B7530
manila
Genesee

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

B753044126

FACILITY: Acument Global Technologies - Fenton Processing		**SRN / ID:** B7530
LOCATION: 2480 OWEN RD, FENTON		**DISTRICT:** Lansing
CITY: FENTON		**COUNTY:** GENESEE
CONTACT: Angela Cook , Michigan Regional EHS Manager		**ACTIVITY DATE:** 04/16/2018
STAFF: Daniel McGeen	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

Om 4/16/2018, the Michigan Department of Environmental Quality (DEQ), Air Quality division (AQD) conducted a scheduled inspection of Acument Global Technologies - Fenton Processing.

Environmental contact:

Angela Cook, Michigan Regional EHS Manager; 810-714-7903; acook@acument.com

Facility description:

This facility processes metal fasteners and washers for the automotive industry.

Emission units:

Emission unit* ID, and flexible group, if any	Emission unit description	Permit to Install (PTI) No., or exemption rule	Compliance status
EU-HEAtTreat1	2-part heat treatment line including natural gas-fired hardening furnace and draw furnace, and quench oil bath. Identified as 566 line.	PTI No. 143-97	Yes
EU-HeatTreat2	2-part heat treatment line including natural gas-fired hardening furnace and draw furnace, and quench oil bath. Identified as 834 line.	PTI No. 143-97	Yes
EU-PRECOTELINE	Metal parts flow coating line(s) covered by general permit.	PTI No. 70-11	Yes
EU-PlatingLine	Zinc electrolytic plating line	Rule 285(r)	Yes
EU-Boiler	0.85 million Btu/hr boiler, Weil McLain, 1999	Rule 282(b)	Yes
New boiler	New boiler or hot water heater; 0.967 million Btu/hr, Raypak water tube boiler, 2007	Rule 282(b)	Yes
EUTinZincChromate; FGPLATING	Tin/zinc plating line consisting of 22 tanks for zinc plating. Tanks include acid pickling, desmut, acid activate HCL, and a tin zinc plating bath along with associated rinse tanks. The plating line is equipped with an acid gas scrubber with a packed bed and chevron mist eliminator.	PTI No. 92-17	Not yet operating
EUZincNickel; FGPLATING	Zinc/nickel plating line consisting of 22 tanks. Tanks include cleaners, acid pickling, desmut, and zinc nickel plating bath along with associated rinse tanks. The plating line is equipped with an acid gas scrubber with a packed bed and chevron mist eliminator.	PTI No. 92-17	Not yet operating
2 coating lines operated by Nylok, FA1 and FA2	2 coating lines operated by Nylok, and previously by Ring Screw Textron, who leases space from Acument.	General PTI No. 70-11	Compliance
Metal straightening process	Straightener for bending metal parts that have bent out of true because of heat treating	Rule 285(l)(i)	Compliance
Metal grinding	Metal machining process exhausting into the general, in-plant environment	Rule 285(2)(l)(vi)(B)	Compliance

***An *emission unit* is any part of a stationary source that emits or has the potential to emit an air contaminant.**

Regulatory overview:

This facility is considered a *minor source* of *criteria pollutants*, that is, those pollutants for which a National Ambient Air Quality Standard (NAAQS) exist. These include carbon monoxide, nitrogen oxides,

sulfur dioxide, volatile organic compounds (VCOs), lead, particulate matter smaller than 10 microns (PM10), and particulate matter smaller than 2.5 microns (PM2.5). A *major source* of criteria pollutants has the potential to emit (PTE) of 100 tons per year (TPY) or more of any one of the criteria pollutants, and would be subject to the Renewable Operating Permit program.

This facility is also considered to be a minor or *area source* for hazardous air Pollutants (HAPs), because it has a PTE of less than 10 TPY for any single HAP and less than 25 TPY for all HAPs combined.

There is an existing boiler onsite which is exempt from needing a PTI, under Rule 282(b). A natural gas-fired boiler which burns no other fuel at an area source of HAPs would not be subject to 40 CFR Part 63, Subpart JJJJJJ, *National Emissions Standards for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers, Area Sources*, under Section 63.11195(e).

