

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

N642051488

FACILITY: AAR Mobility Systems		SRN / ID: N6420
LOCATION: 1405 Sixth Ave, CADILLAC		DISTRICT: Cadillac
CITY: CADILLAC		COUNTY: WEXFORD
CONTACT: Greg R. Shay , Environmental Specialist		ACTIVITY DATE: 11/18/2019
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Monday, November 18, 2019, Caryn Owens and Bob Byrnes of the EGLE-AQD conducted a scheduled field inspection of AAR Mobility Systems (SRN: N6420) located at 1405 6<sup>th</sup> Avenue in Cadillac, Wexford County, Michigan. More specifically, the site is located west side of 6<sup>th</sup> Avenue, just north of 8<sup>th</sup> Street. The field inspection and records review were to determine compliance with permit to install (PTI) 27-98B. The site is currently an area (a synthetic minor) source for hazardous air pollutants (HAPs) and a synthetic minor source of volatile organic compounds (VOCs). PTI 27-98B indicates that the facility is subject to the following National Emission Standard for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products in 40 CFR Part 63, Subpart M. However, since this facility has taken limits to opt-out of major source status for HAPs, the facility is not subject to 40 CFR Part 63, Subpart M.

#### **Evaluation Summary**

The activities covered during this field inspection and records review appear to be in compliance with PTI 27-98B. Review of the records for the facility indicates the facility was in compliance with emission limits in accordance to the PTI. No further actions are necessary at this time. Specific permit conditions that were reviewed are discussed below.

#### **Source Description:**

The weather Conditions were cloudy, about 37 degrees Fahrenheit, and calm winds about 5 to 10 miles per hour from the south. EGLE was accompanied by Mr. Greg Shay, the Environmental Specialist for AAR Mobility Systems, during the field inspection. The facility consists of one large industrial building and associated parking lots. AAR manufactures air cargo transportation equipment for the military including containers and pallets, which is a continuation from EUCONTAINERLINE from AAR's Haynes Street location in Cadillac. The containers and pallets are converted into various cargo such as military shelters, canine kennels, or housing for electronics. The processes for these products include woodworking, metal preparation and machining, paint application, and assembly. The parts go into to a washer then into one of two paint booths and then into an oven to dry. The facility uses high volume low pressure (HVLP) handheld spray guns. AAR records each shift, the type of material used, the part number, and the material usage in quarts and gallons. The purge from the guns and cleanup are stored in 55-gallon drums which are collected by a contractor approximately every 90 days for disposal. Each paint booth also contains a parts washer. The lids were closed on the parts washer when AQD walked through the paint booths.

Assembly of the cargo containers involves cutting openings in the sides of the pallets, and welding parts and pieces together. The cutting operations are in a designated area of the building that use fabric filters prior to venting outside. And the welding activities are in another designated area of the building. The company claims that the cutting activities are covered under AQD's Rule exemption R 285(2)(l)(vi)(C), and the welding activities are covered under R 285(2)(i). There is a wash area on the west side of the building that is used to verify the containers are completely waterproof and have no leaks. There are two steam operated presses with their own small 20 MMBtu/hr, natural gas boiler system on the northern side of the building to form container walls. The company claims the natural gas boiler system meets exemption R 282(2)(b)(i).

#### **Records Reviewed:**

**FGCOATING:** This flexible group also contains EUCCLEANUP for the clean-up of equipment with VOC based solvents.

**Emission Limits:** VOC emissions are limited to 40 tons per year based on a 12-month time period and 220 pounds per calendar day. Based on the records reviewed from November 1, 2018 through October 31,

2019, the VOC emissions were 0.24 tons per year based on a 12-month rolling time period, and the highest VOCs reported were 15 pounds per day.

Acetone emissions are limited to 7.2 tons per year based on a 12-month time period. Based on the records reviewed, the highest reported Acetone emissions were 0.041 tons per year based on a 12-month rolling time period.

p-chlorobenzotrifluoride (PCBTF) emissions are limited to 90 pounds per day. Based on the records reviewed, the highest emissions reported were 1.92 pounds per day.

