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

A93(6441	025	

FACILITY: Hutchinson Antivibration Systems, Inc		SRN / ID: A9364	
LOCATION: 600 Seventh St., CADILLAC		DISTRICT: Gaylord	
CITY: CADILLAC		COUNTY: WEXFORD	
CONTACT: AI Gatt , HSE Coordinator		ACTIVITY DATE: 08/03/2017	
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR	
SUBJECT: Scheduled inspection	on of this ROP source		
RESOLVED COMPLAINTS:			

Hutchinson Antivibration Systems produces a variety of automotive parts that consist of rubber and metal components. The rubber components are manufactured on site while the metal parts are manufactured elsewhere and shipped to the facility. Various adhesives are used to bond rubber and metal together. The facility includes processes for cleaning the various metal components, molding of rubber components, and applying various adhesives to each.

On August 3, 2017, this facility was inspected per Renewable Operating Permit (ROP) Number MI-ROP-A9364-2014. Records review associated with this ROP were reviewed and documented by AQD staff and are addressed in a separate activity report. Following are the findings of this inspection.

SOURCE-WIDE CONDITIONS

- 1. EMISSION LIMIT(S) There are no source wide emission limits; therefore, this section is not applicable.
- 2. MATERIAL LIMIT(S) There are no source wide material limits associated with this unit; therefore, this section is not applicable.
- 3. PROCESS/OPERATIONAL RESTRICTION(S) There are no source wide process or operational restrictions; therefore, this section is not applicable.
- 4. DESIGN/EQUIPMENT PARAMETER(S) There are no source wide design or equipment parameters; therefore, this section is not applicable.
- 5. TESTING/SAMPLING There are no source wide testing or sampling requirements; therefore, this section is not applicable.
- 6. MONITORING/RECORDKEEPING Applicable required monitoring and recordkeeping for this section have been reviewed and documented separately.
- 7. REPORTING All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.
- 8. STACK/VENT RESTRICTION(S) There is no source wide stack or vent restrictions; therefore, this section is not applicable.
- 9. OTHER REQUIREMENT(S) The facility is required to comply with Consent Order 7-2012. The order requires that the facility obtains and complies with an ROP and that they install the Roll Coat Line as a supplemental environmental project. The facility has complied with this Consent Order.

The facility is required to have an approved site specific Malfunction Abatement Plan. A Work Practice Plan (WPP); Startup, Shutdown, Malfunction Plan (SSMP), and Malfunction Abatement Plan (MAP) are integrated in to one document that was last approved in October of 2016.

<u>EUROLLCOAT</u> - A roll coat process with primer and adhesive application stations connected by a conveyor system. VOC emissions from the system are controlled by a regenerative thermal oxidizer.

1. EMISSION LIMIT(S) - There are no emission limits associated with this emission unit; therefore, this

section is not applicable.

- 2. MATERIAL LIMIT(S) There are no material limits associated with this emission unit; therefore, this section is not applicable.
- 3. PROCESS/OPERATIONAL RESTRICTION(S) The facility is required to store any waste coatings and solvents in closed containers. All solvent and coating containers are closed.
- 4. DESIGN/EQUIPMENT PARAMETER(S) The facility is required to only use non-atomizing applicators in the unit. This unit uses only rolling applicators.
- 5. TESTING/SAMPLING There are no testing or sampling requirements associated with this emission unit; therefore, this section is not applicable.
- 6. MONITORING/RECORDKEEPING Applicable required monitoring and recordkeeping for this section have been reviewed and documented separately.
- 7. REPORTING All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.
- 8. STACK/VENT RESTRICTION(S) There is no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.
- 9. OTHER REQUIREMENT(S) There are no other requirements associated with this emission unit; therefore, this section is not applicable.

<u>EURBRMOLDING</u> - Rubber injection and compression presses; and post bond cure oven. Emissions from presses and oven are controlled by fabric filters.

