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Genesee

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

P004145330

FACILITY: Acument Global Technologies, Inc. - North Holly		SRN / ID: P0041
LOCATION: 10031 N Holly Rd, HOLLY		DISTRICT: Lansing
CITY: HOLLY		COUNTY: GENESEE
CONTACT: Tasha Munson , EHS Supervisor		ACTIVITY DATE: 07/26/2018
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled, unannounced inspection of facility last inspected in 2013.		
RESOLVED COMPLAINTS:		

On 7/26/2018, the Michigan Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an unannounced, scheduled inspection of Acument Global Technologies, Inc. - North Holly, a facility which AQD last inspected in 2013.

Environmental contact:

Tasha Munson, EHS Supervisor; 810-220-9025; tmunson@acument.com

Facility description:

This facility manufactures metal internal threaded fasteners and washers.

Emission Units:

Emission unit* ID, and flexible group ID, if any	Emission unit description	Permit to Install (PTI) No., or exemption rule	Compliance status
EU-HeatTreat	One hardening furnace (#507), quench oil bath, tempering (draw) furnace, endothermic gas generator, and wash stations	PTI No. 22-10	Compliance
EUHARDENFURN; FG-HEATTREAT1	Natural gas-fired rotary hardening furnace (heat treat furnace, #508) with an internal quench tank. A natural gas-fired endothermic generator supplies the atmosphere of the heat treat furnace.	PTI No. 89-12	Compliance
EUDRAWFURN; FGHEATTREAT	Natural gas-fired tempering furnace	PTI No. 89-12	Compliance
13 forming machines	Metal forming processes exhausting into the general, in-plant environment	Rule 285(2)(l)(i)	Compliance
40 threading machines	Metal machining processes which are enclosed, otherwise they would exhaust into the general, in-plant environment	Rule 285(2)(l)(vi) (B)	Compliance
9 stamping machines	Metal stamping processes exhausting into the general, in-plant environment	Rule 285(2)(l)(l)	Compliance
CLM Vibe Tech washer	Parts washer used for deburring metal parts; exhausts into general, in-plant environment	Rule 285(2)(r)(iv)	Compliance

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

Flexible group summary table:

Flexible group ID	Flexible group description	Associated emission units	Permit to Install (PTI) No., or exemption rule
FG-HEATTREAT1	Heat treating and tempering of metal fasteners; process consists of one heat treat furnace (rotary furnace) with an internal oil quench tank, one aqueous washer, one tempering furnace (draw furnace), and one endothermic generator.	EUHARDENFURN; EUDRAWFURN	PTI No. 89-12

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 (VOCs), 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.

It was advised that there are no boilers onsite, just a hot water heater(s) for restrooms. A hot water heater <120 gallons in size is considered exempt from 40 CFR Part 63, Subpart JJJJJJ, *National Emissions Standards for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers, Area Sources*.

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:

This facility is located in the northern end of an industrial park. There are commercial and industrial businesses to the north, east, and south. There is also a pond to the south. To the west is largely undeveloped land, with a single residence about 400 feet to the west northwest of the plant. .

History:

This facility was last inspected by AQD on 4/11/2013, and was found to be in compliance.

Safety apparel required:

Safety glasses with side shields, steel-toed boots, and hearing protection.

Odor evaluation:

I checked for odors in the vicinity, prior to arrival onsite. Downwind in the industrial park, I detected a diesel exhaust odor, but this appeared to be coming from truck traffic. Weather conditions were cloudy and 75 degrees F, with winds out of the west southwest at 15 miles per hour. I could not detect any visible emissions coming from the North Holly plant of Acument Global Technologies, Inc.

Arrival:

I arrived at the plant offices at 11:30 AM. I parked next to the plant, near a open door, and detected a very faint odor like oil. This odor was not detectable offsite, and I did not consider it to be a problem.

I provided my identification/credentials, per AQD procedure, and explained that I would like to inspect this facility, as it was last inspected 5 years prior. I was introduced to Ms. Tasha Munson, EHS Supervisor. We agreed to conduct the inspection shortly, at 1:00 PM. I got lunch nearby, and returned to the plant at 1:07 PM.