A new boiler onsite is for providing water for restrooms, I was advised today. It has a rated heat input capacity of 0.967 million Btu/hr, and satisfies the exemption criteria of Rule 282(b). This exemption has been revised, as of 12/20/2016, as Rule 282(2)(b), but the exemption criteria are unchanged. It may qualify as a hot water heater, rather than a boiler, under the JJJJJJ definition. To meet the definition of a hot water heater in this area source Generally Achievable Control Technology (GACT) standard, the unit must be no more than 120 gallons in capacity. A hot water heater <120 gallons in size would not be subject, under Section 63.11195(f).

I was advised that another entity, Ring Screw Textron, Inc. leases space from them, and has a General PTI, No. 70-11 for 2 coating lines with up to 10 TPY VOCs. it is under the same SRN, B7530, as Acument Global Technologies - Fenton Processing. I had previously been unaware of this, and did not inspect this company's operations, at this time.

Fee status:

This facility is not considered a Category I fee-subject facility, because it is not a major source of criteria air pollutants. It is not considered a category II fee-subject source because it is neither a major source for hazardous air pollutants, nor is it subject to a federal New Source Performance Standard regulation. Lastly, it is not considered a Category III fee-subject facility, because it is not subject to a federal Maximum Achievable Control Technology standard. This facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS), because it does not meet the criteria for reporting of having more than 10 TPY VOC emissions.

Location:

The facility is surrounded by a mix of commercial and industrial businesses. The closest residences are about 800 feet to the south, 725 feet to the southeast, and 1,00 feet to the east, as measured in Google Maps.

History:

This facility was last inspected by AQD on 6/25/2014, and found to be in compliance. On 8/3/2017, PTI No. 92-17 was approved for a new dual plating line.

It is my understanding that Acument Global Technologies, Inc. shut the Fenton processing plant down in 2008, during the Recession, and it was used as a warehouse for several years, prior to resuming operations.

Safety equipment required:

Hearing protection and safety glasses are required, as are closed toe shoes.

Odor evaluation:

I checked for odors offsite, prior to arrival, and found none. Weather conditions were cloudy, humid, and 35 degrees F, with winds out of the west at 15-20 miles per hour. No visible emissions were detected from the plant.

Arrival:

This was not an unannounced inspection. I had tried earlier this yeat to inspect the facility unannounced, when the environmental contact was not available. To avoid making a wasted trip in the future, I scheduled the time and date for this inspection with the facility representative, Ms. Angela Cook, Regional EHS Manager.

I arrived at 9:40 AM, in the facility parking lot. Neither odors nor visible emissions were detectable in the parking lot at the southwest corner of the facility.

Upon entering the office, I signed in, and read the site EHS Orientation document. I then met with Ms. Cook, and I provided my identification/credentials, per AQD procedure. I explained the reason for the inspection, that this was a facility last inspected by AQD 4 years ago, in 2014, and AQD tries to inspect true minor sources of air emissions every several years. Plus, this facility had recently received a new PTI No. 92-17, and AQD inspectors frequently try to observe newly permitted equipment at regulated facilities.

I was advised that another entity, Nylok, leases space from them, and has a General PTI, No. 70-11 for 2 coating lines with up to 10 TPY VOCs, originally issued to Ring Screw Textron, Inc. I had previously been unaware of this. I did not inspect this company's operations, at this time, but I did examine their VOC recordkeeping, discussed later in this report. I was introduced to Nylok's environmental contact, Mr. Micha Fulgham. I was advised that the consulting firm NTH does their recordkeeping for them, and the reports go to Ms. Cook.

Inspection:

EU-HeatTreat1 (566 line), and EU-HeaTreat2 (834 line); PTI 143-97:

Manufactured parts are shipped to the company where they are processed to meet customer specifications. This is not a manufacturing facility, as that is done at their other locations. This is considered a processing facility ,as the parts are heat treated in one of the two heat treat lines, and/or plated or coated to customer specs. Each heat treat line is covered by the same permit. The furnaces operate using natural gas.

The 2-part heat treatment process begins with a pre-wash hot water bath prior to the part entering the hardening furnace where parts are subjected to a temperature of approx. 1650 degrees F. Parts are then quenched in an oil bath and rinsed in a water wash station. The metal parts then enter a second heat treating furnace (draw furnace) that is heated to approx. 850 degrees F. Emissions from each part of the process are collected and emitted to atmosphere.