1. EMISSION LIMIT(S) – VOC emissions from EURBRMOLDING are limited to 7.8 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Compliance with this limit is through usage records and emission factor calculations. A review of these records was performed by AQD staff and demonstrated compliance.

Particulate matter, particulate matter less than 10 microns and particulate matter less than 2.5 microns are limited to 1.35 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Compliance with this limit is through usage records and emission factor calculations. A review of these records was performed by AQD staff and demonstrated compliance.

2. MATERIAL LIMIT(S) - The mold release agents used in EURBRMOLDING shall not contain any VOCs as defined by the supplier's MSDS information. A review of the MSDS information on site indicated no VOCs were present in the mold release agents. It is called Monocoat 1892 and is essentially water and ethyl alcohol.

The permittee shall not process more than 18,000,000 pounds of rubber in EURBRMOLDING per year based upon a 12-month rolling time period as determined at the end of each calendar month. Compliance with this limit is through usage records. A review of these records was performed by AQD staff and demonstrated compliance.

3. PROCESS/OPERATIONAL RESTRICTION(S) – The facility is required to have an approved site specific Malfunction Abatement Plan. A Work Practice Plan (WPP); Startup, Shutdown, Malfunction Plan (SSMP), and Malfunction Abatement Plan (MAP) are integrated in to one document that was last approved in October of 2016.

The facility is required to maintain of their dry fabric filter system. Upon inspection, all filters appeared to be installed properly and maintained.

4. DESIGN/EQUIPMENT PARAMETER(S) - The permittee shall equip and maintain EURBRMOLDING with fabric filters Upon inspection, all filters appeared to be installed properly and maintained.

- 5. TESTING/SAMPLING There are no testing or sampling requirements associated with this emission unit; therefore, this section is not applicable.
- 6. MONITORING/RECORDKEEPING Applicable required monitoring and recordkeeping for this section have been reviewed and documented separately.
- 7. REPORTING All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.
- 8. STACK/VENT RESTRICTION(S) There is no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.
- 9. OTHER REQUIREMENT(S) There are no other requirements associated with this emission unit; therefore, this section is not applicable.

<u>FGAUTODIP</u> - Two (2) automatic dip systems for applying cement to metal and plastic parts. Processes also include conveyor systems for drying the dipped parts. The cements are dried by an electric dryer. VOC emissions from both lines are controlled by a regenerative thermal oxidizer.

- 1. EMISSION LIMIT(S) There are no emission limits associated with this flexible group; therefore, this section is not applicable.
- 2. MATERIAL LIMIT(S) There are no material limits associated with this flexible group; therefore, this section is not applicable.
- 3. PROCESS/OPERATIONAL RESTRICTION(S) The facility is required to store any waste coatings and solvents in closed containers. All solvent and coating containers are closed.
- 4. DESIGN/EQUIPMENT PARAMETER(S) There are no design or equipment parameters associated with this flexible group; therefore, this section is not applicable.
- 5. TESTING/SAMPLING There are no testing or sampling requirements associated with this flexible group; therefore, this section is not applicable.
- 6. MONITORING/RECORDKEEPING Applicable required monitoring and recordkeeping for this section have been reviewed and documented separately.
- 7. REPORTING All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.
- 8. STACK/VENT RESTRICTION(S) Stack parameters for this group appear correct and do not appear to have been recently modified.
- 9. OTHER REQUIREMENT(S) There are no other requirements associated with this flexible group; therefore, this section is not applicable.

<u>FGSPRAYMACHINES</u> - Chain-on-edge numbers 1 and 2 are two (2) automated booths each for applying cement to parts. Prior to entering the booths the parts first pass through a pre-heat oven. The chain-on-edge rotates the parts through spray guns. Chain-on-edge number 3 is also an automated booth for applying cement to parts. Parts do not pass through a pre-heat oven. Cement is applied to the parts by spray guns and then the cement is dried in an oven. Chain-on-edge number 4 is two (2) automated booths for applying cement to parts. Prior to entering the booths, the parts first pass through a pre-heat oven. EUSPRAYMACHINE#9 is a turbo spray system is used for applying cement to parts. The system consists of an electrically heated tunnel, a primer application booth, a topcoat application booth and an electrically heated drying tunnel.

