

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

U23180432644938

<b>FACILITY:</b> Rapids Tumble Finish	<b>SRN / ID:</b> U231804326
<b>LOCATION:</b> 1607 Hulls Rd., Eaton Rapids	<b>DISTRICT:</b> Lansing
<b>CITY:</b> Eaton Rapids	<b>COUNTY:</b> EATON
<b>CONTACT:</b> Brian Janetzke , Facility Manager	<b>ACTIVITY DATE:</b> 06/27/2018
<b>STAFF:</b> Michelle Luplow	<b>COMPLIANCE STATUS:</b> Compliance
<b>SUBJECT:</b> Scheduled, announced inspection to determine compliance with Air Pollution Control Rules	
<b>RESOLVED COMPLAINTS:</b>	

Inspected by: Michelle Luplow (author) and Sam Braman (AQD LDO)  
Personnel Present: Brian Janetzke, Facility Manager (brian.janetzke@rapidstumblefinish.com)

**Purpose**

Conduct an announced, scheduled compliance inspection. This inspection was conducted at the request of Brian Janetzke, Facility Manager, who wanted to ensure that Rapids Tumble Finish was in compliance with all applicable Air Quality Rules and Regulations.

**Facility Background/Regulatory Overview**

Rapids Tumble Finish is a metal finishing, furnishing, and wheelabrating "job shop." I did not find any records in MACES that this facility had been inspected in the past.

On June 14, 2018, Brian Janetzke had requested via Meg Sheehan, AQD Saginaw Bay District Office, that the air quality division would assist him in determining Rapids Tumble Finish's compliance with Air Quality Rules and Regulations.

**Inspection**

This was an announced compliance inspection. At approximately 7:40 a.m. on June 27, 2018, Sam Braman and I met with Brian Janetzke, Facility Manager. I explained to B. Janetzke what occurs during an inspection and provided him with a January 2017 Permit to Install Exemptions Handbook and a Boiler MACT outreach brochure.

Table 1 contains all emission units recorded during the inspection with associated PTI Exemptions where applicable.

**Table 1.** Emission Units

<b>EU</b>	<b>Description</b>	<b>Control</b>	<b>Exemption</b>
<b>Surface Coating Line</b>	<b>Line contains multiple dip baths to coat and treat metal parts for corrosion resistance.</b>  <b>Local exhaust vents over the bath that pull emissions from baths to one exhaust vent which exhaust outside through one stack to ambient air</b>	<b>NA</b>	<b>Permit will be required</b>
<b>"Vibratory" cleaning machines</b>	<b>Shakes and rolls parts for cleaning and drying. Cork, ceramic and steel are the various cleaning media</b>  <b>Steel cleaning machines use a non-VOC cleaner. Ceramic cleaning machines use a powder mixed with water (no VOC).</b>	<b>NA – vented to in-plant environment</b>	<b>Rule 281(2)(e)</b>

4 shot blasters	<p>3 wheelabrator shot blasters, and 1 turntable shotblaster.</p> <p>All particulate from these machines are collected into cartridge filter baghouse units, located outside the building, which vents to ambient outside air.</p> <p>None of this equipment was operating during the inspection</p>	<p>2 Cartridge filter Baghouse units; no signs of particulate on ground, indicative of particulate all being captured appropriately</p> <p>Collected particulate is shipped out as non-hazardous waste</p>	Rule 285(2)(l)(vi)(C)
2 Boilers	2 Natural gas-fired boilers. One is rated at 1.8 MMBtu/hr, the other at 1.4 MMBtu/hr. Boilers are used to heat the coils via heat exchange for the coating line and spin dryers	NA	Rule 282(2)(b)(i)
4 Monorail Parts Washer	<p>Uses L-360 Parts Washer solution (SDS attached) which contains no VOC;</p> <p>3 are heated with a natural gas-fired 1.5 MMBtu/hr burner, the 4<sup>th</sup> washer is heated with a 500,000 Btu/hr natural gas-fired burner. There is no venting to outside ambient air</p>	NA	<p>Rule 282(b)(i) – for the natural gas-fired heaters (&lt;50 MMBtu/hr)</p> <p>Rule 281(2)(e) for washers</p>

#### Surface Coating Dip Bath Line

This line is used to clean and apply corrosion resistant coatings to metal parts. There are approximately 6 local ventilation hoods situated just above the dip baths that pull air off the baths into one main duct that exhausts to ambient outside air. There are 10 steps total:

1. Alkaline Cleaner (for steel)
2. Double Rinse (city water)
3. Acid Bath (Muriatic Acid)
4. Double Rinse
5. Black Additive (occasionally)
6. Rinse
7. Phosphate dip (fine)
8. Phosphate dip (heavy)
9. Double Rinse
10. Rust inhibitor, lab oil, or Pen Dip oil

The SDS for all chemicals in this process are attached. The muriatic acid (hydrochloric acid) bath is of most concern to the AQD because HCl has an ITSL of 20 ug/m3 and is also considered a hazardous air pollutant (HAP) by the EPA. B. Janetzke said that the solution contains 30-40% HCl. I told B. Janetzke that this would likely only be exempt through a Rule 290 or Rule 291 exemption demonstration, and that I would investigate how emissions from the HCl bath would be evaluated per Rule 290/291. I spoke with Andy Drury, of the AQD Permit Section, who explained that the determination of monthly HCl emissions from a bath process would be cumbersome and that a PTI would likely be less cumbersome, as it would likely only require the company to track how much HCl solution was added to the tank during a given timeframe. I explained this to B. Janetzke

who, with the help of consultant, Jillann Koebbe, determined that it would be in the company's best interest to apply for a permit to install for the coating line, rather than calculate monthly emissions from the HCl bath. I will follow up with the company to ensure they have a date by which they will be submitting the permit to install application.

**Compliance Statement:** Rapids Tumble Finish is in compliance with the Air Pollution Control Rules, pending the submittal of a PTI application for the coating line.



**Image 1(Catridge filter)** : one of the cartridge filter baghouses for 2 of the shot blasting wheelabrators



**Image 2(cartridge filter #2)** : Cartridge filter baghouse unit used for the other 2 shotblasting units





**Image 4( Coating Line )** : Coating Line with local ventilation (see slatted gray ducts near bath tanks)



**Image 5(Vibratory)** : Example of one of the "vibratories" used to clean parts



**Image 6(Parts Washer) :** One of the natural gas-fired parts washers

NAME Wesley Smith

DATE 9/13/18

SUPERVISOR B.M.

