

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

B437323727

FACILITY: Alma Products I Inc		SRN / ID: B4373
LOCATION: 2000 MICHIGAN AVE, ALMA		DISTRICT: Lansing
CITY: ALMA		COUNTY: GRATIOT
CONTACT: Tim Miller , Facilities Engineer		ACTIVITY DATE: 11/22/2013
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM 208A
SUBJECT: Scheduled compliance inspection and verification of 208a status/compliance.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present: Tim Miller, Facilities Engineer (timmiller@almaproducts.com)

Purpose: Conduct an unannounced, scheduled compliance inspection by determining compliance with Alma Products' Permits to Install (PTI) Nos. 56-87, 57-87, 310-87; 977-91, 985-91, 434-92, and 11-03. Alma Products status as a 208a source was also considered.

Facility Background/Regulatory Overview: Alma Products is a 208a registered source that is involved in automobile parts remanufacturing, specifically for Ford calipers, turbines, and compressors.

Inspection: This was an unannounced compliance inspection. At approximately 10:00 a.m. on November 22, 2013 I met with Tim Miller, Facilities Engineer. I explained to T. Miller what occurs during an inspection and provided him with a DEQ "Environmental Inspections: Rights and Responsibilities" brochure to illustrate a typical inspection procedure. I also provided him with a May 2012 Permit to Install Exemption handbook.

PTI No. 56-87 – Shell seam welder and PTI No. 57-87 – Spud and Flange welders

These three units contain only 1 special condition: to maintain visible emissions at or below 20% opacity per Method 9. None of these units were being operated during the inspection, thus compliance with the 20% opacity limit could not be determined at that time. T. Miller said the shell seam welder is used to seam parts for the compressors. He also said the seam and spud welders are vented inside the plant; the flange welder is vented outside the plant.

PTI No. 310-87 – Caustic sonic cleaner

T. Miller showed me the MSDS of the solution contained in the sonic cleaner. The active ingredient is an alkanol amine which has a pH of 8 in aqueous solution. The equipment was originally permitted for NaOH (sodium hydroxide), a pH of 14. The cleaner is no longer vented to the ambient environment: all emissions are released inside the plant. SC 10 is therefore no longer relevant to this equipment. SC 11 requires no visible emissions from the sonic cleaner. There were no VE from the sonic cleaner within the plant. SC 12 requires the AQD approve substituting NaOH with another raw material if there is any appreciable change in the quality or quantity of emissions. Because the alkanol amines are less corrosive, Alma Products is in compliance with this condition. *This process would currently be exempt under Rule 285(r)(iv).*

PTI No. 977-91 and 985-91 – Wire Wheel buffing

Alma Products has multiple wire wheel buffers, including the two that are permitted. One of the permitted wire wheels with associated Torit baghouse was operating during the inspection. All wire wheel buffers emit to the in-plant environment, and thus have no stacks associated with them; therefore, SC 14 in both permits has PM limits that are no longer applicable. No opacity was observed at any of the wire wheel buffer stations during the inspection. Alma Products is in compliance with the conditions of their wire wheel permits. The other wire wheel buffing stations either emit into the in-plant environment or into in-plant baghouses and are exempt per 285(vi) (B).

There are also 2 baghouses located outside of the plant that were once used for asbestos brake pads. T. Miller said these bag houses were last used 15 years ago and were already tested for any residual asbestos fibers. I informed T. Miller that these baghouses may be used for exempt processes without obtaining a permit to install, but would have to be included in a PTI application if the installed process required a permit and Alma Products planned on using those baghouses for the control.

PTI No. 434-92 – Wheelabrator shot blaster with baghouse control

The wheelabrator was not operating during the inspection. T. Miller said that it hasn't operated for several years. SC 15, 16, 18, and 19 are all dependent on the equipment operating (as they pertain to the baghouse's functionality, opacity, and disposal of particulates. Compliance with these conditions was therefore not able to be determined. SC 17 discusses only stack tests when required for verification of particulate emission rates. There were at least 3 other shot blasters located onsite that were operating and emit to the in-plant environment. These are exempt per 285 (vi)(B).

General PTI 11-03 – Coating Line

T. Miller said the 2 coating lines permitted under the general PTI have been removed and in its place, Alma Products has installed 7 paint booths with HVLP hand spray under exemption 287(c). T. Miller said the lines were removed and the paint booths installed in January of 2006 (see attached email). I will request the voidance of General PTI 11-03. In order to meet the 287(c) exemption for the 7 paint booths, Alma Products must use no more than 200 gallons of coating per month (minus water) and have properly installed and operating particulate control. I verified that all paint booths had properly installed fabric filters. T. Miller provided me with both paint usage and VOC emission data. Attachment 1 shows November 2013's running total of paint usage per coating type. For all booths combined, the number of gallons of coating used with water is 110. If Alma Products had excluded the water content from the total gallons of water-based coatings used, the number of gallons used would be even less. This data shows that Alma Products is in compliance with the 287(c) exemption. Attachment 2 also shows that for every month this year, for all paint booths combined, the total gallons used with water never reached or exceeded 200 gallons/month.

208a Compliance

Alma Products, as a 208a source, must remain under 40 tons of VOC per year. Attachment 2 contains complete VOC emission records January 2013 through October 2013. T. Miller said that a year before the 2 coating lines were removed/paint booths installed, Alma Products switched over to water-based coatings. Alma Products VOC emissions from all paint booths, up through November 22, 2013 is 0.266 tons. Upon reviewing the records I found that January – May VOC calculations had errors and VOC calculations with correct values for these months brought the VOC emissions up to 0.38 tons. Additionally, these emissions are overestimations, as the calculations of VOC were done by multiplying the VOC content (lb/gal) without water by the number of gallons used with water. These emissions are in compliance with the 208a emission limitations.

T. Miller provided me with an MSDS for coating WD8-5500 for EUBT5002 (0.9 lb/gal) to verify the density of the coating used in the calculations (see attached).

There are also plans for Alma Products to conduct a PTE to potentially remove their 208a status and consequently be remove the requirement to report to MAERS.

MAERS

According to the EI year 2012 report, Alma Products has also shown compliance with the 208a emission limits. VOC emissions from the boiler (EUBT-4813) and cold cleaners (EUColdCleaners) have a combined total of 1.17 tons of VOCs. I did not inspect the cold cleaners or the natural gas boiler; these should be checked during a future inspection.

Other Exempt Units

There is a sulfuric acid "tank room" used for dipping parts. T. Miller said this process removes oil, rust and grease from the parts; it is exempt per 285(r)(iii) equipment used for metal treatment processes that are vented to the in-plant environment. I did not see any hoods or ventilation above the tanks that would have vented emissions outside of the plant.

There are several other parts washers onsite that are water-based and emit steam outside of the plant. These units are exempt per rule 281(e).

There are also multiple welding stations throughout the plant, which include automatic welding for the assembly of the turbines. These are exempt per 285(i).

Large metal stamping presses (~10) are also located onsite and exempt per rule 285(l)(i).

Future Permitted Equipment

Alma Products has plans to install a burn-off oven under a general permit. T. Miller said that the burn-off oven would be used to burn off remnants of gaskets and Si grease from brake calipers. He said this would be more efficient than using the shot blasting equipment and other liquid parts cleaners.

Based on this inspection, Alma Products is in compliance with all state and federal regulations at this time.

NAME Michelle M. Lupton DATE 11-27-13 SUPERVISOR T. Miller