DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P077869083

FACILITY: Pro Powder Inc.		**SRN / ID:** P0778
LOCATION: 201 Lovejoy Avenue, SOUTH HAVEN		**DISTRICT:** Kalamazoo
CITY: SOUTH HAVEN		**COUNTY:** VAN BUREN
CONTACT: Kevin Wedge ,		**ACTIVITY DATE:** 07/25/2023
STAFF: Rachel Benaway	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: On-site inspection to verify compliance with PTI #211-16 and all state and federal air use regulations.		
RESOLVED COMPLAINTS:		

AQD staff (Rachel Benaway) completed an unannounced air quality inspection of Pro Powder Inc. (P0778), a powder coating facility located in South Haven, MI, on 7/25/2023. The purpose of this inspection was to verify Pro Powder is in compliance with their Permit to Install (PTI) #211-16 and all state and federal air use regulations. Pro Powder is considered a minor source of hazardous air pollutants (HAPs) and volatile organic compound (VOC) emissions. The facility is not subject to any New Source Performance Standard (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP). The facility has never been inspected since their PTI was issued in 2017. Kevin Wedge is the facility manager responsible for submitting requested records, and was present for the on-site inspection. Personal protection equipment includes safety glasses and safety shoes.

The facility operates 1 shift per day, 4 to 5 days a week, and employs approximately 20 people. The facility powder coats aluminum and steel parts, appliances, and furniture for the automotive, agricultural, recreational, and landscaping industries. There are no parts washers, boilers, or emergency engines on site.

#	**Equipment at Facility**
1	Pyrolysis (burnoff) oven
2	Powder coat production lines **(Exempt Rule 287(2)(d))**
1	Dust collector **(Exempt Rule 285(2)(f))**

Pro Powder has two overhead monorail conveyor lines and can accommodate larger parts through a batch process with manual application. The purpose of the pyrolysis oven is to remove cured powder coating from metal racks used to secure parts along the coating line. Heating the surface in an oxygen starved atmosphere reduces the combustible material to ash and fumes. The fumes are directed to the secondary chamber or afterburner which operates as a pollution control mechanism at a higher temperature and releases a discharge consisting of water vapor and carbon dioxide. The racks are place in the primary chamber and the secondary chamber is brought up to temperature, the primary chamber is raised to operating temperature so pyrolysis may commence. Both cycles last approximately 8 hours long. The facility reports that the oven is used daily and typically begins a burnoff cycle at the end of a shift, around 4:30 pm.

The following is a summary of information obtained from the on-site inspection and the submittal of requested records. Where applicable, compliance determinations are indicated for each special condition established in the PTI, organized by emission unit or flexible group.

EU-BOVEN

A batch type natural gas-fired burnoff oven with a secondary chamber or afterburner, used to remove cured paints, oil, or grease from metal parts by thermal decomposition in a primary chamber. The primary and secondary chamber are each rated at 1.0 MMBTU/hr. Pollution Control: Afterburner. The oven was not in operation at the time of this inspection.

Parts to be processed are placed in modular containers called "dressers" that are kept next to the oven. Two dressers are loaded into the oven per run.

SC	Condition	COMPLIANT?
I.1	Shall be no visible emissions from EU-BOVEN	Yes
II.2	Shall only burn natural gas in EU-BOVEN	Yes
III.1	Shall not use EU-BOVEN for thermal destruction or removal of uncured paints or any materials containing non-chlorine halogens (fluorine, bromine), such as Teflon	Yes
III.2	Shall not load any transformer cores, wire, or parts coated with lead, or any waste materials such as paint sludge or waste powder coatings into EU-BOVEN	Yes
IV.1	Shall not operate EU-BOVEN unless secondary chamber is installed, maintained, and operated in a satisfactory manner: Secondary chamber must maintain minimum temperature of 1400degF and minimum retention time of 0.5 sec.	Yes Yes
IV.2	Shall not operate EU-BOVEN unless an automatic temperature control system for primary and secondary chambers is installed, maintained, and operated in a satisfactory manner.	Yes
IV.3	Shall not operate EU-BOVEN unless an interlock system that shuts down the primary chamber burner when the secondary chamber is not operating properly is installed, maintained, and operated properly.	Yes
IX.1	Install and operate the afterburner temperature recording device (SC VI.1) and the interlock system (SC VI.6) within 14 days of PTI issuance.	Yes

Monitoring/Recordkeeping:

SC	Condition	COMPLIANT?
VI.1	Install, calibrate, maintain, and operate a device to continuously monitor the temperature in the burnoff oven secondary chamber and record temperature at least once every 15 minutes.	Yes
VI.2	Calibrate temperature signal received by controller associated with primary and secondary chamber at least once per year and keep records of calibrations. Keep all records on file at facility and make available to Department upon request.	Yes
VI.3	Keep temperature data records for secondary chamber on file at facility and make available upon request.	Yes
VI.4		Yes

	Keep records of date, duration, and description of any malfunction of control equipment, any maintenance done and any test results.	
VI.5	Maintain a current listing from manufacturer of the chemical composition of each material processed in EU-BOVEN, including weight percent of each component. (MSDS)	**Yes**
VI.6	Maintain current information from manufacturer that EU-BOVEN is equipped with a secondary chamber, automatic temperature control system, and interlock system that shuts down primary chamber if secondary chamber is working improperly.	**Yes**
VI.7	Monitor EU-BOVEN to verify proper operation by taking VISIBLE EMISSION (VE) readings once per calendar month. -Observe stack exhaust during operation and record if VE are present every 15 sec for a 6-minute period. -May reduce frequency of VE readings to once per 6-month period if no VEs observed for 3 consecutive months. -If VEs are observed, shall inspect oven, verify type of coating processed, perform maintenance required, return to taking VEs every month for a minimum of 3 months. -Keep records of any action taken in response to VE readings. -Keep records on file at facility and make available upon request.	**Yes**
VI.8	Keep records of all VE readings for EU-BOVEN. Records shall include: -Date, time, name of observer, whether reader is certified, status of VE during observation period. Keep records on file and make available upon request.	**Yes**

The facility submitted records demonstrating the secondary chamber temperature is being monitored and recorded in one-minute intervals during operation. These records also demonstrate compliance with SC IX.1 requiring the monitoring equipment to be installed within the stated timeframe. Calibration records for the thermocouple were submitted for 2022 and 2023. The facility reports that no abnormal conditions or malfunctions have occurred since the unit was installed. An MSDS was submitted for the material processed in the oven, including weight percents of each component.

The facility followed the proper protocol of recording visible emissions (VE) observations as directed by SC VI.7. No VEs were observed for a 3-month period so the frequency of readings was reduced to every 6 months. VE reading log sheets were submitted from 2017 to 2022.

The facility appears to be in compliance with all requirements of PTI 211-16 and all state and federal air use regulations at this time.

NAME Rachel Benaway DATE 9/21/23 SUPERVISOR