

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

N532160843

<b>FACILITY:</b> LOUDON STEEL INC		<b>SRN / ID:</b> N5321
<b>LOCATION:</b> 8208 ELLIS RD, MILLINGTON		<b>DISTRICT:</b> Bay City
<b>CITY:</b> MILLINGTON		<b>COUNTY:</b> TUSCOLA
<b>CONTACT:</b> Gib Loudon , Plant Manager		<b>ACTIVITY DATE:</b> 11/17/2021
<b>STAFF:</b> Adam Shaffer	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> On-site inspection		
<b>RESOLVED COMPLAINTS:</b>		

An onsite inspection and records review was conducted by Air Quality Division (AQD) staff Adam Shaffer (AS) of the Loudon Steel Inc (LS) site located in Millington, MI. Applicable records were requested on November 15, 2021, to verify compliance with permit to install (PTI) No. 112-98. An in-person inspection to verify onsite compliance was later completed on November 17, 2021.

### **Facility Description**

The LS facility assembles and paints steel parts racks for use in the automotive industry and the site is in operation with PTI No. 112-98. The facility has taken opt out permit limits for hazardous air pollutants (HAPs).

### **Offsite Compliance Review**

Based on the timing of the inspection, the 2020 Michigan Air Emissions Reporting System (MAERS) Report was submitted on March 9, 2021, and later reviewed. Upon review, errors were noted, however, the 2020 MAERS Report was concluded to be acceptable.

### **Compliance Evaluation**

A request was sent to Mr. Gib Loudon, Plant Manager, of LS on November 15, 2021, for various records required by PTI No. 112-98. The records that were later received and reviewed will be discussed further in this report. An onsite inspection of the facility was later completed on November 17, 2021. AQD staff AS arrived in the area at 9:15am. Weather conditions at the time were cloudy skies with mist, temperatures in the low 50's degrees Fahrenheit, and winds from the south at 10-15mph. While offsite, what appeared to be a solvent odor was noted to the northeast of the site. The odor was brief in nature and no odor complaints have been recently received regarding LS. No emissions were observed while offsite. Upon arriving onsite, AS met with Mr. Loudon, who provided a tour of the facility and answered site specific questions. Requested records were later provided by company staff.

As mentioned above, LS is an assembly and painting part racks facility for the automotive industry. The various stages of onsite processes were reviewed during the inspection and will be discussed further below.

### **PTI No. 112-98**

Per Special Condition (SC) 14, the volatile organic compound (VOC) emission rate from the prime booth portion of the metal parts coating line, hereinafter "primer booth" shall not exceed 9.3 pounds per hour (pph) nor 5.2 tons per year (tpy) based upon a 12-month rolling time period as determined at the end of each calendar month. Speaking with the LS staff it

was determined that the facility has not prime coated parts in the booth since at least the last inspection, therefore, this condition was not reviewed for compliance.

Per SC 15, the VOC emission rate from the topcoat portion of the metal parts coating line, hereinafter "topcoat booth" shall not exceed 11.0 pph nor 8.4 tpy based upon a 12-month rolling time period as determined at the end of each calendar year. Records were requested and reviewed for select time periods. The pph emissions for the select time periods, though not provided were easily calculated and reviewed. For the month of October 2021, the calculated pph VOC emission rate appeared to be 1.15 lbs/hr which is well within the permitted limit. The monthly lb/hr VOC emission rates for previous time periods reviewed also appeared to be within the permitted limit. For the month of October 2021, 185.05 lbs of VOCs were emitted and as of October 2021, 0.633 tpy of VOCs were emitted which is well within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be well within the permitted limit.

Per SC 16, the VOC emission rate from the dipcoat process used to coat metal parts shall not exceed 6.9 pph nor 1.5 tpy based upon a 12-month rolling time period as determined at the end of each calendar month. At the time of the inspection, the facility no longer utilizes the dip coat process. The location of the dip tank when it was in operation was observed as well as the current storage location of the unit. Based on the observations noted, this condition was not reviewed for compliance.

Per SC 17, the VOC content for any coating used shall not exceed 3.47 pounds per gallon of coating (minus water) as applied. Records were requested and reviewed of the materials used during select time periods. Based on the records reviewed, the highest VOC content noted was 3.46 pounds per gallon (minus water), which is within the permitted limit. After further review, this appears acceptable.

Per SC 18, the individual and aggregate hazardous air pollutant (HAP) emission limits are less than 9 tpy and 15.1 tpy respectively per a 12-month rolling time period. Speaking with LS staff it did not appear that any HAPs were emitted based on the materials used. A review of the materials used during select time periods appeared to show no HAP components.

Per SC 19, verification of VOC emission rates from the metal parts coating line by testing, at the owner's expense, may be required. After further review, no testing is required by LS at this time.

Per SC 20, the applicant shall not operate either of the paint spray booths unless all exhaust filters are in place and operating properly. Since at least the last inspection, LS does not prime coat parts onsite. The topcoat paint booth was observed in operation at the time of the inspection. Dry filters were in place and appeared acceptable.

Per SC 21, the applicant shall equip and maintain the paint dip tank with a cover which shall be closed whenever the tank is not in use. As mentioned above, the dip tank is no longer used for onsite operations and was noted in storage.

Per SC 22, the applicant shall calculate the VOC emissions from each paint spray booth using the method detailed in Appendix A and Appendix B for the dipcoat emissions. As mentioned above, the dip tank is no longer used. Based on the records reviewed, LS appears to be using the methods in Appendix A to calculate VOC emissions. Additionally, per SC 22, the applicant shall keep track of each coating used, usage rates, VOC contents,

VOC monthly / 12-month rolling time period emissions, hours of operation, and monthly / 12-month rolling time periods of individual / aggregate HAP emissions. Records were requested and provided for select time periods. Based on the records reviewed, LS appears to be keeping track of the applicable items.

Per SC 23, there shall be no VOCs contained in any wash solvent and / or solution used in the metal parts coating process. Records were provided for select time periods and reviewed. Based on the records reviewed it appears that the facility only utilizes one cleaning material. After further review, it did not appear that the one cleaning material used contained any VOCs.

Per SC 24, there are four stacks listed in association with PTI No. 112-98 and several of the stacks were observed during the course of the inspection. Though the dimensions were not measured they appeared to be consistent with what is listed in PTI No. 112-98. It was also verified by company staff that all stacks are vented unobstructed vertically.

### **Additional Observations**

A pre-fabrication area was observed during the course of the inspection where various types of metalworking are completed. The pre-fabrication metal area items appear to be exempt per Rule 285(2)(l)(vi)(B).

Several welding stations were observed during the inspection. The welding operations appear to be exempt per Rule 285(2)(i).

One plasma cutter was observed during the inspection. A stack was located directly above the unit with a manual fan that vented emissions externally. No control appears to be on the unit. The unit is potentially exempt per Rule 285(2)(l)(vi) and the options for using this exemption were discussed at length with company staff. It was concluded that the company wishes to vent emissions externally. Therefore, the unit must be equipped with an appropriately designed and operated fabric filter collector that, for all specified operations with metal, is preceded by a mechanical precleaner per Rule 285(2)(l)(vi)(C). Moving forward, once control has been installed on the unit, photo verification shall be provided to verify its completion.

### **Conclusion**

Based on the facility walkthrough, observations made, and records received, LS appears to be in compliance with PTI No. 112-98 and applicable air quality rules.

NAME Adam Shaffer

DATE 12/09/2021

SUPERVISOR Chris Hare