

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

B419729441

FACILITY: AAR Mobility Systems		SRN / ID: B4197
LOCATION: 201 Haynes St., CADILLAC		DISTRICT: Cadillac
CITY: CADILLAC		COUNTY: WEXFORD
CONTACT: Greg Shay , Environmental Specialist		ACTIVITY DATE: 04/02/2015
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled Field Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Thursday, April 2, 2015, Caryn Owens of the DEQ-AQD conducted a field inspection and records review of AAR Mobility Systems (AAR) (SRN: B4197), located at 201 Haynes Street, Cadillac, Wexford County, Michigan. The plant is located on the south side of Haynes Street, approximately 1/10 mile west of North Lake Street. The field inspection and records review were to determine compliance with the Renewable Operating Permit (ROP) MI-ROP-B4197-2011. AAR's renewal of their ROP will be submitted in 2015. The site is currently a major source for volatile organic compounds (VOCs). AAR has opted out of major source applicability of hazardous air pollutants (HAPs) by limiting the operational and/or production limits potential to emit (PTE) to be below major source thresholds. Additionally, the source is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products in 40 CFR, Part 63, Subpart Mmmm.

**On-site Inspection:**

During the field inspection it was cloudy with wind speeds approximately 10 miles per hour out of the southwest, and approximately 50°F. DEQ checked in at the front desk and called Mr. Greg Shay, Environmental Specialist, to escort DEQ through the facility. DEQ needed to show a driver's license, and obtain a visitor badge to walk through the facility. DEQ handed an inspection brochure to Mr. Shay.

AAR manufactures air cargo transportation equipment for the military including containers, pallets, and aircraft floor panels. The products are composed of various combinations of aluminum, balsa wood, and fiberglass. Processes in the manufacture of these products include woodworking, metal preparation and machining, adhesive coating application, gluing, paint application, and assembly. In addition to manufacturing new products, AAR also rebuilds old containers and pallets.

DEQ began the inspection at EUWOODROOM, which consists of two panel saws exhausted to a baghouse. The saws are used to size the balsa wood panels. Once the panels are sized, they are transferred to EUBALSACORE where adhesive is applied to the tops and bottoms. After the adhesive application, the panels are conveyed through a curing oven. From the curing oven, the panels are stacked and carted to be assembled in the pallet frames. VOC flash-off emissions from the curing oven are connected to a regenerative thermal oxidizer (RTO). The machines for EUBASLACORE also contains a

CNC router which will cut the panels to size, but this is only used when there is limited staff to cut the balsa wood panels to size in EUWOODROOM. The router is exhausted to the same baghouse as EUWOODROOM. The operator records daily the amount of adhesive and thinner used per shift and machine hours along with a maintenance form that records differential pressure, RTO operating, and when filters are changed.

DEQ observed EUSKINorRAIL line, which is an automatic spray booth and infrared oven where they spray adhesives on the aluminum skins and rails. AAR uses very little thinner at EUSKINorRAIL because the adhesive (FM47) is continuously heated with a smaller heater constantly cycling the adhesive in the enclosed 55-gallon drum, there is no purging that is necessary for this system. The emissions are ducted to the RTO for destruction. The operator records the amount of adhesive and thinner used per shift and machine hours along with a maintenance form that records differential pressure, RTO operating, and when filters are changed on a daily basis. There is a heated fire proof storage container located east of EUSKINorRAIL that stores the adhesive. This storage container is kept at 85°F to keep the adhesive at the right consistency for application.

EUCONTAINERLINE and EUCONTNRNOCNTRL are both considered EUCONTNRNOCNTRL because the ducts to the RTO have been disconnected, and the spray booth vents to atmosphere. EUCONTNRNOCNTRL has a spray booth on one side, and curing on the other side. EUCONTNRNOCNTRL is lined with fabric filters that are changed approximately 4 to 7 times a month. The exterior filters are changed approximately once per month. EUCONTAINERLINE uses paint with p-chlorobenzotrifluoride (PCBTF), which cannot go through the RTO. The spray guns for painting in EUCONTNRNOCNTRL booths are high volume low pressure (HVLP) spray

guns. AAR records the shift, type of material used, the part number, and the material usage in gallons on a daily basis. Also a maintenance sheet is filled out that records the differential pressure and filter changes on a daily basis. EU197LINE and EU197LINENOCNTRL are not currently being used for priming like they have been in the past due to reduced plant operations, but AAR is currently using the EU197LINE paint booth for painting pallet rings. AAR claims exemption R 336. 1287(c) for the pallet ring painting process. The filters in EU197LINE are changed mostly per shift, or as needed depending on the amount of time spent in the booth painting. Once the paint has been applied, the pallet rings are transferred to the oven for curing. At the time of the inspection, the oven was 150°F. The pallet ring process is connected to the RTO, there is a switch to bypass the RTO, but during the inspection EU197LINE was venting to the RTO. AAR has sheets for the operator to record daily paint usage, and a maintenance form to be filled out daily.