- 1. EMISSION LIMIT(S) There are no emission limits associated with this flexible group; therefore, this section is not applicable.
- 2. MATERIAL LIMIT(S) There are no material limits associated with this flexible group; therefore, this section is not applicable.

3. PROCESS/OPERATIONAL RESTRICTION(S) – The facility is required to store any waste coatings and solvents in closed containers. All solvent and coating containers are closed.

The facility disposes of spent filters by storing them in closed containers and having them transported to a Class II landfill.

4. DESIGN/EQUIPMENT PARAMETER(S) - The facility is required to operate only if all filters are in place. At the time of this inspection, these filters appeared in good condition.

The facility only uses HVLP applicators in these booths as required.

- 5. TESTING/SAMPLING There are no testing or sampling requirements associated with this flexible group; therefore, this section is not applicable.
- 6. MONITORING/RECORDKEEPING Applicable required monitoring and recordkeeping for this section have been reviewed and documented separately.
- 7. REPORTING All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.
- 8. STACK/VENT RESTRICTION(S) Stack parameters for this group appear correct and do not appear to have been recently modified.
- 9. OTHER REQUIREMENT(S) There are no other requirements associated with this flexible group; therefore, this section is not applicable.

<u>FGRTO</u> - Two (2) automatic dip spin lines, four (4) automated chain-on-edge lines, a turbo spray line, and a roll coater all used to coat metal and plastic parts.

1. EMISSION LIMIT(S) - VOC emissions from FGRTO are limited to 56.4 tons per year based on a 12month rolling time period as determined at the end of each calendar month. Compliance with this limit is through usage records and emission factor calculations. A review of these records was performed by AQD staff and demonstrated compliance.

Ethylbenzene emissions from FGRTO are limited to 10 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Compliance with this limit is through usage records and emission factor calculations. A review of these records was performed by AQD staff and demonstrated compliance.

- 2. MATERIAL LIMIT(S) There are no material limits associated with this flexible group; therefore, this section is not applicable.
- PROCESS/OPERATIONAL RESTRICTION(S) The facility is required to have an approved site specific Malfunction Abatement Plan. A Work Practice Plan (WPP); Startup, Shutdown, Malfunction Plan (SSMP), and Malfunction Abatement Plan (MAP) are integrated in to one document that was last approved in October of 2016.

The permittee shall maintain a minimum of 0.007 inches of water (H2O) pressure differential between the PTE and the adjacent area on a continuous basis. Compliance with this limit is through continuous monitoring of the pressure drop in each booth. Following are instant readings taken during the inspection:

Chain on Edge 1 - a) 0.06, b) 0.02 Chain on Edge 2 - a) 0.02, b) 0.02 Chain on Edge 3 - a) 0.02, b) 0.02 Chain on Edge 4 - a) 0.05, b) 0.05 Rollcoat - 0.05Dip 1 - 0.2Dip 2 - 0.5Silverspray - Not in operation All readings above are in inches of water, gauge. a) and b) represent the two booths that make up each Chain on Edge line.

4. DESIGN/EQUIPMENT PARAMETER(S) – To operate FGRTO the RTO must be installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO includes a minimum VOC destruction efficiency of 95% (by weight), maintaining a minimum temperature of 1,500°F or the minimum temperature may be adjusted based on the most recent acceptable stack test which achieved a minimum overall destruction efficiency of 95%, and a minimum retention time of 0.5 seconds. Destruction efficiency testing was last performed in December of 2012 and demonstrated a DE of 97%. Temperature of the RTO is monitored and recorded continuously. Records regarding this were reviewed by AQD staff and demonstrated compliance. The minimum retention time to the RTO is designed in to the RTO.

