

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

U47170015038327

FACILITY: Precise Finishing		SRN / ID: U471700150
LOCATION: 1650 N. Burkhart Road, Howell		DISTRICT: Lansing
CITY: Howell		COUNTY: LIVINGSTON
CONTACT: Brad Salutes , Manager- High Viscosity Temp. Conditioning Equip		ACTIVITY DATE: 01/17/2017
STAFF: Nathaniel Hude	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS:
SUBJECT: This was an unannounced and unscheduled inspection conducted after being notified by a OWMRP employee that there may be emission units requiring permits on site. This report details a 1/17/17 inspection and a 1/23/17 in person follow up meeting.		
RESOLVED COMPLAINTS:		

Inspection Report

U471700150- Precise Finishing

1650 N. Burkhart Road

Howell, MI 48855

<http://www.preciseusa.com/products.html>

Inspection Date:

1/17/17 and 1/23/17

Facility Contacts:

Brad Salutes, Manager- High Viscosity Temperature Conditioning Equipment, 517-552-9200

bsalutes@preciseusa.com

Bill Emborsky, Product Engineering Leader and General Manager, 517-552-9200 bemborsky@preciseusa.com

Brad ?, Health and Safety Manager, 517-552-9200

MDEQ AQD Personnel:

Nathan Hude – 517-284-6779, huden@michigan.gov

Facility Description:

This facility fabricates systems for automotive, petroleum, ethanol, and other plants. The systems consist of specialty tanks, pressure systems, hot water boilers (<4 MMBtu), heat exchangers and the like. These products are either sold direct to companies or sold to a distributor who places their specific brand on the product.

They operate 5 days per week, sometimes 6 with production occurring 6:30am-3:00pm and the office is staffed from 8:00am – 5:00pm. There are about 15 employees on site and the personal protection for inspections is steel toed boots and eye protection. The facility does not have any emergency generators or boilers in use on site.

The facility is bordered by railroad tracks oriented north-west to south east and a vacant treed area for approx. 500 feet until there is an industrial park to the east. To the west is Baymont Inn and Suites and the Tanger Outlet Mall; and to the south is a mixture of residential structures and industry. An aerial image is provided with this report identifying emission units exhaust stacks.

There are also 2 Precise Finishing locations in the Whitmore Lake area that are non-production plants, but rather assembly plants. There has been no change in name or ownership and the facility has been in operation for approx. 19 years.

For the purpose of this report, I assigned emission unit ID's to the facility to assist in writing this report as follows:

EU-WCG: welding, cutting, and grinding activities that are released to the in plant general environment

EU-SOLVWASH: outdoor enclosed on all but 1 side cleaning booth with exhaust fan used to wash stock stainless steel with solvent prior to the manufacturing process

EU-ELECTPOL: externally vented electropolish system without control

EU-PAINTBOOTH: externally vented paint booth with fabric filters for the coating of various metal components

Applicable Regulations:

R336.1284(h) Trace Zero operation

R336.1285(l)(i) applies for the bending and forming of metals;
R336.1285(l)(vi) applies for the cutting, grinding, drilling of metals.
R336.1287(c) applies for the paint booth

Possible non-delegated Federal Regulations applicable to source:

40CFR63 Subpart WWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

40CFR63 Subpart XXXXX—National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

Previous Inspections:

None (air quality) found on record

Previous Violations:

None found on record

Recent Complaints (within 2 years):

None found on record

Number of Violations Found During this Inspection:

1. R336.1201 violation for failure to obtain a permit for exhaust system servicing the electropolish system, EU-ELECTPOL

2. R336.1201 violation for failure to obtain a permit for exhaust system servicing the semi-outdoor cleaning booth using Americhem Lacquer Thinner, EU-SOLVWASH.

Inspection Key Concerns:

None

MAERS Reporting

No, not applicable

MAERS Emission Unit List

None

Inspection Summary

1/17/17

This was an unannounced and unscheduled inspection conducted after being notified by a OWMRP employee that there may be emission units requiring permits on site. I arrived at the facility at approx. 8:20am. It was a cloudy misty day with fog and I did not see any visible emissions of smell any odors while approaching the facility.