On the south side of the property, there is a small building that is called Lakeside, which houses EUPAINT/GRIND, which is where used pallets come in to be dismantled and portions recycled into new pallets. The processes include, but are not limited, to dismantling a panel by grinding the aluminum, which is recycled, and if the balsa wood cores are in good shape, they are re-used or sent off-site as fuel at an electrical generating facility. The wood cores that are not able to be re-used are properly disposed of. The rails for the panels have all the painted material hand-grinded off and are used to make more panels. Adhesive FM47 is hand applied to the rails prior to bringing them to the main plant for assembly. About 70-80 percent of the panels are made from recycled panel parts.

DEQ also observed the EULMS which is located in a building on the eastern portion of the property between the main plant and Lakeside. EULMS produces metal parts from aluminum, using a CNC router. The particulate emissions use a cyclone baghouse for control. A daily log is filled out indicating if there were any visible emissions, the differential pressure, and the volume of dust collected. The chemical storage area was located in the southern portion of the plant just south of EUCONTNRNOCNTRL line. Additionally, DEQ observed that waste was collected and stored in 55-gallon closed containers. The waste containers were stored in a building in the central portion of the property to be properly disposed of by an outside vendor.

### **Records Review:**

**Source-Wide Conditions:** No Source-wide conditions are applicable for this facility.

- A. **EUAIRSTRIPPER:** A soil vapor extraction (SVE) remediation system for removal of volatile organic compounds (VOCs) from the groundwater purged from the aquifer beneath the facility which is controlled by a packed scrubber tower.

#### **I. Emission Limits:**

The emission limits are: 3.69 milligrams per cubic meter (mg/m<sup>3</sup>) of 1,2 Dichloroethane (DCA); 2.58 mg/m<sup>3</sup> of 1,1,2,2 Tetrachloroethylene (PCA); 15.8 mg/m<sup>3</sup> Trichloroethylene (TCA), and 0.19 pounds per hour VOCs. Based on the reports received from January 2014 through December 2014: DCA emissions were reported as 0.00 mg/m<sup>3</sup>; the highest emissions for PCE were 0.0382 mg/m<sup>3</sup>; the highest emissions for TCE were 0.27 mg/m<sup>3</sup>; and the highest VOC emission rate was 0.0000185 pounds per hour. Based upon the records reviewed, the facility is within the permitted emission limits.

#### **II. Material Limits:**

No Material Limits were applicable for this emission unit.

#### **III. Process/Operational Restrictions:**

No Process/Operational Restrictions were applicable for this emission unit.

#### **IV. Design/Equipment Parameters**

No Design/Equipment Parameters were applicable for this emission unit.

#### **V. Testing/Sampling**

No Testing/Sampling was applicable for this emission unit.

#### **VI. Monitoring/Recordkeeping**

AAR monitors and records DCA, PCA, TCE, and VOCs on a monthly basis and completes all calculations in an acceptable manner.

**VII. Reporting**

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

**VIII. Stack/Vent Restrictions**

The stack height for EUAIRSTRIPPER was in compliance with the ROP diameters and heights.

**IX. Other Requirements**

No Other Requirements was applicable for this emission unit.

**B. EU197LINENOCNTRL**

A dry filter paint booth and associated oven to use coatings with a VOC content equal to or less than 1.8 pounds of VOC per gallon of coating, minus water, as applied. This emission unit is controlled by fabric filters and can be controlled by the RTO. There is a switch to bypass the RTO when coating operations that contain PCBTF, which cannot be vented through the RTO.

This emission unit is currently being used for coating pallet rings, which AAR claims that the process falls under exemption R 336. 1287(c).

**I. Emission Limits:**

The emission limits for EU197LINENOCNTRL are: 3.1 tons per 12-month rolling time period for VOC; 105.2 pounds per day of p-chloro-benzotrifluoride (PCBTF), and 12.3 tons per 12-month rolling time period of PCBTF. Based on the records received from January 2014 through February 2015: the highest emissions of VOCs reported were 0.13 tons per 12-month rolling time period; the highest emissions of PCBTF reported were 1 pound per day; and 0.17 tons of PCBTF per 12-month rolling time period. Based upon the records reviewed, the facility is within the permitted emission limits.

