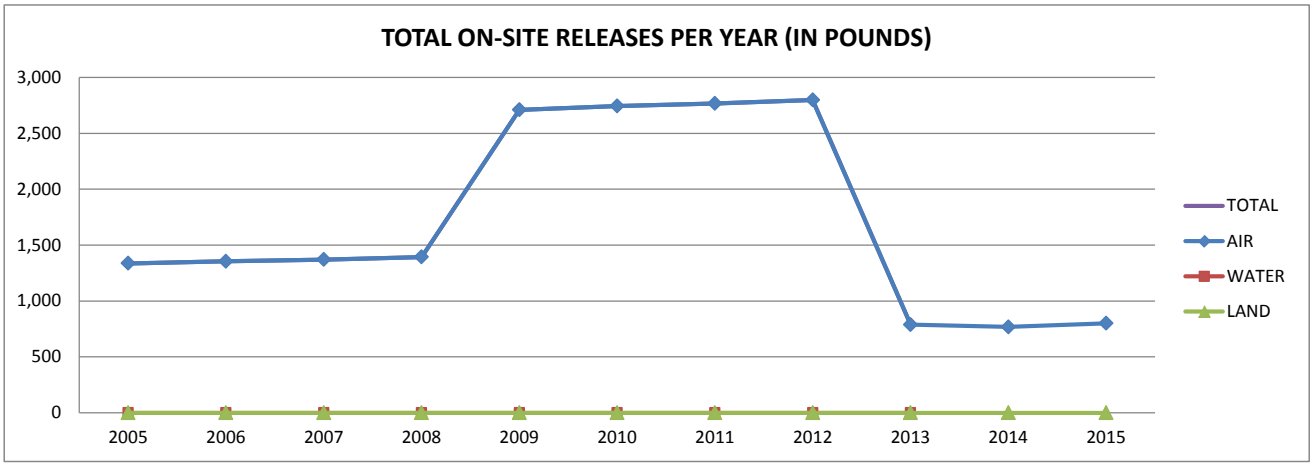
GRAPHICAL INFORMATION:

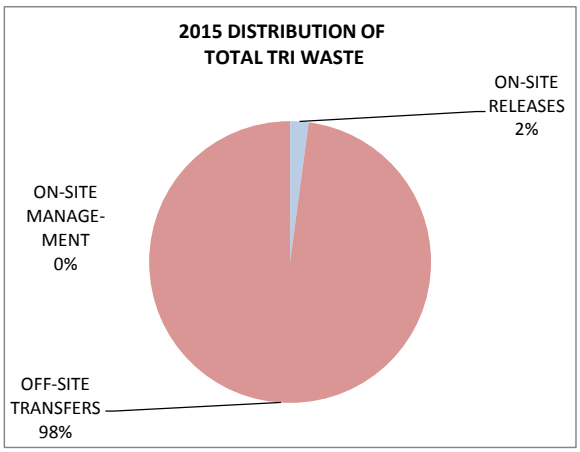


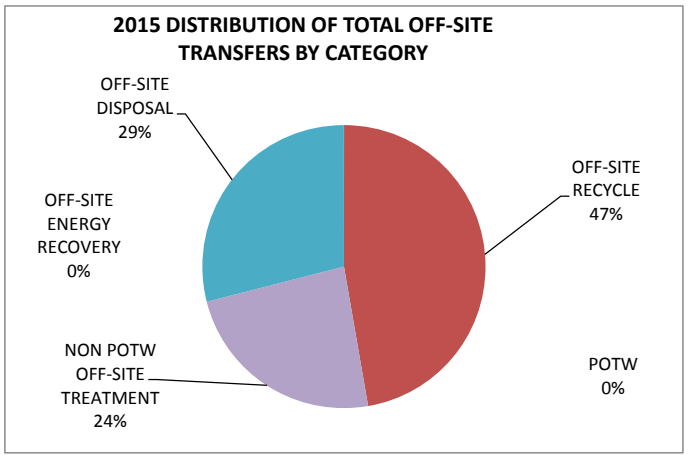


ROHM & HAAS B7, B15, CONT.