Each booth is required to be a permanent total enclosure (PTE). Compliance with this is through pressure drop monitoring. If the pressure drops below the requirement of 0.007 inches of water, gauge, an alarm is sounded and operation of that booth cannot continue until staff resolve the issue and return flow out of the booth to a compliant level.

The facility is required to continuously monitor and record the combustion temperature of the RTO. Records regarding this have been reviewed and found to be in compliance. At the time of the inspection, readings of each chamber of the RTO were 1586 and 1603 degrees F.

5. TESTING/SAMPLING – VOC content of materials used at the facility are determined through manufacturers formulation data. This information is used to calculate VOC emissions.

Testing for destruction efficiency is required. Destruction efficiency testing was last performed in December of 2012 and demonstrated a DE of 97%.

- 6. MONITORING/RECORDKEEPING Applicable required monitoring and recordkeeping for this section have been reviewed and documented separately.
- 7. REPORTING All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.
- 8. STACK/VENT RESTRICTION(S) Stack parameters at the facility appear correct and do not appear to have been modified.
- 9. OTHER REQUIREMENT(S) The facility is required to comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR 63, Subpart A and MMMM. By complying with the conditions listed in this section, the facility is in compliance with this subpart.

<u>FGMACT MMMM</u> - Each new, reconstructed, and existing affected source described in 40 CFR 63.3881(a) (1), including the subcategories listed in 40 CFR Part 63, Subpart MMMM, 63.3881(a)(2) through (6), meeting the applicability requirements of 40 CFR 63.3881(b), which is engaged in the surface coating of miscellaneous metal parts and products. The affected source includes the collection of all the items listed in 40 CFR 63.3882(b)(1) through (4). Surface coating is defined by 40 CFR 63.3881 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating. 40 CFR Part 63, Subpart MMMM does not apply to surface coating or a coating operation that meets any of the criteria of 40 CFR 63.3881(c)(1) through (17).

 EMISSION LIMIT(S) – Organic HAP emissions from FGMACT MMMM are limited to 2.6 lb per gal of coating solids used based on a 12-month rolling time period as determined at the end of each calendar month for general use coatings. Organic HAP emissions from FGMACT MMMM are limited to 37.7 lb per gal of coating solids used based on a 12-month rolling time period as determined at the end of each calendar month for Rubber-to-Metal Coating. Compliance with this is through usage and material content records and corresponding calculations. These records were reviewed by AQD staff and found to be in compliance.

The facility coats metal parts under 40 CFR 63 Subpart MMMM, but also coats some plastic parts. This activity is subject to 40 CFR 63 Subpart PPPP. Each subpart allows for calculation of a facility specific limit based on proration of the number of each type of part coated. Calculation of this limit must be documented by the facility. A review of this calculation was reviewed by AQD staff and found to be in compliance.

- 2. MATERIAL LIMIT(S) There are no material limits associated with this flexible group; therefore, this section is not applicable.
- 3. PROCESS/OPERATIONAL RESTRICTION(S) The average combustion temperature in any 3-hour period for the RTO must not fall below the combustion temperature limit of 1500°F. Records of continuous monitoring of the RTO temperature has been reviewed by AQD staff and found to be in compliance.

Each booth must maintain the direction of air into the enclosure of an emission capture system that is a permanent total enclosure (PTE) per USEPA Method 204. Compliance with this is by continuous monitoring of pressure drops in each affected booth and maintaining a pressure drop of 0.007 inches of water, gauge, pursuant to the method. Records of these readings were reviewed by AQD staff and found to be in compliance.

The facility must operate the RTO temperature monitor and PTE pressure drop monitor and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating. Monitoring at the facility is continuous. Any deviations from this are reported semi-annually as required. These reports are reviewed and documented by AQD staff.