**II. Material Limits:**

EU197LINENOCNTRL had a material limit of coating to be less than 1.8 pounds of VOC per gallon of coating, minus water, as applied. Based on the records from January 2014 through February 2015, and according to the Automated Chemical Information Management System (ACIMS) data report, no coatings greater than 1.8 pounds of VOC per gallon, as applied, were used during this time period.

**III. Process/Operational Restrictions:**

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 central portion of the site. The waste generated from the onsite processes are stored in closed 55-gallon drums awaiting proper disposal.

**IV. Design/Equipment Parameters**

During the site inspection, DEQ observed coating material applied using HVLP applicators in EU197LINENOCNTRL paint booth with properly installed fabric filters. Once the rings are painted in EU197LINENOCNTRL, they are placed in the oven to dry.

**V. Testing/Sampling**

AAR uses ACIMS to complete the Method 24 analysis of each coating as applied, minus water. Each coating is tested using ACIMS when it is purchased.

**VI. Monitoring/Recordkeeping**

AAR keeps a current listing of the chemical composition of each coating on file, as well as: a listing of each coating and reducer; the VOC content of each coating and reducer as applied, minus water, and as received; the daily usage rate; daily hours of operation of EU197LINENOCNTRL; daily VOC emission calculations; and VOC emission calculations 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; PCBTF mass emission calculations for EU197LINENOCNTRL in tons per calendar month and in tons per 12-month rolling time period (as determined at the end of the month). AAR completes all calculations and maintains records in an acceptable manner.

**VII. Reporting**

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

**VIII. Stack/Vent Restrictions**

The stack heights for EU197LINENOCNTRL (SV197BTHSTK and SV197OVNSTK) were in compliance with the ROP diameters and heights.

**IX. Other Requirements**

No Other Requirements was applicable for this emission unit.

**C. EUCONTNRNOCNTRL**

Two dry filter paint booths with manual applicators and associated oven. This emission unit uses coatings with a VOC content equal to or less than 3.5 pounds of VOC per gallon of coating, minus water, as applied. This emission unit is control by fabric filters.

**I. Emission Limits:**

The emission limits for EUCONTNRNOCNTRL are: 10.5 pounds of VOCs per hour; 17.1 tons of VOCs per 12-month rolling time period; 24.3 tons of PCBTF per 12-month rolling time period; and 256.0 pounds of PCBTF per day. Based on the records received from January 2014 through February 2015 the highest emissions were reported as 4.39 of VOCs pounds per hour and 3.71 tons of VOCs per 12-month rolling time period. Based on the records received from January 2014 through February 2015 the highest emissions for PCBTF were reported as 26 pounds per day and 4.1 tons per 12-month rolling time period. Based upon the records reviewed, the facility is within permitted emission limits.

**II. Material Limits:**

EUCONTNRNOCNTRL had a material limit of coating to be less than 3.5 pounds of VOC per gallon of coating, minus water, as applied. Based on the records from January 2014 through February 2015, and according to the ACIMS data report, no coatings greater than 3.5 pounds of VOC per gallon were used during this time period.

**III. Process/Operational Restrictions:**

All purge and cleanup activities are completed in the EUCONTNRNOCNTRL spray booths. EUCONTNRNOCNTRL spray booths are disconnected from the RTO, so all coating, purging and cleanup activities vent to the atmosphere after passing through the fabric filters.

**IV. Design/Equipment Parameters**

DEQ observed coatings applied with HVLP applicators to the pallets during the inspection.

**V. Testing/Sampling**

AAR uses ACIMS to complete the Method 24 analysis of each coating as applied, minus water. Each coating is tested using ACIMS when it is purchased.

**VI. Monitoring/Recordkeeping**

AAR keeps a current listing of the chemical composition of each coating on file, as well as: a listing of each coating and reducer; the VOC content of each coating and reducer as applied, minus water, and as received; the daily usage rate; daily hours of operation of EUCONTNRNOCNTRL; daily VOC emission calculations; and VOC emission calculations 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; PCBTF mass emission calculations for EUCONTNRNOCNTRL in tons per calendar month and in tons per 12-month rolling time period (as determined at the end of the month). AAR completes all calculations and maintains records in an acceptable manner.