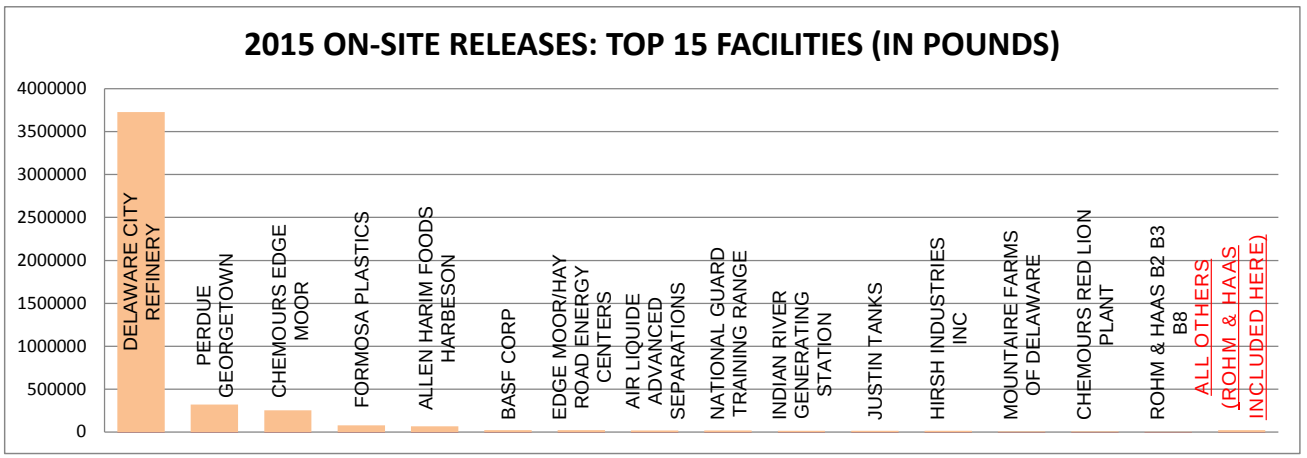
GRAPHICAL INFORMATION:





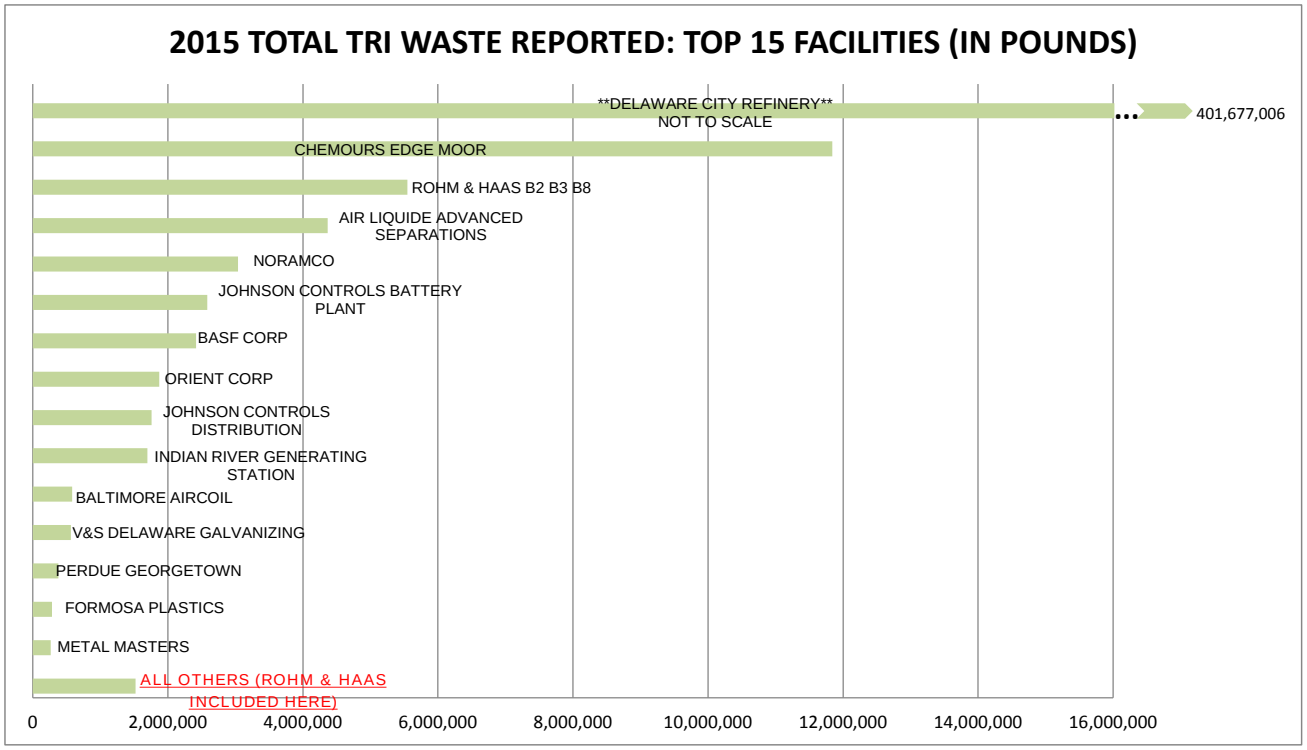


COMPARISON TO OTHER DELAWARE TRI FACILITIES:



ROHM & HAAS B7, B15, CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES, CONT.:



NOTABLE 2015 NATIONAL RANKINGS:

Rohm & Haas ranks 45th for off-site recycling of n-methyl-2-pyrrolidone (out of 385 facilities).

TRI FACILITY PROFILES

SERVICE ENERGY DOVER

LOCATION/CONTACT:

Address: 3799 N Dupont Highway
Dover, DE 19901

Phone: (302)-734-7433

Contact: Don Steiner

FACILITY OVERVIEW:

Service Energy reported under the North American Industrial Classification System (NAICS) as 424710, which covers bulk liquid storage facilities primarily engaged in merchant wholesale of crude petroleum and petroleum products.

Service Energy Dover has reported since 1998. The facility reported on two chemicals in 2015, 1,2,4-trimethylbenze and toluene; both 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 lbs. to be eligible to submit a Form A report.)

2015 TRI DATA (REPORTED IN POUNDS):

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

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 2015, 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.)

2015 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.

TRI FACILITY PROFILES

V & S GALVANIZING

LOCATION/CONTACT:

Address: 511 Carroll Drive
New Castle, DE 19720

Phone: (302) 322-1420

Contact: Johnny Roibu

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.

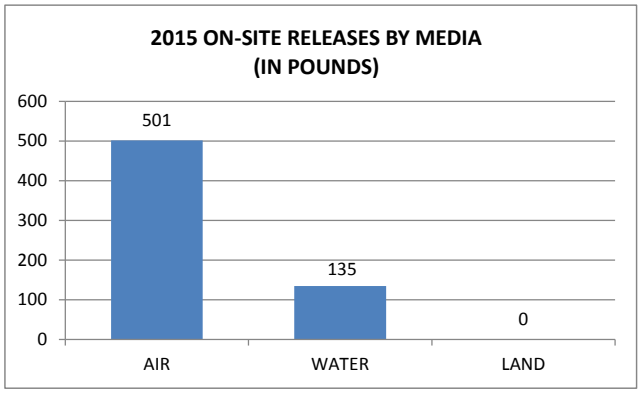
V&S Galvanizing has reported since 2009. The facility reported on two chemicals in 2015, with on-site releases to both air and water. The chemicals are that reported are found in the hot dip galvanizing process and coating. Stormwater data was also revised as more became available, combined with differences in annual precipitation for the various years. This resulted in reduced amount reported in stormwater for the last four 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 189% compared to 2009, but make up about 0.1% of all waste management activities. The result increase in releases reported was due to a change in calculations and release assumptions based on more readily available data.

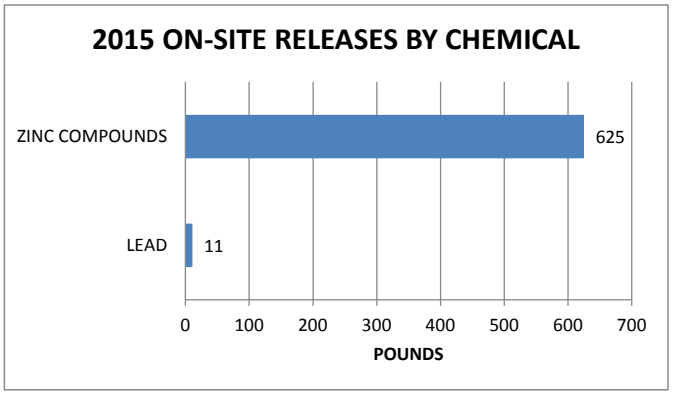
2015 TRI DATA (REPORTED IN POUNDS):

