

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

N111935162

<b>FACILITY:</b> ALPHA METAL FINISHING		<b>SRN / ID:</b> N1119
<b>LOCATION:</b> 8155 HURON ST, DEXTER		<b>DISTRICT:</b> Jackson
<b>CITY:</b> DEXTER		<b>COUNTY:</b> WASHTENAW
<b>CONTACT:</b> Robert Wood , President		<b>ACTIVITY DATE:</b> 06/09/2016
<b>STAFF:</b> Zachary Durham	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Scheduled, unannounced inspection of PTI 21-11 and 409-85.		
<b>RESOLVED COMPLAINTS:</b>		

**Contact**

Bob Wood, P.E.  
President  
734-426-2855  
[bobwood@alphametal.com](mailto:bobwood@alphametal.com)

**Purpose**

This was a scheduled, unannounced inspection of the Alpha Metal Finishing Co. (AMF) facility located at 8155 Huron St, Dexter, MI 48130. Brian Carley and I arrived at about 1:40pm on 6/9/16 to conduct an inspection of their Permit to Install (PTI) 21-11 and 409-85. Brian Carley and I were granted access to the facility and met with Bob Wood, President of AMF.

**Background**

AMF operates equipment that anodizes and treats aluminum. The equipment consists of a series of tanks that clean, etch, and coat the metal. The company received PTI 21-11 as a resolution to a violation that occurred after an inspection conducted by Diane Kavanaugh Vetort. During Diane's scheduled inspection on 11/4/10 she found that their process had changed, which included the removal of the scrubber control equipment identified in PTI 409-85. The company had installed and operated the equipment now identified in PTI 21-11 along with the exhaust hoods that utilize mesh filter pads as a means for controlling emissions. It was determined that the use of these filter pads meet the requirement in permit exemption Rule 285(d) for controlling emissions with and equivalent or better system.

A violation notice citing Rule 201 was issued to the company for failing to receive a modified permit before installing and operating the process changes. The application and issuance of the new permit was found to be sufficient in resolving the violation.

**Compliance Evaluation**

This facility has one flexible group, FGANODIZING, under which all pieces of process equipment are included. FGANODIZING includes emission limits and material limits for three chemicals: sodium hydroxide, nitric acid, and sulfuric acid. Throughput of sodium hydroxide is not to exceed 25,000 pounds in a 12-month rolling time period, and actual use for 2015 was 3,591.63 pounds. Nitric acid is limited to 130,000 pounds, and 2,145 pounds were used. Sulfuric acid is limited to 100,000 pounds, and 1,540 pounds were used. Copies of all safety data sheets (SDS) for these chemicals are attached as well.

I also received sample copies of the inspection check lists the company uses as a part of their Preventative Maintenance/Malfunction Abatement Plan (PM/MAP). Attached to this report are the MAPCO Exhaust System check sheet, Boiler Log, and Boiler Preventative Maintenance – Weekly Inspection sheet.

During my inspection, Bob Wood indicated that the exhaust hoods equipped with the mesh filter pads are maintained according to manufacturer recommendations. The filters are removed from the system while not in operation and cleaned on a routine basis.

The facility also operates 4 Burnham boilers that provide processes heat for their treatment baths. The boilers are natural gas fired and rated at 439 MBH (439,000 BTU/hr) according to the boiler plate. These units are

exempt from Rule 201 to require a permit to install by Rule 282(b)(i) because they burn sweet natural gas and are below 50 MMBTU/hr rated heat input capacity.

The company had recently purchased a parts cleaner from Harbor Freight and they are still in the process of installing it. I provided them with copies of the cold cleaner operating procedures stickers for their use.

Other equipment observed on site was a lacquer thinner fume hood and a drying oven set to 160°F. Parts were currently being cleaned in the fume hood and waste solvent was collected for recycling through Safety Kleen.

### Summary

Brian and I arrived and parked behind the facility. We did a brief walk around the outside of the building and did not notice any odors that would be associated with acids used in the process. Nor did we observe any visible emissions coming from the facility.

Upon entry, I initially conducted a pre-tour meeting to discuss the purpose of this visit, during which time I distributed the Environmental Inspections brochure. I detailed what my expectations for the inspection were to going to be, which included having a walk-through of the facility, record keeping request, and a closing meeting. I also informed Bob of the optional survey to provide AQD with feedback on the inspection process.

Next, we proceeded on the facility tour. The process for metal treatment was in one area of the facility and I observed seven (7) exhaust vents, each of which was equipped with the mesh filter pads. The process was operating at the time and company employees were transferring material to be processed from one bath to the next, along the treatment line. The exhaust system appeared to handle any emissions coming from the baths.

Brian and I observed the other areas of the facility that is used to prep materials for treatment as well as the buildings utilities, product drying/curing, and final product packaging and material storage. These areas appeared tidy.

Having completed the walk-through, we went back the employee breakroom area to wrap up the inspection with a closing meeting. I reported my initial findings and requested the documents referenced in their permit, including material throughputs and logs used in their PM/MAP. I was given the PM/MAP logs before leaving. Brian Muscat, Project Specialist/Laboratory Technician, has since provided me an electronic copy of the SDS and material throughput for 2015 for all permit chemicals.

### Compliance Determination and Recommendations

After on-site inspection and review of the information provided to me, I have determined that this facility is in compliance with PTI 21-11.

I recommend that PTI 409-85 be voided since the equipment listed has either been removed or included in their new permit.

NAME Zack Durham

DATE 6/24/16

SUPERVISOR 