**VII. Reporting**

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

**VIII. Stack/Vent Restrictions**

The stack heights for EUCONTNRNOCNTRL were in compliance with the ROP diameters and heights.

**IX. Other Requirements**

No Other Requirements were applicable for this emission unit.

**D. EUCLEANUP:** This emission unit includes all cleanup and purge activities performed at the facility. EU197LINENOCTRL and EUCONTNRNOCNTRL are controlled by fabric filters only, and the remaining processes use the RTO for control.

**I. Emission Limits**

The emission limit for EUCLEANUP is 1.7 tons per 12-month rolling time period of acetone. Based on the records received from January 2014 through February 2015 the highest emissions reported were 0.016 tons of acetone per 12-month rolling time period. Based upon the records reviewed, the facility is within permitted emission limits.

**II. Material Limits**

No Material limits are applicable for EUCLEANUP.

**III. Process/Operational Restrictions**

As previously stated, cleanup activities for EU197LINENOCTRL and EUCONTNRNOCNTRL are controlled by fabric filters only, and the remaining processes use the RTO for control.

**IV. Design/Equipment Parameters**

During the site inspection, the RTO appeared to be operating properly. Paint booth for EU197LINENOCTRL had a switch to bypass the RTO when using PCBTF material, and EUCONTNRNOCNTRL is completely disconnected from the RTO. The paint booths also use fabric filters prior to venting through the stack.

**V. Testing/Sampling**

Testing/Sampling requirements are not applicable with EUCLEANUP.

**VI. Monitoring/Recordkeeping**

AAR maintains a list of each cleanup solvent used which contains acetone, tertiary butyl acetate (TBA), and FM47Thinner. Majority of the cleanup activities use TBA. AAR maintains the identity of each cleanup and purge solvent, the density of each cleanup and purge solvent, the amount of cleanup and purge solvent reclaimed, the hours of operation, and the acetone emission rate calculations. AAR completes all calculations and maintains records in an acceptable manner.

**VII. Reporting**

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

**VIII. Stack/Vent Restrictions**

Stack/Vent Restrictions are not applicable with EUCLEANUP.

**IX. Other Requirements**

Other Requirements are not applicable for EUCLEANUP.

**E. EUGRIND/PAINT** This emission unit includes the operations that take place in the lakeside building located on the southern portion of the site. The processes in the lakeside building consist of dismantling and rebuilding the pallets and containers. The emissions are released in plant, and would be considered fugitive emissions.

**I. Emission Limits**

The emission limit for EUGRIND/PAINT is 2,000 pounds of VOCs per month and 10 tons of VOCs per year. Based on the records received from January 2014 through February 2015 the highest emissions reported were 880 pounds of VOCs per month and 4.43 tons of VOCs per year (based on a 12-month rolling time period). Based upon the records reviewed, the facility is within permitted emission limits.

**II. Material Limits**

No Material limits are applicable for EUGRIND/PAINT.

**III. Process/Operational Restrictions**

No Process/Operational restrictions were applicable for EUGRIND/PAINT.

**IV. Design/Equipment Parameters**

No Design/Equipment Parameters were applicable for EUGRIND/PAINT.

**V. Testing/Sampling**

AAR uses ACIMS to complete the Method 24 analysis of each coating as applied, minus water. Each coating is tested using ACIMS when it is purchased.

**VI. Monitoring/Recordkeeping**

AAR maintains the identity of each coating and reducer, the VOC content of each coating and reducer as received and applied (minus water and with water), the monthly usage rate of each coating and reducer as applied, and VOC emission rate calculations. AAR completes all calculations and maintains records in an acceptable manner.

**VII. Reporting**

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

**VIII. Stack/Vent Restrictions**

Stack/Vent Restrictions are not applicable with EUGRIND/PAINT.

**IX. Other Requirements**

Other Requirements are not applicable for EUGRIND/PAINT.

- F. **FGCOATINGS** This flexible group includes all the coating processes within the main plant of AAR, with the exception of exempt activities covered under R 336.1287(c) (Rule 287(c)) and cleanup and purge activities.

**I. Emission Limits**

Emission limits for FGCOATINGS are: 25.9 pounds of VOC per hour; 13.0 tons of VOCs per month; and 122.3 tons of VOCs per 12-month rolling time period. Based on the records received from January 2014 through February 2015 the highest VOC emissions reported were: 7.57 pounds per hour; 1.26 tons per month; and 10.02 tons per 12-month rolling time period. Based upon the records reviewed, the facility is within permitted emission limits.