I entered the buildings front office area and asked for the safety manager or the site manager while introducing myself. Shortly thereafter I was greeted by Brad Salutes. I introduced myself to Brad and while providing him a copy of my business card informed him of the purpose of my visit. Brad informed me that he was technically the manager of fabrication and the safety manager and building manager where at one of the Whitmore Lake facilities, but he would try to answer my questions. I offered to return when everyone was available and Brad contacted the Safety Manager where we decided I would come back on 1/23/17 at 8am so that everyone could be present, though we decided we would walk through the facility to see what emission units were in use.

We went into a conference room where we discussed the facility based on what I was provided by the OWMRP staff. I gave Brad a copy of our "Permit to Install Exemption Handbook". In this copy, I earmarked and circled rules; this included page 5 rule 281 for a semi-outdoor cleaning booth further referenced as EU-SOLVWASH, page 13 rule 285 (r) for the Electropolishing tanks further referenced as EU-ELECTPOL, and page 17 rule 287(c) for the paint booth further referenced as EU-PAINTBOOTH. While we were seated we discussed the details of the rules and how they would apply.

After our discussion, we toured the facility in which John, one of the managers joined us. Once we entered the production floor, Brad pointed out that there was another company currently renting space. The company name is Trace Zero and they produce malonic acid onsite with emissions being released to the general in plant environment with no ventilation. The process was completed by dissolving bags of a powder into water. A google search found that the company is based at 2740 Auburn Court in Auburn Hills. The following information is from the company website

regarding malonic acid: "Trace Zero manufactures various aqueous solutions of malonic acid, the common name for 1,3 propanedioic acid, in its manufacturing facilities. The high purity grade product is processed, purified, filtered, and contaminant levels verified to meet both internal and customer specifications before customer delivery. The product is available with concentrations ranging from 10 to 50% liquid solutions. The purity of the solution is determined through analysis of select metal ions. Those ions include (but not are not limited to) aluminum, boron calcium, chloride, chromium, cobalt, copper, iron, potassium, magnesium, manganese, sodium, titanium, zinc and zirconium. Each ion has a specific maximum specification, but the total ion content will not exceed 40 ppm for a 50% liquid solution unless otherwise approved by customer specification."

A safety data sheet found on the Trace Zero website is attached to this report and a search found that malonic acid is not listed as a Hazardous Air Pollutant (HAP). It appears that R336.1284(h) meets the needs of this operation.

EU-WCG

The next area we entered was the metal working area which I believed to be on the north end of the building. This area had overhead cranes for lifting heavy objects for assembly. On the floor, Brad pointed out a centrifuge that was used in the ethanol industry for removing additional bio-fuel from the mash by-product. I consider this area EU-WCG and due to in addition to assembly, welding, cutting, and grinding takes place in this area. All of the activities are released to the general in plant environment without any sort of air filtration or outside venting devices, thus R336.1285(l)(i) applies for the bending and forming of metals; R336.1285(l)(vi) applies for the cutting, grinding, drilling of metals.

EU-ELECTPOL

We then continued to the electropolish area. Based on the correspondence of OWMRP staff, sulfuric acid (CAS 7664-93-9, non-HAP) and phosphoric acid (CAS 7664-38-2, non-HAP) and are used at this station (a picture from that inspection is also included in this report). It is used for polishing stainless steel components fabricated on site prior to certain assembly points or prior to distribution to customers. Exhaust hoods cover the first 2 of the 3 tanks. These are the cleaning tank and the electropolish tank, the last tank is the rinse tank which does not have any sort of ventilation. Brad informed me that even when polishing is not being conducted, the fans are operational. The exhaust is ducted out the east side of the building through an uncontrolled stack that is approx. 30 feet above ground level (agl). Based on a review of the Exemption Handbook, I found that R336.1285(l)(iii) excludes exhaust systems of acid solutions as follows: (l) The following equipment and any exhaust system or collector exclusively serving the equipment: (iii) Equipment for surface preparation of metals by use of aqueous solutions, except for acid solutions. R336.1285(r) is a rule for covering electro polishing yet it can only be done if emissions are released into the in-plant general environment: (r) Equipment used for any of the following metal treatment processes if the process emissions are only released into the general in-plant environment: (i) Surface treatment. (ii) Pickling. (iii) Acid dipping. (iv) Cleaning. (v) Etching. (vi) Electropolishing. (vii) Electrolytic stripping or electrolytic plating.

Based on the lack a permit exemption, the facility is in violation of R336.1201 for failure to obtain a permit.