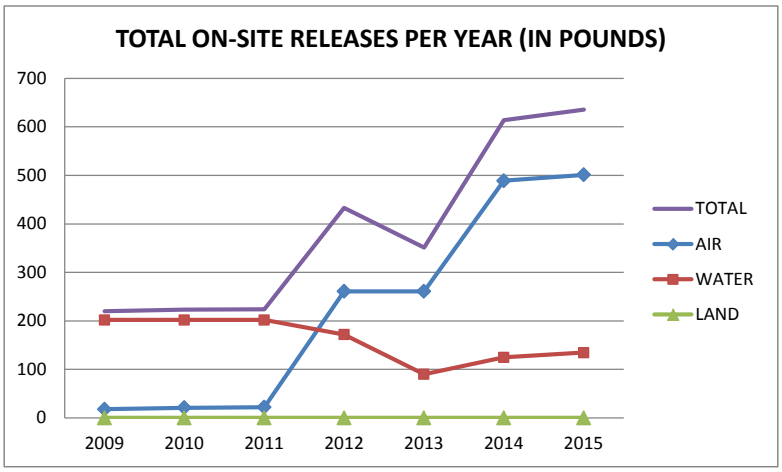
CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
LEAD	8	3	0	11	5,924	2,842	YES	YES
ZINC COMPOUNDS	493	132	0	625	223,279	333,412	NO	NO
TOTAL	501	135	0	636	229,203	336,254		

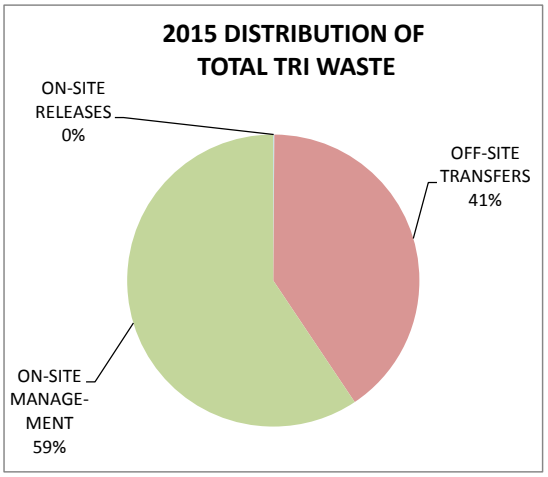
V & S GALVANIZING, CONT.

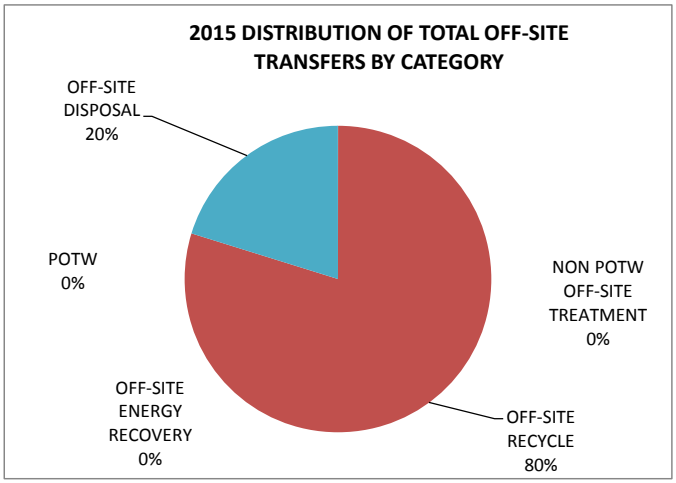
GRAPHICAL INFORMATION:

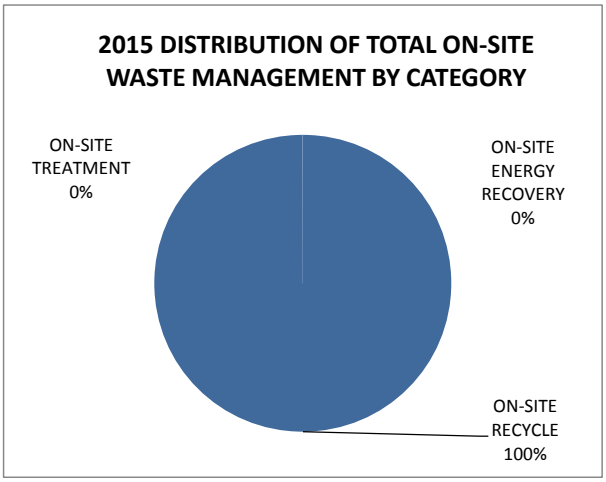






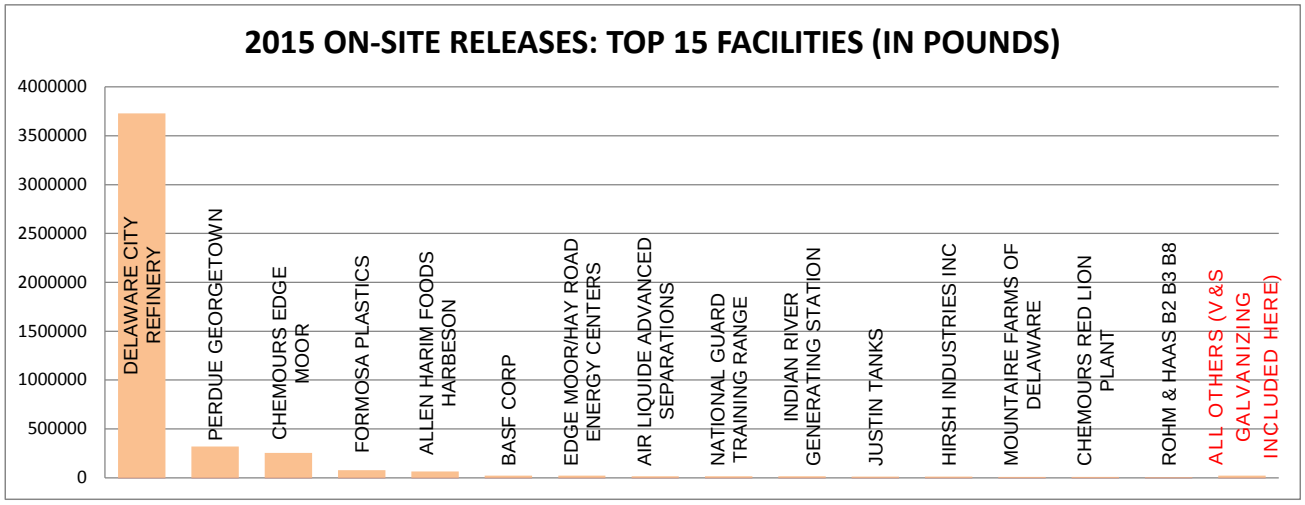


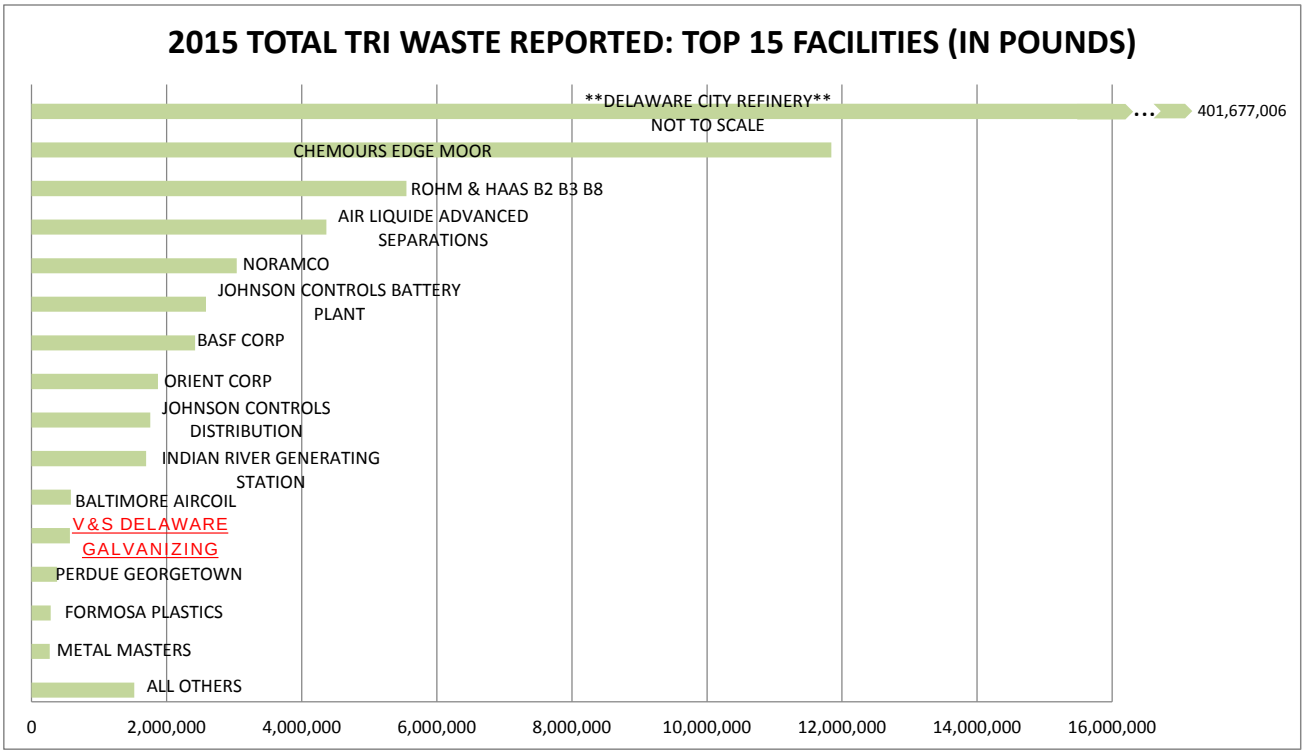




V & S GALVANIZING. CONT.

COMPARISON TO OTHER DELAWARE TRI FACILITIES:





NOTABLE 2015 NATIONAL RANKINGS:

V&S Galvanizing ranked 60th in the off-site recylce of zinc compounds for fabricated metal facilities (NAICS 332) (out of 374 facilities).

TRI FACILITY PROFILES

VP RACING FUELS

LOCATION/CONTACT:

Address: 16 Brookhill Drive
Newark, DE 19702

Phone: (302)-368-1500

Contact: Marc Wesler

FACILITY OVERVIEW:

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

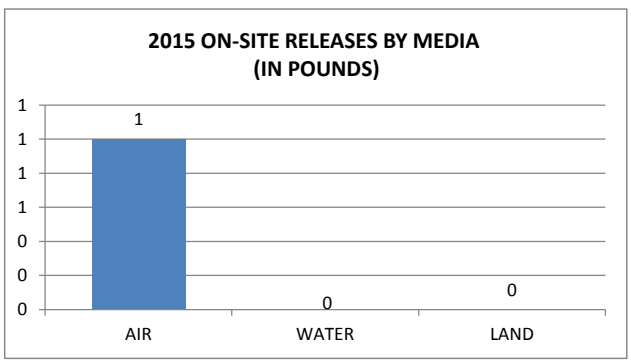
VP Racing Fuels has reported since 2001. The facility reported on 4 chemicals in 2015, with 3 chemicals being reported on the short Form A. Form A reports do not include waste management activities. (Chemicals must have less than 500 lbs. of total waste activities and the total annual amount of the chemical manufactured, processed, or otherwise used does not exceed 1,000,000 pounds to be eligible to submit a Form A report.) Persistent Bio-Accumulative Toxic (PBT) Chemicals, such as lead, are ineligible for Form A.