**II. Material Limits**

No Material limits are applicable for FGCOATINGS.

**III. Process/Operational Restrictions**

During the field inspection it appeared that the exhaust filters for the spray booths were installed and operating properly for the stacks with no control, and the RTO was installed and operating properly for the controlled emissions.

AAR submitted a revised malfunction abatement plan (MAP) and Startup, Shutdown, and malfunction plan (SSMP) on September 10, 2014. Based on review of the MAP & SSMP, that facility appears to comply with the parameters specified in the plans.

AAR completed a successful performance test on February 18, 2014 that showed a destruction efficiency of 96.3%. The capture efficiency was 96.9. During the inspection, the combustion chamber of the RTO was greater than 1400 °F.

**IV. Design/Equipment Parameters**

According to AAR, the RTO maintains a minimum retention time of 0.5 seconds in the combustion chamber. The differential pressure gauges are connected with a visual alarm when the differential pressure is out of range. Additionally, there is an audible and visual alarm system connected to the RTO when it is not operating properly.

**V. Testing/Sampling**

As previously mentioned, AAR completed a successful performance test on February 18, 2014 that showed a destruction efficiency of 96.3% and the capture efficiency was 96.9%. The most recent performance test for the maximum VOC emission rate was conducted August 22, 2013. The maximum VOC emission rate was 8.52 pounds per hour, which was within the permitted limits of 25.9 pounds of VOCs per hour.

#### **VI. Monitoring/Recordkeeping**

AAR maintains the identity of each coating and reducer, the VOC content of each coating and reducer as received and applied (minus water and with water), the daily usage rate of each coating and reducer as applied, and VOC emission rate calculations. AAR completes all calculations and maintains records in an acceptable manner to the DEQ.

#### **VII. Reporting**

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. Monitor downtime and/or excess emissions were reported on a semi-annual basis. Performance test notifications and reporting were completed in a timely manner and in accordance with DEQ requirements.

#### **VIII. Stack/Vent Restrictions**

The stack heights for SVRTOSTACK were in compliance with the ROP diameters and heights.

#### **IX. Other Requirements**

AAR captures all purge solvents and waste coatings in 55-gallon drums and stores them properly in a chemical storage building, located just south of the main plant building awaiting proper disposal. AAR initiates procedures in described in the MAP/SSMP when the differential pressure readings are out of the allowable ranges listed in the MAP, and when the RTO drops below 1400 °F.

Based on observations during the field inspection and records review, AAR appears to comply with CAM requirements of 40 CFR Part 64.

- G. FGMACT** This covers the requirements of surface coatings of miscellaneous metal parts and products as required by 40 CFR, Part 63, Subpart M. FGMACT is applicable for emission units EU197LINENOCCTRL, EUCONTRNOCTRL, EU197LINE, EUCONTAINERLINE, EUCLEANUP, EUBALSACORE, and EUSKINORRAIL. The pollution control equipment for FGMACT is the RTO.

#### **I. Emission Limits**

The emission limit for organic HAPs is 2.6 pounds per gallon of coating solids for existing general use coating, based on a 12-month rolling time period. Based on the most recent summary of HAP emissions from the coating operations from February 2014 through February 2015, the highest organic HAP emissions were 0.97 pounds per gallon per 12-month rolling time period of coating solids. Based on the records reviewed, the facility is within the permitted HAP emission limit for existing general use coatings.

#### **II. Material Limits**

Material limits are not applicable for FGMACT.

#### **III. Process/Operational Restrictions**

Based on the records reviewed, AAR was in compliance with the emission limit while using the emission rate without add-on control for EU197LINENOCCTRL, EUCONTRNOCTRL and EUCLEANUP. AAR was in compliance with the emission limit while using the RTO for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL.

AAR uses the emission rates with and without add-on control for associated HAP emissions based on 12-month rolling emission rates determined on a monthly basis.

Based on the records reviewed, the RTO did not drop below 1400 °F during production activities. The most recent performance test indicated the RTO was operating properly.

AAR submitted a work practice plan that is initiated to minimize HAP emissions from the storage, mixing and conveying of coatings, thinners and other additives, cleaning materials, and waste materials generated by the facilities controlled coating operations.

The SSMP Plan was included in the MAP that was submitted to the DEQ on September 10, 2014.

#### **IV. Design/Equipment Parameters**

As previously stated, the RTO is installed and operating properly.