Though Michigan does not have enforcement delegation according to R336.1902 and R336.1941-R336.1960, it appears the electropolish tanks are subject to 40CFR63 WWWW(6W) and XXXXX(6X). A copy of each regulation will be provided to the company during the 1/23/17 meeting. The copies include highlighted areas and lightly crossed out areas with a note stating "Highlighted areas are what I believe apply, yet you must perform your own research" followed by my initials. Copies are included with this hardcopy report.

EU-PAINTBOOTH

The paint booth is located on the south end of the building in its own room. While we inspected the booth, Ron the lead paint technician joined us. I estimated the booth to be about 15 feet high, 10 feet wide and about 10 feet deep. The booth had ventilation and particulate control fabric filters and the outside exhaust stack I estimated to be approx. 25 feet agl. Ron keeps track of the filter change out dates on a dry erase board. We discussed R336.1287(c), all of the requirements were being met except the tracking of paint usage. Ron stated that the normal maximum would be about 30 gallons per month. Due to the low paint usage, I agreed to allow the use of purchase orders to prove usage to meet the exemption rule requirement. Brad agreed to have these records available at our next meeting on 1/23/17 and Ron agreed to maintain records starting that day to prove usage is less than the exemption limit of 200 gallons per month. Based on our ability to sort through records and promote future compliance, a violation will not be cited for the lack of recordkeeping as required by R336.1287(c)(iii).

EU-SOLVWASH

This cleaning booth is accessed by opening a overhead door in the electropolish area. The booth is contained on all sides but one and has an exhaust fan on the northern wall. There is a bottom containment area for the collection of solvent. I estimated the booth to be about 15 feet high, 10 feet wide and about 10 feet deep. There were two 55 gallon drums near the overhead door which is what they use in the solvent wash device; it appears

this solvent is sprayed on using low pressure devices directly attached to the drums. The solvent used did not have a "Name" label on it but did identify the manufacturer as Americem out of Mason, MI. It is estimated they use the device 2-3 times per week. I asked for the usage rate and the MSDS to be available during our 1/23/17 meeting. At the time of this visit, I was unsure if any exemption applies. Upon returning to the office I found that based on the solvent used, R336.1281(e) would not qualify due to the solvent having a vapor pressure of greater than 0.1 MMHg at standard conditions. All of the MSDS sheets available online identified a vapor pressure of greater than 0.1 MMHg at standard conditions. Once the 1/23/17 meeting is conducted, the MSDS will be checked.

Based on the lack a permit exemption, the facility is in violation of R336.1201 for failure to obtain a permit.

Prior to departing, I informed Brad of my concerns with the lack of fitting permit exemptions regarding EU-ELECTPOL and EU-SOLVWASH, but informed him I would research and bring any information to the 1/23 meeting. We also discussed the company having the following on hand for review at the meeting: EU-ELECTPOL air testing, EU-PAINTBOOTH paint purchase orders and the MSDS and usage rates for EU-SOLVWASH.

1/23/17

I arrived on site at 8am. I did not notice any VE's or odors from the facility. I entered and signed in and was greeted by Bill and Brad. I introduced myself and provided them a copy of my business card. We then went to a meeting room to discuss the plant operations based on my 1/17/17 visit.

We began the discussion of what I found in the exemption booklet that would apply to their operation; this included the EU-WCG (R336.1285(l)(vi)) and EU-PAINTBOOTH (R336.1287(c)) pending records could be provided to prove a usage of less than 200 gallons per month. I also informed them that it was the facilities responsibility to claim the use of the exemptions rather than me assigning the use.

We then discussed my findings regarding the EU-SOLVWASH and EU-ELECTPOL. I informed them that I was not able to find an exemption that would apply to these units and that a permit would be needed.

During our discussion, Brad provided me a MSDS for the solvent used in the EU-SOLVWASH. The solvent is produced by Americem as stated before and is identified with a product name of SCI-100LT. Both Bill and Brad estimated that about 0.5 gallons is used per day for a total of 2.5 gallons used per week. The solvent is not removed from the device, but is rather allowed to evaporate. A detailed check of the solvent found that 99% of it is volatile, the vapor pressure is > 10 MMHg, a density of 6.97 lbs/gallon, and 96% of the solvent is classified as a Hazardous Air Pollutant (HAP) by EPA. Based on the estimated usage, the total HAP emissions are estimated at 870 lbs/yr. Based on this usage, an exemption of R336.1290 or R336.1291 may apply, but documentation to prove such could not be provided thus a violation to rule R336.1201 will be cited.

