

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

B437345289

FACILITY: Alma Products I Inc		SRN / ID: B4373
LOCATION: 2000 MICHIGAN AVE, ALMA		DISTRICT: Lansing
CITY: ALMA		COUNTY: GRATIOT
CONTACT: Greg Tragis , Facility/Maintenance Manager		ACTIVITY DATE: 07/16/2018
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, scheduled compliance inspection to determine compliance with active PTI's and exemptions.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow (author) and Sam Braman (AQD LDO)  
Personnel Present: Greg Tragis, Facility/Maintenance Manager (gregtragis@almaproducts.com)

**Purpose:** Conduct an unannounced, scheduled compliance inspection to determine compliance with Alma Products' Permits to install (PTI) Nos. 56-87, 57-87, 310-87; 977-91, 985-91, and 434-92.

**Facility Background/Regulatory Overview:** Alma Products is a true minor source that is involved in automobile parts remanufacturing, specifically for Ford torque converters, brake calipers, and air compressors. Alma Products was at one time registered as a 208a source for VOCs, but the rule was rescinded. In August 2014 Alma Products provided a Potential to Emit demonstration with evidence that suggests Alma Products is a true minor source.

The facility was last inspected November 22, 2013.

**Inspection:** This was an unannounced compliance inspection. At approximately 2:30 p.m. on July 11, 2018, Sam Braman and I met with Greg Tragis, Facility/Maintenance Manager. He informed us that they run 1 shift from 6 a.m. – 2:30 p.m., thus we had arrived for the inspection just after the end of their shift. Although none of the equipment was operating, the inspection was conducted. I explained to G. Tragis what occurs during an inspection, why we were there (including possibly voiding many of the permits to install) and provided him with a January 2017 Permit to Install Exemptions Handbook, and a Boiler MACT outreach brochure.

**Table 1.** Emission Units

<u>EU</u>	<u>Description</u>	<u>Control</u>	<u>PTI/ Exemption</u>
Shell seam welder	Used to seam parts for compressors.  Vented to in-plant environment	NA	56-87
Spud and Flange Welders	Spud welder vented to in-plant environment  Flange welder vented outside plant	NA	57-87
Caustic Sonic Cleaner	NaOH metal treatment cleaner vented to in-plant environment	NA	310-87
Wire wheel buffing	Steel and aluminum to remove corrosion/paint/gasket material	Torit Dust Collector to in-plant environment	977-91
Wire wheel buffing	Steel and aluminum to remove corrosion/paint/gasket material	Torit Dust Collector to in-plant environment	985-91

Wheelabrator shot blaster	Equipment has been rendered permanently in operable. PTI will be voided	Baghouse	434-92
4 Paint booths	3 booths operational, 1 booth out of service, but has the capability to operate. Exhausted to outdoor ambient air.	Fabric filters	Rule 287(2)(c)
Sulfuric Acid Tank Room	Process removes oil, rust, grease from parts.  Vented to ambient, outside air  1 sulfuric acid tank 2 sodium hydroxide tanks	NA	Exemption Rule TBD
2 Parts Washers	Each unit is 2' x 3.5' (Surface area < 10 ft <sup>2</sup> )  Each has posted operating instructions  Both lids were closed	NA	Rule 281(h)
6 shot blasters	Vented to in-plant environment to Torit dust collector units	Torit dust collectors	Rule 285(2)(l)(vi)(B)
6 Metal Stamping presses	Only 1 of the 6 is being used, but all 6 are functional	NA	Rule 285(2)(l)(i)
Cleaver Brooks Boiler, 119 hp, 4 MMBTU	Natural gas-fired boiler manufactured in 2003, used for process heating, and plant heat during the winter.	NA	Rule 282(2)(b)(i)
4 (four) BT Gerreff conveyor washers  (Unit #'s 5076, 5077, 5078, 5079)	All 4 use Process 52 cleaning solution (SDS attached). Natural gas-heated each with a 25,000 Btu/hr heater. Gases from burner are vented outside, washer is vented inside.	NA	Rule 282(b)(i) – for the natural gas heaters  Rule 281(2)(e) for washers
BT 5082 Monorail Washer	Uses Process 52 and RPC cleaning solutions, natural gas-heated with a 500,000 Btu/hr burner, washer and burned vent to ambient air	NA	Rule 282(b)(i) – for the natural gas heaters  Rule 281(2)(e) for washers
BT 5088 Core Washer	Uses Process 52 cleaning solutions, electrically heated and vents to the ambient air	NA	Rule 281(2)(e)
BT 4830 Viking	Washer uses Process 52 cleaning solution, electrically heated, and vents to ambient air	NA	Rule 281(2)(e)
BT 5384 Mart Washer	Uses Process 52 cleaning solution, natural gas-heated, with a 20,000 Btu/hr burner. Washer and burner vent to ambient air	NA	Rule 282(b)(i) – for the natural gas heaters  Rule 281(2)(e) for washers

<b>BT 5137 Hurricane Washer</b>	<b>Uses Process 52 cleaning solution, electrically heated, and vents to the in-plant environment</b>	<b>NA</b>	<b>Rule 281(2)(e)</b>
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PTI No. 56-87 – Shell seam welder and PTI No. 57-87 – Spud and Flange welders

The shell seam welder is used to seam parts for the compressors. 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; however, the shell seam welder and spud welder are vented to the in-plant environment and therefore no visible emissions from these units is released to atmosphere. The flange welder is vented outside the plant. All 3 units, regardless if they vent inside or outside are eligible to be operated under exemption Rule 285(2)(i). Per G. Tragis' request, PTI No's 56-87 and 57-87 will be voided because the equipment can likely be operated under exemption Rule 285(2)(i).