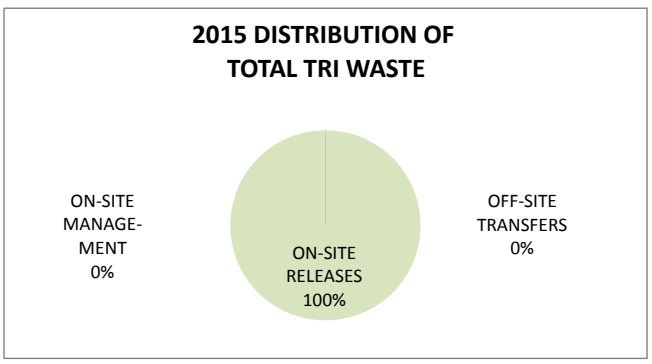
2015 TRI DATA (REPORTED IN POUNDS):

CHEMICAL	ON-SITE RELEASES				OFF-SITE TRANSFERS	ON-SITE MANAGEMENT	PBT	CARCINOGEN
	AIR	WATER	LAND	TOTAL				
ISOPRENE*	0	0	0	0	0	0	NO	NO
LEAD COMPOUNDS	1	0	0	1	0	0	YES	YES
METHANOL*	0	0	0	0	0	0	NO	NO
TOLUENE*	0	0	0	0	0	0	NO	NO
TOTAL	1	0	0	1	0	0		

*Reported on short Form A

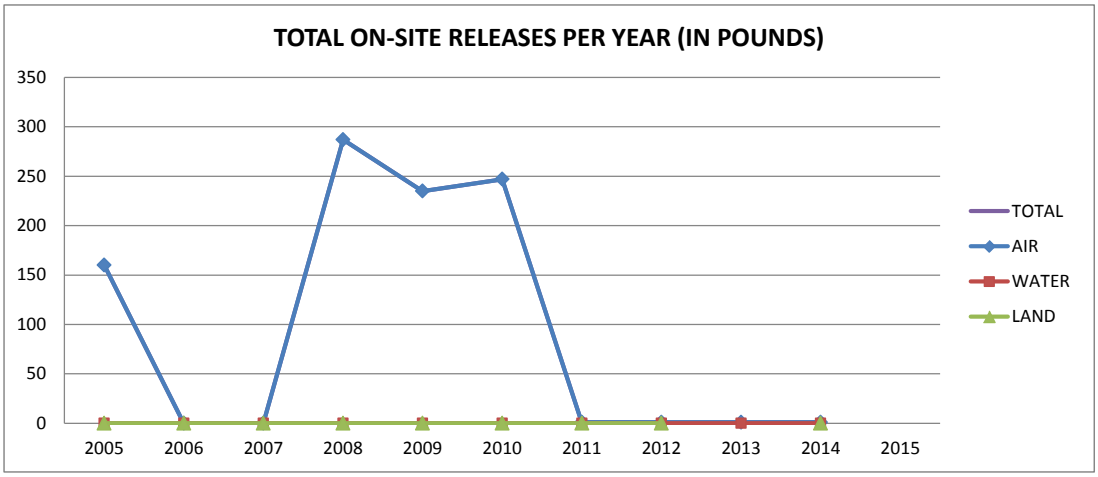
GRAPHICAL INFORMATION:





VP RACING FUELS, CONT.

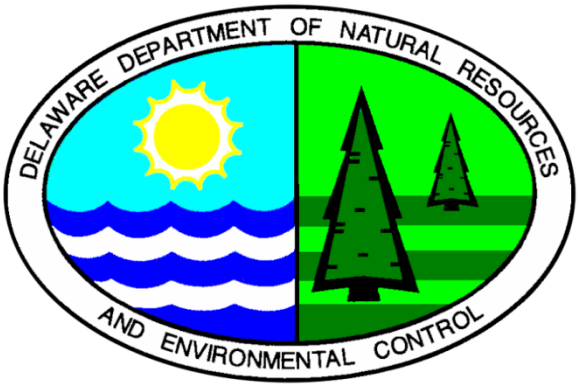
GRAPHICAL INFORMATION CONT:



COMPARISON TO OTHER DELAWARE TRI FACILITIES:

VP Racing Fuels ranks in the bottom third in on-site releases reported by facilities in 2015. The bottom third accounted for less than a total of 170 pounds released on-site.

VP Racing Fuels ranks in the bottom third in total waste reported by facilities in 2015. The bottom third accounted for about 72,000 pounds of total waste. Total waste includes waste released on-site, managed on-site, or transferred off-site.



EPCRA Reporting Program

Emergency Prevention and Response Section, DNREC
89 Kings Highway
Dover, DE 19901
(302) 739-9405

Doc. No. 40-04-02/17/01/03