Inspection:

This facility manufactures metal internal threaded fasteners and washers. It is my understanding that there are no additional processes needing a permit here since the last AQD inspection. Some processes they consider exempt have been added, including a new front end washer on a furnace which is considered to be exempt under Rule 285(2)(b). This rule exempts the following process from the requirement of Michigan Air Pollution Control Rule 201 to obtain a permit to install:

(b) Changes in a process or process equipment which do not involve installing, constructing, or reconstructing an emission unit and which do not involve any meaningful change in the quality and nature or any meaningful increase in the quantity of the emission of an air contaminant therefrom.

I did not see any reason to disagree with the company's use of the Rule 285(2)(b) exemption.

I was informed that a new vibratory washer has also been added, since March 2018. It is my understanding that this is considered to be exempt. under Rule 285(2)(r)(iv), since it exhausts into the general, in-plant environment. It is used to remove any fine burrs from metal washers. A flocculent is added to the cleaning solution to collect the burrs.

Ms. Munson showed me the metal part-forming process, starting with steel coils which arrive at the plant. Coils or ribbons of steel are fed into a forming machine. The forming machine cuts the metal, and forms each piece into a nut. Cutting oils are used, and heat is generated during the forming operation. The machines exhaust to the general, in-plant environment, and so can be considered exempt under Rule 285(l)(vi)(B).

Following the forming process, nuts are threaded. The facility has approx. 40 threading machines. These are completely enclosed machines that do not generate air emissions. They appear to be exempt from this standpoint alone. If they exhausted into the general, in-plant environment, they would be exempt under Rule 285(l)(vi)(B)

Sheets of metal are placed in stamping presses to form the washers. The facility has 9 stamping presses and these are exempt per Rule 285(l). I saw no visible emissions from the stamping presses.

Depending on the part that is made it may be heat treated in one of the two heat treat lines in the plant. Each line is covered by a different permit as described below. The furnaces operate using natural gas.

The 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. A carbon-rich, reducing atmosphere (endothermic gas) will be maintained with the furnace to scavenge oxygen and carburize the steel parts. Parts are then quenched in an oil bath and rinsed in a water wash station. The quench oil liquid level is monitored and refilled as necessary from a oil storage tank. The company uses a "Superator" reclaiming system to reclaim approx. 800 out every 1000 gallons of oil used. The part then enters a draw furnace where the parts will be heated to approximately 1200 degrees F. The tempering process increases ductility and relieves internal stresses within the metal parts. A rust inhibitor is applied to the parts following the draw furnace. The finished parts are collected in bins and shipped to customers. We also viewed the operation of the stamping presses, thread machines and cold formers. No visible emissions were noted. The plant was very clean and well maintained.

I was shown one process for adding a small dimple to the metal parts. I did not witness any visible emissions.

Some of the processes involve assembly, and do not appear to be a source of air emissions.

Parts washer exhausting into the general, in-plant environment; Rule 285(2)(r)(iv).

The new washer is a CLM Vibe Tech unit. It was exhaust into the general, in-plant environment. They plan to install a Smog Hog unit above it, to capture the mist from washer, and exhaust into the general, in-plant environment. Metal cleaning processes which exhaust into the general, in-plant environment can be considered exempt under Rule 285(r)(iv).

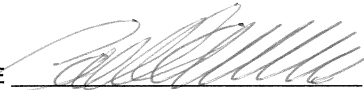
Recordkeeping:

Ms. Munson showed me the facility recordkeeping for the 507 furnace (PTI No. 22-10) and the 508 furnace (PTI No. 89-12) in the plant office, and we discussed the data in detail, including a data glitch which had occurred in April 2018. I was informed that they made a "middle of the road" calculation to try to address the data glitch, based on an entire year of previously recorded data. This appeared to be a conservative approach approach, and I did not see a problem with it. Ms. Munson added a note to their spreadsheet to document this. A copy of the recordkeeping is attached for reference, and indicates compliance.

Conclusion:

No instances of noncompliance were observed. The facility was clean and neat. I left the site at 2:30 PM.

NAME



DATE

5/30/2019

SUPERVISOR

B. M.