In regards to EU-ELECTPOL, I informed them of the same finding. For the exemption of R336.1285(r) to apply, the emissions would need to be released to the in general plant environment. Because of the risk to their workers, this is not feasible so I informed them that a permit with a scrubber or some sort of surface tension solution will be required. Based on an exemption that does not fit this unit, a violation to rule R336.1201 will be cited.

I also provided them hard copies of 40CFR63 Subpart WWWW and XXXXXX which I believe apply to their facility. Due to the State of Michigan not having delegation and enforcement authority of these regulations, I did not cite the facility or review the regulations. Rather, I provided the documents for informational purposes and informed them that they should look into the regulations applicability to their facility.

Prior to departing, we discussed the violation process and I agreed to send them internet links to our rules and commonly used consultants which I provided on 1/26/17.

Based on my inspection and our follow-up meeting, it appears Precise Finishing Systems is non-compliant with State of Michigan Air Quality Rules and violations will be sent as detailed above.

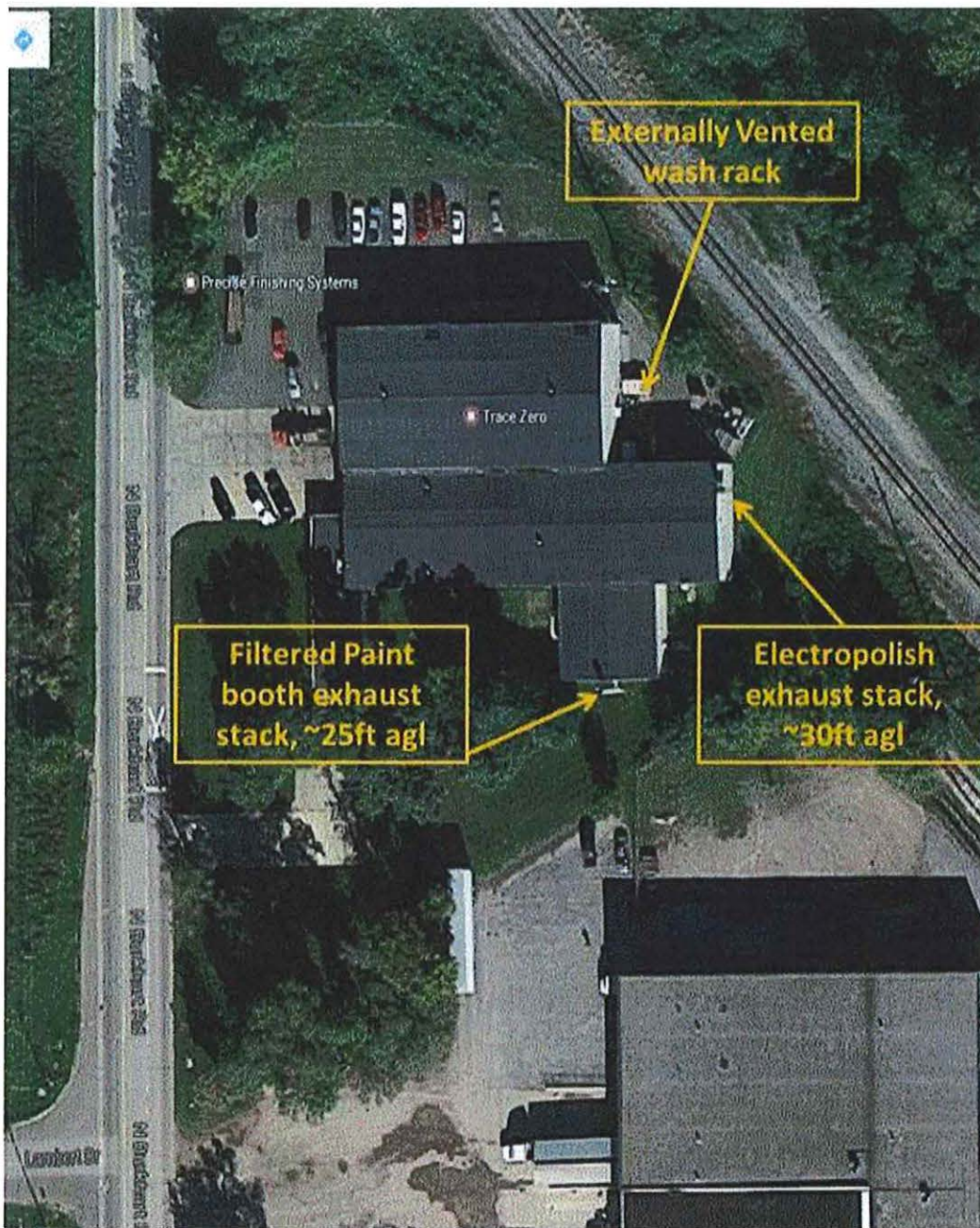


Image 1(Facility Aerial Imag) : Aerial Image depicting stack locations for associated emission units

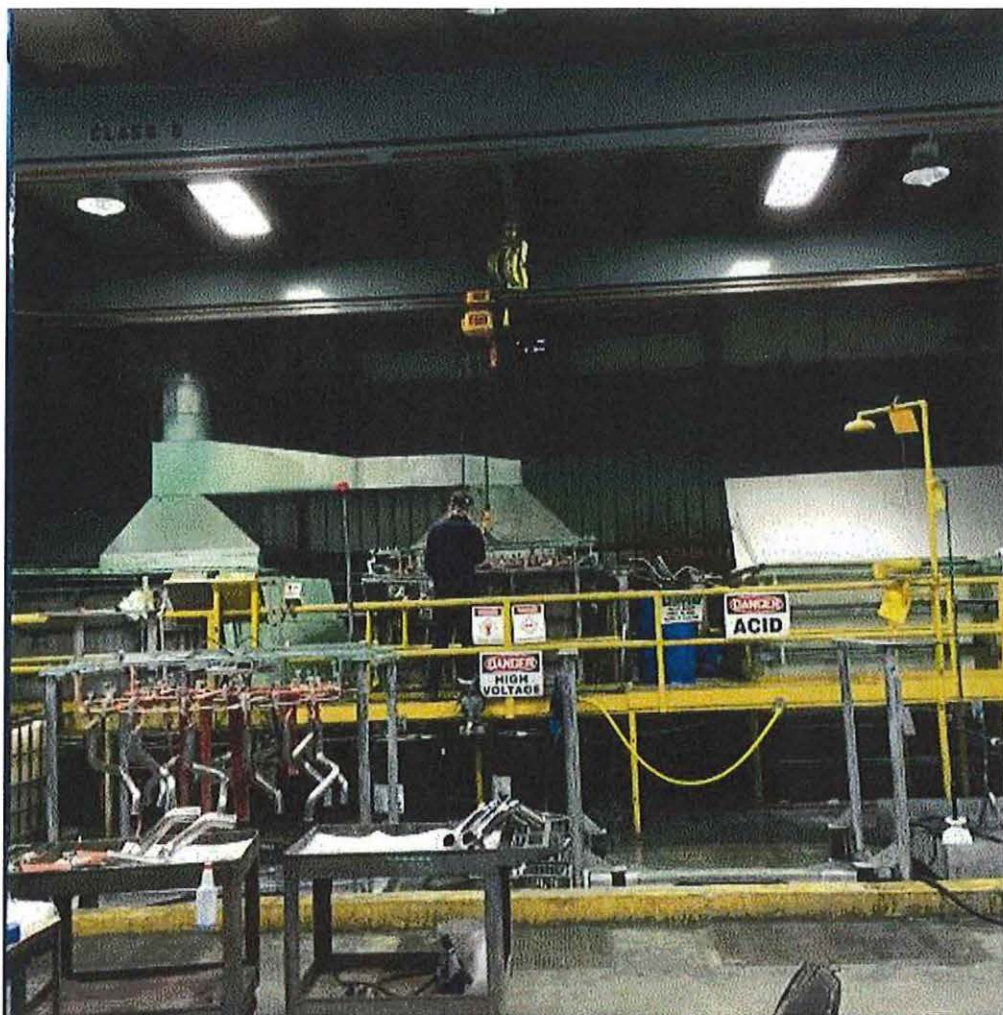


Image 2(Electropolish) : Electropolish station with hoods venting to outside ambient air



Image 3(Cleaning Booth) : Internal view of cleaning booth that is vented to outside ambient air

NAME *[Signature]*

DATE 1-26-17

SUPERVISOR *B. M.*