The facility was within the permitted emission limits.

**Material Limits:** VOC content is limited to 3.5 pounds per gallon as applied. Based on the records reviewed, no coatings were above this limit.

PCBTF containing coatings are limited to 300 pounds per day. Based on the records reviewed, the coatings containing PCBTF did not exceed the permitted limit.

**Process/Operational Parameters:** During the site inspection, DEQ observed waste coatings, reducers, thinners, and purged solvents stored in closed containers. There is a waste storage area in the south-central portion of the site. The waste generated from the onsite processes are stored in closed 55-gallon drums awaiting proper disposal.

**Design/Equipment Parameters:** During the site inspection, AQD observed the coating booths where the material is applied using HVLP applicators and observed properly installed fabric filters. The fabric filters are connected to pressure gauges that are monitored, and the fabric filters are changed based on the change in pressure.

**Testing Requirements:** AAR uses ACIMS to complete the Method 24 analysis of each coating. Each coating is tested using ACIMS when it is purchased and the VOC content, water content and density of all coatings are documented as applied and as received.

**Monitoring/Recordkeeping:** AAR keeps a current listing of the chemical composition of each coating on file, as well as: a listing of each coating, reducer, and purge and cleanup solvents; the VOC content of each coating and reducer as applied, minus water, and as received; the daily usage rate; daily hours of operation; daily VOC emission calculations of coatings applied; and VOC emission calculations of coatings applied to calculate monthly and 12-month rolling time period emission rates as determined at the end of each calendar month. Additionally, AAR maintains records for PCBTF that include gallons of each PCBTF containing material used per day; PCBTF content (with water) in pounds per gallon of each material used. AAR completes all calculations and maintains records in an acceptable manner.

**Reporting:** No Reporting Requirements are associated with FGCOATING.

**Stack/Vent Restrictions:** Based on visible observations during the field inspection, the stacks of the spray booths appeared to be within the permitted limits.

**Other Requirements:** No Other Requirements are associated with FGCOATING.

**FGFACILITY:** This flexible group includes all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

**Emission Limits:** Emissions are limited to 10 tons per individual HAP and 25 tons aggregate HAPS. Based on the records reviewed, the highest reported aggregate HAPS was 0.119 tons per year based on a 12-month rolling time period, well beneath the permitted limits.

**Material Limits:** No Material Limits are applicable for FGFACILITY.

**Process/Operational Parameters:** No Process/Operational Parameters are applicable for FGFACILITY.

**Design/Equipment Parameters:** No Design/Equipment Parameters are applicable for FGFACILITY.

- **Testing Requirements:** AAR uses military specific coatings and each coating is batch tested, water content and density of all coatings are documented as applied and as received.
- **Monitoring/Recordkeeping:** AAR keeps a current listing of the chemical composition of each coating and solvent on file. Additionally, the facility records the amount of coatings used and reclaimed on a daily basis and the information is entered into an ACIMS system for emissions calculations. The facility calculates and records the HAP content in pounds per gallon of each material used, and the individual and aggregate HAP emissions on a monthly basis. AAR completes all calculations and maintains records in an acceptable manner.
- **Reporting:** No Reporting Requirements are associated with FGFACILITY.
- **Stack/Vent Restrictions:** No Stack/Vent Restrictions are associated with FGFACILITY.
- **Other Requirements:** As previously stated in the in the beginning of this inspection report, PTI 27-98B indicates that the facility is subject to the NESHAP for Surface Coating of Miscellaneous Metal Parts and Products in 40 CFR Part 63, Subpart M. However, since the facility has taken limits to opt-out of major source status for HAPs, the facility is not subject to 40 CFR Part 63, Subpart M. Therefore, no Other Requirements are associated with FGFACILITY.

NAME Caryn OwensDATE 11/18/19SUPERVISOR JN