#### **V. Testing/Sampling**

As previously stated, the most recent performance test indicated AAR was in compliance with capture efficiency and destruction efficiency of the RTO. The combustion temperature was monitored during each of

the three runs during performance testing.

#### **VI. Monitoring/Recordkeeping**

Based on the records reviewed, it appears AAR is maintaining the appropriate records in accordance with FGMACT.

#### **VII. Reporting**

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner. No deviations were reported with respect to FGMACT emission limits have been reported to the DEQ.

#### **VIII. Stack/Vent Restrictions**

Stack/Vent Restrictions are not applicable with FGMACT.

#### **IX. Other Requirements**

AAR appears to be in compliance with the applicable provisions of 40 CFR, Part 63, Subpart M.

**H. FGPARTICULATES** This flexible group includes the router and saw that are controlled by a cyclone in EULMS and a horizontal band saw, a vertical band saw, a straight-line rip saw, a trim saw and a belt sander (EUWOODROOM) that are controlled by a baghouse. This flexible group also includes wood chip and dust material from EUBALSACORE CNC router, which is also controlled by the baghouse that controls EUWOODROOM. The emission units this flexible group includes are EULMS, EUWOODROOM, and EUBALSACORE.

#### **I. Emission Limits**

Emission limits for FGPARTICULATES are 0.10 pounds of PM per 1,000 pounds of exhaust gases. The emission limits for PM 10 are 0.6 pounds per hour for the cyclone at EULMS and 6.3 pounds of PM 10 per hour for the baghouse that controls EUWOODROOM and EUBALSACORE. Compliance with the emission limits are monitored using non-certified visible emissions. Based upon the records reviewed, no visible emissions were recorded from the cyclone or baghouse for FGPARTICULATES.

#### **II. Material Limits**

No Material limits are applicable for FGPARTICULATES.

#### **III. Process/Operational Restrictions**

During the field inspection the cyclone and baghouse appeared to be installed and operating properly. AAR monitors and records the differential pressure gauge once per shift in accordance with the MAP for the facility.

#### **IV. Design/Equipment Parameters**

The baghouse and cyclone are equipped with differential gauges.

#### **V. Testing/Sampling**

As previously mentioned, AAR completes daily non-certified visible emissions of FGPARTICULATES. No visible emissions have been recorded. Performance testing was not required for this flexible group.

#### **VI. Monitoring/Recordkeeping**

AAR monitors the differential pressure across the baghouse and cyclone on a daily basis when the equipment is in operation. AAR maintains records in an acceptable manner to the DEQ.

#### **VII. Reporting**

Reporting of any deviations, quarterly reports, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

#### **VIII. Stack/Vent Restrictions**

The stack heights for SVCOMPOSITES (for the cyclone) were in compliance with the ROP diameters and heights.

#### **IX. Other Requirements**



AAR submitted a MAP and SSMP on September 10, 2014 Compliant differential pressure ranges across the baghouse and cyclone are included in the MAP. No exhaust gases were discharged from the baghouse of EUBALSACORE and EUWOODROOM.

I. **FGRULE287(c)** Currently, AAR uses this Rule to apply paint for touch-ups at the facility.

**I. Emission Limits**

Emission Limits are not applicable for FGRULE287(c).

**II. Material Limits**

Coating usage is limited to 200 gallons per month, minus water, as applied. Based on the records reviewed, the facility is below the 200 gallons per month material limit.

**III. Process/Operational Restrictions**

Process/Operational Restrictions are not applicable for FGRULE287(c).

**IV. Design/Equipment Parameters**

AAR uses fabric filters for control in the spray booths for touch-ups.

**V. Testing/Sampling**

Testing/Sampling requirements are not applicable for FGRULE287(c).

**VI. Monitoring/Recordkeeping**

Records of paint usage were available upon request and were adequate to demonstrate compliance with the requirements of the ROP.

**VII. Reporting**

Reporting of any deviations, semi-annual reports, and annual compliance reports for ROP certification were submitted to the DEQ in timely manner.

**VIII. Stack/Vent Restrictions**

Stack/Vent Restrictions are not applicable with FGRULE287(c).

**IX. Other Requirements**

Other Requirements are not applicable for FGRULE287(c).

J. **FGRULE290:** DEQ did not review this Flexible Group during this field inspection.

**Summary:**

The activities covered during the field inspection and records review for the facility indicate AAR appears to be in compliance with MI-ROP-B4197-2011, and no additional information is necessary at this time.

NAME Campy Owens

DATE 4/2/15

SUPERVISOR [Signature]