

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

P091547714

<b>FACILITY:</b> Jackson Metal Cleaning		<b>SRN / ID:</b> P0915
<b>LOCATION:</b> 1492 West Grand River Avenue, WILLIAMSTON		<b>DISTRICT:</b> Lansing
<b>CITY:</b> WILLIAMSTON		<b>COUNTY:</b> INGHAM
<b>CONTACT:</b> Tyler Lang , Owner		<b>ACTIVITY DATE:</b> 01/22/2019
<b>STAFF:</b> Michelle Luplow	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Unannounced scheduled compliance inspection to determine compliance with PTI 70-18		
<b>RESOLVED COMPLAINTS:</b>		

Inspected by: Michelle Luplow (author) and Samantha Braman (AQD LDO)

Personnel Present: Brian Doherty, Operations staff

Other Jackson Metal Personnel (not present): Tyler Lang, Manager (tlang@jacksonmetalcleaning.com)

#### **Purpose**

Conduct an unannounced scheduled compliance inspection of Jackson Metal Cleaning to determine compliance with General PTI 70-18 for for a natural gas-fired burnoff oven.

#### **Facility Background/Regulatory Discussion**

Jackson Metal Cleaning In Williamston is a new source; this is the first time this facility has been inspected since the issuance of General PTI 70-18 in April 2018. Jackson Metal Cleaning is located within Building #2 of Michigan Woodworking, located at 1492 E. Grand River in Williamston. Michigan Woodworking owns the building that Jackson Metal Cleaning is leasing and working out of. As a note for future inspectors, you may have to request Michigan Woodworking staff unlock the gate in order to enter their facility and reach Building #2. See attached map for location.

Jackson Oven Supply, located in Jackson, Michigan, is the manufacturer of Jackson Metal's burnoff oven.

Brian Doherty, operations staff, said Jackson Metal currently only burns off paint from DexSys' (P0429, Eaton County) automobile fascia molds.

#### **Inspection:**

S. Braman and I arrived at Jackson Metal Cleaning at approximately 9:20 a.m. January 22, 2019. Michigan Woodworking staff unlocked the gate to allow us entry to the back of their complex where Building #2 is located. We met with Brian Doherty, operations staff for the burnoff oven. I provided B. Doherty with a 2017 Permit to Install Exemptions Handbook and explained to him that we were there to conduct an inspection of the burnoff oven.

B. Doherty said that the burn off oven was installed mid-July 2018, and began operating in late July/early August 2018. They operate one 9-hour shift 5 days per week.

#### **General PTI 70-18: EU-BURNOFF**

General PTI 70-18 permits one burnoff oven (EU-BURNOFF) that is natural gas-fired, 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 afterburner and primary oven chamber are equipped with automatic temperature controllers, although the oven temperature can also be manually adjusted.

#### Emission Limits

There shall be no visible emissions from EU-BURNOFF. EU-BURNOFF was operating during the inspection. S. Braman and I did not observe any visible emissions from the stack neither before, nor after the inspection. See attached photo of building with stack.

#### Material Limits

Jackson Metal is permitted to burn off only cured paints, oil or grease on metal parts and no fuels, except for natural gas, are allowed to be burned inside EU-BURNOFF. B. Doherty verified that the unit is natural gas-fired and that currently they are only burning off paint from DexSys' metal molds. B. Doherty said that they are considering also gaining a contract from a Magna International (parent) company in Ohio.

#### Process/Operational Restrictions & Monitoring/Recordkeeping

Thermal destruction or removal of rubber, plastics, uncured paints, or any other materials that contain sulfur or halogens, such as plastisol, PVC or Teflon are not permitted under EU-BURNOFF. Transformer cores are also not permitted to be loaded into EU-BURNOFF. A current listing from the manufacturer of the chemical composition of each material processed in

EU-BURNOFF (including wt% of each component is required to be kept. T. Lang provided me with the 4 SDS's for the coatings being burned off of the auto fascia molds. Attached is one of the SDS's. I reviewed all SDS's and verified that none of the coatings contain sulfur or halogens, plastisol, PVC, or Teflon. Also, based on my previous experience with DexSys and the coatings that they use most frequently, these SDS are representative of DexSys' coatings.