The 566 line, EUHeatTreat1, was operating. I did not see visible emissions into the interior of the plant.

Parts were being loaded into the 834 line, EU-HeatTreat2. I saw no visible emissions into the interior of the plant from this the line, other than a fair amount of steam from the washer. Uncombined steam is not considered an air contaminant, however. I was advised that they will install an improved hood to capture more steam from this washer, to exhaust it outside.

We walked around the outside of the plant,. Visible emissions of brownish-tinted steam were observed today. The steam mixed with visible emissions was from a quench line, I was advised. It appeared to me that over a 6-minute average, opacity would be under the limit of Rule 301 and PTI No. 143-97, Special Condition No. 13. This limit is a 6-minute average of 20% opacity, except for one 6-minute average per hour not to exceed 27% opacity. Weather conditions were cloudy, humid, and 35 degrees F, with winds out of the west

Ms. Cook informed me that the do monthly VE readings on the two heat treat lines, from up on the roof. Inside the plant, she showed me 2017 and 2018 records of opacity readings conducted by plant staff. Recent 6-minute averages, and the dates they were taken on, are below, and indicate compliance with the 20% limit:

- 2/27/2018: 5.0%
- 1/31/2018: 2.2%
- 3/29/2018: 5.6%

Readings from January 2018 were lower, and indicated 2% opacity. Ms. Cook provided requested examples of visible emission readings by plant staff, please see attached. All indicate compliance with the 20% limit.

Ms. Cook provided examples of facility recordkeeping, please see attached. This includes The quench oil liquid level is monitored and refilled as necessary from a oil storage tank. Records of oil removed and oil added to the quench tanks each month are maintained on site. The permit does not specify an oil usage limit, only that records of usage be maintained., which they are doing. The 12-month rolling total of oil loss through March 2018 was 5,509.18 gallons for both lines combined.

I was also provided with a list of the spare parts inventory for the scrubber serving the plating lines, please see attached.

EUTinZincChromate; FGPLATING; PTI No. 92-17:

This brand line was largely installed but not yet operating, I was shown. AQD has already received from Acument the Malfunction Abatement Plan (MAP) required by the PTI.

EUZincNickel; FGPLATING; PTI No. 92-17:

This brand new line was largely installed but not yet operating, Ms. Cook showed me. AQD has received the MAP, as mentioned above.

EU-PlatingLine; Rule 285(r):

I believe that the use of Rule 285(r) exemption for the old zinc plating line may be erroneous, as does Ms. Cook, who asked about it during the application process for the new plating ine. She had wanted to include it in the permit, as well, but explained AQD staff advised her that it was exempt. It exhausts outdoors, however, so I do not think it meets the exemption criteria.

We observed this line operating. There were no visible emissions. I was advised that treated parts go into a bake oven which Acument considers exempt.

40 CFR Part 63, Subpart WWWWWW:

On 5/2/2018, I e-mailed to Ms. Cook a link to 40 CFR Part 63, Subpart WWWWWW, for educational purposes. The requirements which may potentially apply under Section 63.11507(g), based on a review of applicability criteria, are:

(g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.
(1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.
(2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.
(3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted

barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.
(4) Use tank covers, if already owned and available at the facility, whenever practicable.
(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).
(6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.
(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.
(8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.
(9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.
(10) Minimize spills and overflow of tanks, as practicable.
(11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.
(12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

Note: AQD does not have delegation of authority from U.S. EPA to enforce Subpart WWWWWW.

2 coating lines, FA1 and FA2, operated by Nylok, General PTI No. 70-11:

I was provided 12-month rolling emission calculations for each line since 2013. As of February 2018, the 12-month rolling values were 2.69 and 1.75 tons VOC, for a combined total of 4.44 TPY VOC, far below the limit of 10 TPY VOC per line and total limit of 20 TPY VOC for all coating lines combined. HAPs were 4.42 tons combined, below the limit of 10TPY for a single HAP and 25 TPY for total HAPs.

Conclusion:

No instances of noncompliance were found. The facility was clean and neat.

NAME _____ DATE _____ SUPERVISOR _____