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

N122943473

FACILITY: PRS MANUFACTURING CO		**SRN / ID:** N1229
LOCATION: 3745 DYKSTRA DR, WALKER		**DISTRICT:** Grand Rapids
CITY: WALKER		**COUNTY:** KENT
CONTACT: Dennis Kowalczyk , Owner		**ACTIVITY DATE:** 03/02/2018
STAFF: Adam Shaffer	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled unannounced inspection.		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff Adam Shaffer (AS) arrived at PRS Manufacturing Company (PRS) at 10:05 am on March 2, 2018 to complete a scheduled, unannounced inspection.

Facility Description

Prior to entering the facility, offsite odor and visible emission observations were completed. Weather conditions at the time of the inspection were sunny, low 30's°F and winds from the northwest at 10-15mph. No emissions were observed, and no significant odors were identified.

Upon arrival, AQD staff AS initially met with Mr. Dennis Kowalczyk, Owner, who provided a walkthrough of the facility, answered onsite questions, and provided requested records. PRS manufacturers, coats and cleans plating racks made from various metals. The facility is in operation with one Permit to Install (PTI) No. 915-85A and is a synthetic minor for hazardous air pollutants (HAPs). PRS is currently under Consent Order AQD 56-2014. The facility does not appear to be subject to any additional federal regulations or standards at this time. It was concluded during the initial discussion that no significant changes have occurred to the facility since the last inspection in January 2016.

During process operations, racks previously used for coating are received on site and coating materials are removed in the strip oven. Following the stripping of the coating materials, various procedures such as welding and sandblasting to the racks are completed. Following this the racks are dipped in a primer/solvent prior to being coated with polyvinyl chloride (PVC) and baked before shipped off site.

FGOVENS

This flexible group is for EU-STRIPOVEN and EU-BAKEOVEN, which are two batch type natural gas-fired burn-off ovens used for application of and/or removal of plastisol coatings from metal parts. Each oven is equipped with a 1,200,000 BTU/hr afterburner control system.

FGOVENS is limited to processing no more than 150 batches of metal parts per a 12-month rolling total. Records were requested and eventually provided of monthly totals for EU-STRIPOVEN and EU-BAKEOVEN. It was discussed with Mr. Kowalczyk that PRS shall keep in a more satisfactory manner monthly and 12-month rolling totals of batches processed. Records were reviewed of 12-month rolling totals back to December 2016 with several months exceeding the 150-batch limit and the highest being in February 2017 at 176 batches. However, during the application process for PTI No. 915-85A the batch limit appeared to have been intended for EU-STRIPOVEN only. Reviewing 12-month rolling totals for batches only for EU-STRIPOVEN, the records indicate that PRS is well within the 150-batch limit. After further review among staff this was concluded to not be a violation. The batch limit was discussed with Mr. Kowalczyk during a site visit on March 29, 2018.

The two ovens were observed during the inspection. It was verified that both ovens only burn natural gas and process only cured paints, oil or grease on racks and/or hangers. Each oven was installed with an LCD display screen for both the primary chamber and afterburner temperatures during operation. Both ovens are equipped with a circle chart recorder to continuously record temperatures for each oven's afterburner during operation with the strip ovens circle chart also recording the primary chamber temperature.

The strip oven was in operation at the time of the inspection. The afterburner temperature observed was 1,440°F, which is well within the permitted limit. Circle chart records were observed back to January 2017 for both ovens. Several charts reviewed for the strip oven identify the afterburner temperature below 1,400°F while the primary chamber is in operation. During the initial startup of the strip oven primary chamber, records showed that the afterburner temperature is not at or above the 1,400°F satisfactory operation. Based on the records reviewed, this is a violation of PTI No. 915-85A, FGOVENS, Special Condition (SC) IV.1.

The charts reviewed for the bake oven identify the afterburner temperature below 1,400°F while the oven was in operation on January 6, 2017. Circular charts reviewed after appeared to be satisfactory, and the ovens were calibrated on January 11, 2017. Based on the records reviewed, it is possible it was a calibration error, and no further action is necessary. Reviewing the remaining charts for the bake oven it was concluded that the oven overall appears to be operating satisfactorily. It should be noted that the primary chamber temperature is not being recorded on the circular charts for the bake oven to verify that the afterburner chamber is operating at or above 1,400°F upon initial startup of the primary chamber. This should be verified and adjusted appropriately by PRS to maintain satisfactory operation of the bake oven.