The facility must maintain the RTO temperature monitor and PTE pressure drop monitor at all times and have available necessary parts for routine repairs of the monitoring equipment. Inspection at the facility indicates the facility maintains the monitoring systems.

The facility must implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the emission units in FGMACT MMMM. A Work Practice Plan (WPP); Startup, Shutdown, Malfunction Plan (SSMP), and Malfunction Abatement Plan (MAP) are integrated in to one document that was last approved in October of 2016.

The facility may choose to comply with an alternative to the work practice standard, after receiving prior approval from the USEPA. The facility has not sought an alternative to the work practice standards.

All emission units in FGMACTMMMM shall be in compliance with the emissions limits at all times except during periods of startup and shutdown. Any deviations from this are reported semi-annually as required. These reports are reviewed and documented by AQD staff.

4. DESIGN/EQUIPMENT PARAMETER(S) - The facility must install, calibrate, and maintain devices to measure air flow direction, static or differential pressure, as appropriate for each emission unit under FGMACT MMMM. These devices are installed, maintained, and monitored.

Each pressure sensor must be located in or as close to a position that provides a representative measurement of the pressure drop across each opening that is monitored. The pressure sensor must have an accuracy of at least 0.5 inches of H2O or 5 percent of the measured value, whichever is larger. Each booth is so equipped. The accuracy of each gauge is 0.01 inches of water.

The gas temperature monitor must be installed in the firebox of the RTO or in the duct immediately downstream of the firebox before any substantial heat exchange occurs. The RTO is so equipped.

The RTO gas temperature sensor must be located in a position that provides a representative temperature and has a measurement sensitivity of 5°F or 1.0 percent of the temperature value, whichever is larger. The temperature sensor is accurate to one degree.

- 5. TESTING/SAMPLING For the RTO temperature sensor, an accuracy audit, including a visual inspection, of the sensor shall be performed quarterly and after every deviation. Records of accuracy audits were reviewed on site. These are performed monthly. In the records reviewed, an error of less than 2% was noted for each. It should also be noted that the RTO has redundant thermocouples. These records were also reviewed for pressure drop sensors. These audits are also performed monthly with an error noted of less than 2%.
- 6. MONITORING/RECORDKEEPING Applicable required monitoring and recordkeeping for this section have been reviewed and documented separately.
- 7. REPORTING All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.
- 8. STACK/VENT RESTRICTION(S) There is no stack or vent restrictions associated with this flexible group; therefore, this section is not applicable.
- 9. OTHER REQUIREMENT(S) The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart MMMM for Surface Coating of Miscellaneous Metal Parts and Products. By complying with the conditions listed in this section, the facility is in compliance with this subpart.

The permittee shall develop and implement a work practice plan. A Work Practice Plan (WPP); Startup, Shutdown, Malfunction Plan (SSMP), and Malfunction Abatement Plan (MAP) are integrated in to one document that was last approved in October of 2016.

The permittee shall develop a written startup, shutdown, and malfunction plan. A Work Practice Plan (WPP); Startup, Shutdown, Malfunction Plan (SSMP), and Malfunction Abatement Plan (MAP) are integrated in to one document that was last approved in October of 2016.

<u>FG-RULE 287(c)</u> - Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).

Equipment in this group consists of one rarely used service booth. An inspection of this booth indicated that it is controlled by dry fabric filters that appeared to be in good condition and installed properly. A review of the usage records for the booth indicate the facility is well under 200 gallons per month usage as required by the exemption.

<u>FG-COLDCLEANERS</u> - Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

A total of two cold cleaners exist on site and are both in the maintenance department. These appeared properly signed and used. Lids on both are closed when not in use. Service of these in terms of the solvent change out is by an outside contractor.

At the time of the inspection, this facility appeared in compliance with their ROP.

DATE 0/9/17 SUPERVISOR