DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N577963602

FACILITY: Acument Global Technologies, Ring Screw LLC		**SRN / ID:** N5779
LOCATION: 6125 18 MILE ROAD, STERLING HTS		**DISTRICT:** Warren
CITY: STERLING HTS		**COUNTY:** MACOMB
CONTACT: Russ St. Onge , EHS Manager		**ACTIVITY DATE:** 07/13/2022
STAFF: Sebastian Kallumkal	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Annual scheduled Inspection		
RESOLVED COMPLAINTS:		

On Wednesday, July 13, 2022, I, Sebastian Kallumkal, Michigan Department of Environment, Great Lakes & Energy - Air Quality Division staff inspected Acument Global Technologies (formerly Ring Screw Works, LLC.) (SRN: N5779) located at 6125 18 Mile Road, Sterling Heights, Michigan. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; and the conditions of Air Use Permit to Install (PTI) No. 60-96 and 85-17A.

I arrived at the facility at about 11:00 AM. Due to the COVID-19 Pandemic the inspection was announced earlier. At the facility, I met with Mr. Ross St. Onge (Ross), EHS Manager/Repair Leader. I introduced myself, provided my credentials and explained the purpose of my inspection. He assisted me during the inspection of the facility.

During the pre-inspection meeting, he explained that there is no change in processes. No new process added since the last inspection in November 2020. He informed me that heat-treating furnace covered by PTI No.60-96 is operating at that time. EU-F2 furnace covered by P17A was down since July 2nd for preventive maintenance. It is scheduled to be operating from July 18th.

I also told him about a "burnt metal odor" observed by one of the AQD inspectors while investigating an odor complaint in the area. I also mentioned that the inspector noted the Acument's doors were open at the time the inspector experienced the odor. He explained that during summer months, they keep the doors open to control reduce the temperature inside the building. The odor experienced by the AQD inspector was for a short time and of low intensity and AQD had received no complaint about such odor, so we did not discuss any measures to minimize the odor.

Acument Global Technologies manufactures fasteners for the auto industry. The facility operates 24 hours a day, and 7 days per week. First, the coils are staged using settle headers & rollers. The header will stage the metal rods into fasteners; whereas the rollers will make threads on the metal rods to form screws. The facility has 21 headers and 21 rollers. The smoke from the headers and couple of rollers are abated using Absolent filters and smog hog filters. The headers and rollers (metal forming) appear to be exempt from permit to install requirements pursuant to R336.1285(2)(l)(i).

The facility has two atmospheric generators (using methane and air). One of them is a back up unit. Atmospheric generators are exempt from permit to install requirements pursuant to R336.1285(2)(l)(iv).

After the inspection of the heat treat lines, we went outside to observe visible emissions from the processes. I did not observe any visible emissions from the stacks. The stacks dimensions appear to be in compliance with the permit requirements.

PTI No. 60-96

EU-F1 (PTI No. 60-96, capacity = 6500 lb/hr), heat treating furnace includes wash tank, vibrator (hardener) furnace, quench oil tank, 2nd wash tanks, draw furnace (tempering), and soluble oil tank. The fasteners are fed to furnace by means of a computerized loading system, pre-washed, conveyed through the furnace (where they are heated to maximum temperature of 1750°F). The fasteners are then quenched in a multipurpose fluid (quench oil), post washed, tempered, and treated with rust preventative solution. I observed that the heat-treating line uses a flame curtain to control emissions from the hardening process.

The quench rinse tank (post wash) is equipped with an oil/water separator. Therefore 3-day cleaning of the tanks is not necessary. Therefore, no cleaning records are necessary.

PTI No. 85-17A

Under PTI No. 85-17, the facility installed (in August 2017) a new 4,000 lb/hr metal heat treat line (EU-F2), to heat-treat metal fasteners, that consists of loading station, an alkaline pre-wash tank, a hardening furnace, an oil quench tank, a post-wash tank, a tempering furnace, and a soluble oil station (application of rust prohibitive), unloading station. The heat-treating furnace #2 (EU-F2) for metal fasteners, rated at 4,000 pounds per hour. The heat-treating line uses a flame curtain to control emissions from the hardening process.

Previous permit, PTI 85-17 used a generic VOC emission factor of 0.374 lb VOC emitted per ton of metal processed. This PTI also required the facility to conduct VOC emission testing to verify the VOC emissions and establish a VOC emission factor (lb VOC/ton of metal processed). The testing was conducted on May 29, 2018, and report received on July 31, 2018. The tests showed that VOC emission factor was 0.89 lb VOC per ton of metal processed. Facility submitted another permit application to re-evaluate the quenching portion of the new line using the higher emission factor. PTI No. 85-17A was issued which included higher VOC emission limit and lb/hr production (heat treat) limit.