Records were requested for 2017 for all thermocouple calibrations and maintenance performed on FGOVENS. PRS staff stated that no malfunctions have occurred during that time frame. PRS provided dates for calibrations and some maintenance that was completed in 2017 for the ovens. Improvements to the current recordkeeping were discussed with PRS staff. In the future, PRS shall keep track of all maintenance, calibrations, and malfunctions in a more satisfactory manner.

Compositions of the materials being processed by FGOVENS was requested and provided by PRS. Two stacks are listed in association with this flexible group. Though the exact dimensions for each stack were not measured, they appeared to be consistent with the dimensions listed in PTI No. 915-85A.

Additional Observations

- Several drill press machines were observed that appear to be exempt per Rule 285(2)(l)(vi)(B).
- Welding and soldering areas were observed on site. Operations observed appear to be exempt per Rule 285(2)(i).
- A sandblasting area was observed on site that is used to sandblast burned racks. Fabric filters were observed in use. During operation, the adjacent door is kept open to maintain a negative pressure. The sandblasting area appears to be exempt per Rule 285(2)(l)(vi)(C).
- A PVC dip tank was observed. Monthly usage records for the dip tank were provided to AQD staff AS during a previous site visit on February 12, 2018. The previous visit was regarding PRS submittal of their 2017 Michigan Air Emissions Reporting System

(MAERS) Report. Monthly usage rates for this dip tank from January 2017 through January 2018 were 195 gallons per month. A primer/coating dip tank was observed during the site inspection that is used to prime the racks prior to being coated and baked with PVC. The primer dip tank contains 19% primer and 81% methyl ethyl ketone (MEK). PRS staff stated that all materials coated in the primer dip tank go through the PVC dip tank and EU-BAKEOVEN. Based on this, the two dip tanks are considered one coating line. After discussing combined usage rates for both dip tanks with Mr. Kowalczyk, it was concluded that PRS is likely over the 200-gallon monthly usage limit; therefore, the Rule 287(2)(c) exemption cannot be used. During the site visit on March 29, 2018, AQD staff and PRS staff discussed other potential options for the coating line such as Rule 290 or applying for a general PTI. Moving forward, PRS shall choose which option they wish to use.

Site Visit – March 29, 2018

A follow up site visit was completed with AQD staff AS and Dave Morgan (DM) on March 29, 2018. AQD staff met with Mr. Kowalczyk to address concerns that were identified and to discuss potential options for PRS. Listed below were topics discussed during the site visit.

- The ovens were discussed at length including the satisfactory operation of the afterburners upon startup of the primary chamber and during operation of the primary chamber.
- The two dip tanks and the combined usage rates were discussed. Based on the combined monthly usage rates, PRS cannot use the Rule 287(2)(c) exemption for the surface coating line. Several potential options were discussed for the surface coating line. One option was to apply for a general PTI; however, PRS currently vents the primer/coating dip tank area out the side of the building and may need to install a stack to meet the requirements of a general PTI. A second option is to use the Rule 290 exemption. A third option is applying for a regular PTI for the coating line and reopen PTI No. 915-85A to include the coating line; however, PRS may then be subject to additional requirements such as New Source Review.
- The issues identified by AQD staff of PTI No. 915-85A and when it was initially approved were discussed and PRS potentially applying for a permit modification.

Conclusion

Based on the review of the records provided and the facility walk through, PRS is not in compliance with PTI No. 915-85. A violation notice (VN) will be sent for the following violation identified:

- Several circle charts reviewed identify the afterburner temperature below the 1,400°F satisfactory operation limit while the strip oven was in operation. Additionally, during startup of the primary chamber for the strip oven, the afterburner was not operating above the limit of 1,400°F. This is a violation of PTI No. 915-85A, FGOVENS, SC IV.1.

NAME adam F. Sheffler DATE 04/17/2018 SUPERVISOR