S. Braman and I verified that only automobile fascia molds are present onsite.

Waste materials, including paint sludge or waste powder coatings are also not allowed to be processed in this unit. B. Doherty said that the ash leftover on the auto fascia is washed off in their washing station. The ash slurry (water plus ash) is directed to a unit that dewateres the ash, the dewatered ash of which is placed in a 55-gallon container. Similarly, the ash from the oven floors is also placed into 55-gallon containers. B. Doherty said these ash containers are placed back into the burnoff oven in order to ensure that all hazardous components are removed from the ash before disposing of it as non-hazardous waste.

Reburning of the ash waste has resulted in non-compliance with the permit requirement. A Violation Notice will be sent to Jackson Metal Cleaning for loading the burnoff oven with ash waste. I have informed Jill Coulter of Waste Management and Radiological Protection Division (WMRPD) to ensure follow-up concerning proper characterization and disposal of ash waste. I emailed T. Lang and informed him that any waste characterizations required by WMRPD must be done on the "virgin" ash (ash that has not been "reburned" in the burnoff oven).

#### Design/Equipment Parameters & Monitoring/Recordkeeping

The afterburner is required to be installed, maintained and operated in a satisfactory manner, where satisfactory operation includes maintaining a minimum of 1400°F in the afterburner. The temperature in the afterburner is therefore required to be continuously monitored and continuously recorded (a minimum of one data point every 15 seconds) to demonstrate satisfactory operation. A device to continuously monitor and record the temperature in the afterburner is also required to be installed, calibrated, maintained and operated in a satisfactory manner.

A continuous temperature monitoring device has been installed. During the inspection, the instantaneous temperature readout from the monitor for the afterburner was 1504°F, which meets the 1400°F minimum requirement. I requested July – November 2018 continuous temperature records, however, T. Lang stated that there is no temperature data history to provide because there were parameters within the controller not properly set up. He stated that they have corrected the issue and are now continually recording the temperature data (as of February 1, 2019). Although data is now being recorded, a Violation Notice will be sent to Jackson Metal Cleaning for lack of temperature data recordkeeping through January 31, 2019 to demonstrate that the afterburner temperature is in compliance with the 1400°F minimum temperature requirement.

Thermocouples in the oven and afterburner are required to be calibrated at least once per year. B. Doherty said that their internal service technician calibrates the thermocouples every quarter. T. Lang provided me with records of the July 18, 2018 and December 5, 2018 calibrations on both the oven and afterburner thermocouples. See attached. Jackson Metal Cleaning is meeting this requirement.

Jackson Metal Cleaning is required to ensure that an interlock system that shuts down the primary chamber burner when the afterburner is not operating properly is installed maintained and operated in a satisfactory manner and is also required to maintain records from the manufacturer that demonstrate EU-BURNOFF is equipped with an afterburner, automatic temperature control system, for the primary chamber and afterburner, and an interlock system that shuts down the primary chamber burner when the afterburner is not operating properly. T. Lang provided me with the manufacturer's (Jackson Oven Supply, Inc) oven specifications, in addition oven operating instructions. Combined, these two documents contain all required information. The interlock system on the afterburner works as follows: the gas will shut off if the interlock for afterburner flame failure is triggered. If a flame failure occurs, the burners cannot be relit unless the malfunction is fixed and the oven doors are reopened.

#### Recordkeeping/Reporting/Notification

Jackson Metal Cleaning is required to keep records of the date, duration and description of any malfunction of the control equipment. T. Lang stated that there have been no malfunctions since EU-BURNOFF first became operational but acknowledged that they will be keeping records of all malfunctions in the future.

Records of any maintenance performed is also required. T. Lang stated that when they begin conducting maintenance, including thermocouple replacements, preventative maintenance (which will occur annually), and afterburner refractory maintenance Jackson Metal Cleaning will be keeping records of these events.

#### Stack/Vent Restrictions

The exhaust gases from EU-BURNOFF are to be discharged unobstructed vertically upwards to the ambient air with an exit point not less than 1.5 times the building height. Attached is a photo of the building exterior with stack taken at the inspection by S. Braman and I. T. Lang provided a building design document (with associated email) stating that the height of the building, from ground level to apex, is 22'. The building height is 22'. The stack height is therefore required to be at least 33'. The stack design document shows a stack height of 36', therefore demonstrating compliance with the stack height requirement.

**Compliance Statement:** Jackson Metal Cleaning is currently in non-compliance with PTI 70-18. A Violation Notice will be issued to address the lack of temperature records and the "reburning" of waste ash within EU-BURNOFF.



**Image 1(Stack) :** Stack is at the right edge of the building.

NAME Marcus M. Lynn

DATE 2/8/19

SUPERVISOR D. M.