The submitted records show that the VOC emissions calculated based on a 12-month rolling period, as of June 2022 was 3.34 tons per year (based on calculations made by AQD staff). The highest VOC emissions during 12-month rolling period were as of July 2021 (3.61 TPY). The highest monthly VOC emissions (0.43 Tons) was September 2021.

The submitted records show that the total metal processed calculated based on a 12-month rolling period, as of June 2022 was 7,553 tons per year (based on calculations made by AQD staff). The highest metal processed during a 12-month rolling period appears to be as of July 2021 (8, 078 TPY). The highest monthly production (966 Tons) was in September 2021.

The facility's 12-month calculations were based on a calendar year basis, but permit requires TPY based on a 12-month rolling time period. Permittee was informed about how to correctly calculate the 12-month rolling period emissions. The total emissions and the metal throughput were below the allowed emission limits (7.8 TPY), and metal processed was below the usage limit (17,520 TPY), so the permittee was not requested to recalculate the emissions or the usage. The records show that facility's hourly metal throughput is less than 4,000 pph.

EU-F2 was down for PM work. Therefore, I could not observe the process or the presence of flame curtain.

The permittee conducted VOC emissions testing on May 29, 2018. Facility appears to be calculating the emissions and throughput data timely. Ross provided me the SDS for the quench oil. The facility appears to be keeping the necessary records (Amount of metal

processed per hour, tons of metal processed per month & 12-month, VOC emission factor, VOC mass emission calculations monthly and 12-month). The permittee appears to be electronically monitoring hourly records of metal processed. He provided me a copy of hourly throughput.

The facility has a natural gas fired, (SIEMEN) emergency generator (installed in 2012) and it is used as a backup power supply for the data system. This engine is subject to 40 CFR 60, Subpart JJJJ- Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The facility is required to comply with the applicable requirements of this subpart.

During the post inspection meeting, we discussed more about the processes, recordkeeping etc. Provided me copies of records of the metal throughput, VOC calculations, SDS for quench oil, etc.

After the inspection at the facility, at about 12:20 PM, I conducted odor observations near the facility and on 18 Mile Road. This was in response to an observation by another EGLE-AQD inspector who stated in her odor complaint investigation report (AQD MACES Report No. CA N514563529) and email dated July 7, 2022, related to Industrial Metal Coating (SRN N5145) that she detected "burnt metal odor near Acument Technologies".

Wunderground.com July 13, 2022, Sterling Heights, MI

11:53 AM to 1:53 PM SE 3 mph to S 5 mph. Cloudy

The flag in front of Acument appeared to be moving southwardly (SW). 4-5 mph.

I did not observe any odor in the front parking lot of Acument Technologies. Next, I walked (up and down) on the driveway between Acument and Adler Pelzer Group (East of Acument, upwind). I did not observe any odor at this location.

Next, I crossed 18 Mile Road and walked on the sidewalk to Mound Road (west) and back east to 6600 18 Mile Road (Utica Community Schools Auxiliary Services) a couple of times. I did not observe any "burnt oil/burnt metal" odor at this location on this route. Sidewalk was closed at Mound Road due to construction, so I did not conduct odor observations on Mound Road.

I observed grassy/vegetation odor (Level 2) at and around the east entrance to the parking behind IMC facility (located E of IMC). I observed this odor each time I passed this entrance. The parking lot has two entrances from 18 Mile Road (one on the East Side and another one on the west side). There was a parked truck on the west entrance. I did not smell any diesel fuel odor at that location. Again at 12:55 PM, I smelled the vegetation/grass odor at the east entrance of the parking lot.

Next, I walked to the parking lot of the building plaza which houses several small businesses (e.g., Mike's Autobody, 6031 18 Mile Road). This building is located adjacent and west to Acument building. The flag at Acument was down and not moving. I walked South to North on this parking lot. I smelled burnt oil odor (Level 2) at the north end of the parking lot. This location is across an open door on the Acument building. The other doors were also open on this side of the building.

I left the area around 1:05 PM.

<u>Conclusion:</u> The facility appears to be in compliance with applicable air quality regulations and permit requirements.

NAME Sebastian Kallemkal DATE 07/19/2022 SUPERVISOR Joyce