

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

U59190692349567

<b>FACILITY:</b> Inventory Recovery Systems		<b>SRN / ID:</b> U591906923
<b>LOCATION:</b> 1515 Shearer Road, Greenville		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> Greenville		<b>COUNTY:</b> MONTCALM
<b>CONTACT:</b> Tom Owen , Owner		<b>ACTIVITY DATE:</b> 07/16/2019
<b>STAFF:</b> Adam Shaffer	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b>
<b>SUBJECT:</b> Self-initiated inspection in response to information provided by Mr. Jonathan Vrugink with the EGLE-Waste Management & Radiological Protection Division.		
<b>RESOLVED COMPLAINTS:</b>		

Air Quality Division (AQD) staff Adam Shaffer (AS) arrived at the Inventory Recovery Systems, Inc (IRSC) facility located in Greenville, MI at 10:07am on July 16, 2019. Prior to this, AQD staff AS had received information from Mr. John Vrugink of the Waste Management & Radiological Protection Division, that IRSC was operating a laser ablation machine. Before arriving onsite AQD staff AS spoke with Ms. Isabelle Roberts, staff member with Bot-Links, about process and operation specifics with the laser ablation machine.

### **Facility Description**

Prior to entering the facility, off-site odors and visible emission observations were completed. The weather conditions at the time were cloudy skies, temperatures in the mid-sixty's degrees Fahrenheit, and winds from the southwest at 5-10mph. No odors were noted, and emissions observed appeared to be steam.

Upon arrival at the IRSC facility, AQD staff AS initially met with Ms. Roberts, and proceeded to the area of the laser ablation machine. Specifics regarding the construction and process were discussed and are listed further below in this report. Following the review of the laser ablation machine, AQD staff AS completed an inspection of the facility and its remaining equipment/processes onsite. During the inspection, AQD staff AS met with Mr. Gerald Lanning, Manager, who provided a tour of the facility and helped answer site specific questions. At the end of the inspection, AQD staff AS also spoke with Mr. Tom Owen, Owner, who provided requested documents.

IRSC is a rim processing company. IRSC also has a deviation from the company and that is Midwest PVD Inc. The previous facility occupant had been Greenville Wire Products. Greenville Wire Products had been in operation with permit to install (PTI) No. 390-88, which was for a furnace and an associated afterburner. It was determined during the course of the site review and inspection that the equipment associated with PTI No. 390-88 appeared to no longer be in operation and located onsite. Based on the observations made, PTI No. 390-88 shall be voided.

### **Additional Observations**

- One laser ablation machine was observed while onsite. The machine itself was partially constructed at the time of the inspection. Here powder coating on metal rims received offsite will be removed. Testing had been completed at the time on several rims. The laser itself is a CO<sub>2</sub> laser. Upon completion of construction, the laser portion and rim stand will be entirely enclosed. During operation, the organics of the powder coating material are vaporized, however, the metal surface is cool enough to be physically touched afterwards. After speaking with AQD Permit Section staff it was concluded that the only emissions from the laser ablation machine would appear to be particulate matter. Particulate emissions from the laser ablation machine are vented externally and one fabric filter was observed installed. Additionally, a second fabric filter will be installed later further along the stack. After speaking with IRSC staff on a potential exemption, IRSC believes that the laser ablation machine is exempt per Rule 285(2)(I)(vi)(C). AQD staff AS determined that this appears to be applicable at this time.
- During the inspection three 150-gallon metal strip tanks were observed where old powder coating material is removed from metal rims brought onsite. An exhaust stack was noted at the top of the area of the tanks. Safety Data Sheets (SDS) were requested for each of the materials used in the strip tanks and reviewed. Volatile organic compounds (VOCs) were identified in the materials used. IRSC staff stated that the tanks are closed except when a rim to be processed is taken out and placed in which occurs at a maximum of four times a day. Based on the limited amount of time the tanks are open, emissions were considered overall to be venting internally. IRSC plans on removing the strip tanks and that part of the process will be replaced with the laser ablation machine. After speaking with IRSC staff on a potential

exemption, IRSC believes that the strip tanks are exempt per Rule 285(2)(r)(i). AQD staff AS determined that this exemption appears to be applicable at this time.

- IRSC is in operation with one physical vapor deposition (PVD) line. For this process, rims that have been powder coated onsite are placed onto a rack and put into a high vacuum chamber. Electricity is run through nickel and chrome targets to vaporize and redeposit the material as a coating on the rim. While speaking with IRSC staff, it was determined that a specific type of powder coating material is used to attract the nickel and chrome to the rim being processed. The PVD line is self-contained except for one vent that pulls air into the line. The PVD line is a surface treatment of metal materials and appears to be exempt per Rule 285(2)(r)(i).
- Three powder coating booths and associated ovens were observed as part of the PVD line. Dry filters were observed in place and emissions are vented internally. The filters appeared to be in good condition, and it was advised to IRSC staff to clean up the buildup powder coating waste adjacent to the filters. Based on the observations made the three powder coating booths and associated ovens appear to be exempt per Rule 287(2)(d).
- One steel shot sandblasting machine was observed that vents internally and appears to be exempt per Rule 285(2)(l)(vi)(B).

### **Conclusion**

Based on observations made during the walkthrough of the facility and a review of the documents provided, IRSC appears to be in compliance with applicable air pollution control rules at this time.

NAME

Adam F. Shaff

DATE

08/05/19

SUPERVISOR

AS