PTI No. 310-87 – Caustic sonic cleaner

This unit has a stack height minimum of 24.5 ft above ground level, in addition to the requirement of no visible emissions from the unit except for uncombined water vapor. The cleaner is no longer vented to the ambient environment: all emissions are released inside the plant and therefore Alma Products would be in compliance with both conditions. G. Tragis said that the unit currently contains NaOH, which is what the unit was permitted under. This unit is eligible to be operated under exemption Rule 285(2)(r)(iv) for metal treatment processes, including cleaning of metal, if the emissions are only released to the in-plant environment. Per G. Tragis' request, PTI No. 310-97 will be voided because the equipment can likely be operated under exemption Rule 285(2)(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. None of the wire wheel buffers were being operated during the inspection. All wire wheel buffers emit to Torit Dust collectors which are all vented to the in-plant environment, and therefore have no stacks associated with them. Each permitted unit has PM emission rate limits of 0.01 lb/1000 lb exhaust gases and an opacity limit of 5.0%, although these requirements are no longer applicable as none of the units vent outside. Both units, regardless if they vent inside or outside are eligible to be operated under exemption Rule 285(2)(l)(vi)(B). Per G. Tragis' request, PTI No.'s 977-91 and 985-91 will be voided because the equipment can likely be operated under exemption Rule 285(2)(l)(vi)(B).

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

The wheelabrator was not operating during the inspection. G. Tragis showed us that the unit has been rendered permanently inoperable and no longer requires a permit. I will request that PTI 434-92 be voided because the equipment is no longer operational.

Sulfuric Acid "Tank Room"

There is a sulfuric acid "tank room" comprised of 2 sodium hydroxide dip tanks and 1 sulfuric acid dip tank. The sulfuric acid tank is used to remove rust from parts. The 2 sodium hydroxide tanks are used to apply "Super Derust" (a rust preventative) which contains NaOH. During the 2013 inspection these tanks were not vented to atmosphere and were exempt under Rule 285(r)(iii) equipment used for metal treatment processes that are vented to the in-plant environment. These tanks are now vented outside to the ambient air and need to be re-evaluated under Rule 290 or Rule 291 (pre-December 20, 2016 exemption rules).

Super Derust contains greater than or equal to 0.6% - 0.7% by weight NaOH and greater than or equal to 0.02 – 0.05% by weight triethanolamine. NaOH has an ITSL of 8 ug/m<sup>3</sup> and triethanolamine has an ITSL of 50 ug/m<sup>3</sup>— each of these components is therefore limited to 1000 lb/month uncontrolled emissions. G. Tragis said they use 300 lb of Super Derust per month. Worst case, assuming 300 lb of NaOH and 300 lb of triethanolamine are emitted, Alma Products would still be in compliance with the Rule 290 requirements (Rule 290(a)(ii)(A)).

G. Tragis said that 22.5 gallons of a 93.19% solution (by weight) of sulfuric acid and water is charged to the tank monthly. The old solution is removed, and fresh solution is used to recharge the tank. G. Tragis is currently working on estimating the evaporative losses of sulfuric acid from the tank by using the H<sub>2</sub>SO<sub>4</sub> calculator/excel

spreadsheet provided by AQD permits section Andy Drury. Assuming all sulfuric acid is emitted, neither Rule 290 nor Rule 291 would work for demonstrating the equipment is exempt. Sulfuric acid has an ITSL of 1.0 which allows for uncontrolled emissions of up to 20 lb/month under Rule 290. I will provide a separate activity report for this exemption demonstration once completed by the company.

#### Paint Booths

There are 4 paint booths onsite: 3 are operational and 1 has not been used in quite some time, but is used as a parts work station instead. The booths are currently operated under exemption Rule 287(2)(c), with a limit of 200 gallons per month per coating line and the requirement to have fabric filters installed, maintained and operated in a satisfactory manner. G. Tragis provided me with monthly records from July 2017 – June 2018 (attached). The largest amount of coating used was 45 gallons in October & November (2017) and May 2018, within the 200-gallon monthly limits.

I observed each of the fabric filters on the booths and one of the paint booths was not installed properly, as there was a large gap between the wall of the exhaust vent and the filter. I mentioned this to G. Tragis and he said he would ensure the following day that this particular paint booth operator was reminded of and retrained on the proper installation of the paint booth fabric filters.

#### Cleaners

The SDS for the 2 cleaning solutions used in the units indicates information is not available for VOC content or vapor pressure. Looking at the individual components within each solution, there is either no vapor pressure data or the vapor pressure is greater than 0.1 mm Hg at standard conditions. It is reasonable to assume that Rule 281 (2)(e) applies to all washers, whether they are vented outside or not.

The natural gas-fired burners on the washing units are all exempt under Rule 282(2)(b)(i).

**Compliance Statement:** Alma Products is currently in compliance with all PTI's and applicable exemptions at this time, except for the sulfuric acid tank demonstration, which is still pending.

NAME M. Tragis

DATE 7/31/18

SUPERVISOR B. M.