DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
**ACTIVITY REPORT: Other**

A936450015

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| **FACILITY:** Hutchinson Antivibration Systems, Inc | | **SRN / ID:** A9364 |
| **LOCATION:** 600 Seventh St., CADILLAC | | **DISTRICT:** Cadillac |
| **CITY:** CADILLAC | | **COUNTY:** WEXFORD |
| **CONTACT:** Tom Jackson , | | **ACTIVITY DATE:** 08/07/2019 |
| **STAFF:** Rob Dickman | **COMPLIANCE STATUS:** Compliance | **SOURCE CLASS:** MAJOR |
| **SUBJECT:** Records review for this major 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.**

**Recordkeeping requirements at this facility are extensive. Twelve months of required records were requested by the AQD and received on August 7, 2019. Following is an evaluation of these records as required by Renewable Operating Permit Number MI-ROP-A9364-2014c.**

**SOURCE-WIDE CONDITIONS**

**There are no source wide recordkeeping requirements therefore, this section is not applicable.**
**EUROLLCOAT**

**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 (RTO).**

**Required records for this equipment are listed in FGRTO. There are no specific monitoring or recordkeeping requirements associated with this unit; therefore, this section is not applicable.**

**EURBRMOLDING**

**Rubber injection and compression presses; and post bond cure oven. Emissions from presses and oven are controlled by fabric filters. Air pollution control is by dry fabric filters.**

**The facility is required to keep records of the amount of each rubber molding material processed. The facility is limited to 18,000,000 pounds of rubber molding material processed in EURBRMOLDING based on12 month rolling time period, as determined at the end of each calendar month. In the last 12 months, the highest 12 month rolling average of rubber molding material used was in August of 2018 at 10,745,872 pounds. A sample of these records is attached.**

**The facility shall maintain a current record of the chemical composition of each rubber molding material and mold release agent, including the weight percent of each component. This information is being kept and appeared complete and up to date.**

**The facility shall keep monthly and 12-month rolling time period VOC emission calculation records. This information is being kept and appeared complete and up to date. VOC emissions are limited to 7.8 tons per year based on a 12-month rolling time period. The highest monthly VOC value in the last 12 months was in July of 2019 at 473 pounds. The highest annual VOC emissions in the last 12 months was in August of 2018 with 2.7 tons per year based on a 12-month rolling time period.**

**The facility shall keep, monthly and 12-month rolling time period PM, PM-10, and PM-2.5 emission calculation records. This information is being kept and appeared complete and up to date. PM, PM-10, and PM-2.5 emissions are limited to 1.35 tons per year for each based on a 12-month rolling time period. The highest monthly PM value was in July of 2019 at 142 pounds. The highest PM emissions in the last 12 months was in August of 2018 with 0.8 tons per year based on a 12-month rolling time period.**
**FGAUTODIP**

**Two 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.**

**Required records for this equipment are listed in FGRTO. There are no specific monitoring or recordkeeping requirements associated with this unit; therefore, this section is not applicable.**

**FGSPRAYMACHINES**

**Chain-on-edge numbers 1 and 2 are two 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 automated booths for applying cement to parts. Prior to entering the booths, the parts first pass through a pre-heat oven. EUROTSTRAY1 is a rotary spray adhesive line used to apply adhesive to. VOC emissions are controlled by the RTO.**

**Required records for this equipment are listed in FGRTO. There is no specific monitoring or recordkeeping requirements associated with this unit; therefore, this section is not applicable.**

**FGRTO**

**This group consists of two automatic dip spin lines, four automated chain-on-edge lines, a rotary spray adhesive line, and a roll coater all used to coat metal and plastic parts. VOC emissions from this group are all controlled by a common RTO.**

**The facility shall maintain a current listing from the manufacturer of the chemical composition of each cement, adhesive, coating, thinner, solvent, additive and catalyst, including the weight percent of each component. This information is being kept by the facility.**

**The facility shall keep the following information on a monthly basis for FGRTO:**

**Gallons (with water) of each cement, adhesive, coating, thinner, solvent, additive and catalyst used. These usage records are being kept and appeared complete and up to date. A sample of these records is attached.**

**Where applicable, gallons (with water) of each material reclaimed. No materials are reclaimed at this facility.**

**VOC content (with water) of each material as applied. The content of each material used is listed in the facility records and appeared complete. A sample of these records is attached.**

**VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. Records for each month are being kept and appeared complete and up to date. The highest VOC emissions in the last 12 months was in August of 2018 with 5.05 tons per year based on a 12-month rolling time period. A sample of these records is attached.**

**The facility shall keep the following information on a monthly basis for FGRTO:**

**Gallons (with water) of each ethylbenzene containing material used. The material containing ethylbenzene is 6411 and the gallons of usage are being tracked. A sample of these records is attached.**

**Where applicable, gallons (with water) of each ethylbenzene containing material reclaimed. No materials are reclaimed at this facility.**

**The ethylbenzene content (with water) in pounds per gallon of each material used. The ethylbenzene content of 6411 is 60.8%.**

Ethylbenzene mass emission calculations determining the monthly emission rate in tons per calendar year. These records are being kept and appeared complete and up to date. The highest ethylbenzene emissions in the last 12 months was in August of 2018 with 0.44 tons per year based on a 12-month rolling time period. A sample of these records is attached.

The facility shall monitor and record, the temperature in the combustion chamber of the RTO on a continuous basis. The facility does monitor RTO temperature continuously. Records of this are kept automatically and by strip chart. A review of some of these records indicated compliance with the minimum temperature requirement of 1500 degrees F for the RTO combustion chamber.

The facility shall monitor and record, the pressure differential between the PTE for FGRTO and the outside area, on a continuous basis, to verify that air is entering the PTE. Pressure differential data is monitored and recorded continuously at each required booth. A review of some of these records indicated compliance with the greater than 0.007 inches of water, gauge, pressure drop requirement.

FGMACT MMMM

This group consists of the same units as FGRTO (two automatic dip spin lines, four automated chain-on-edge lines, a rotary spray adhesive line, and a roll coater). This table summarizes the requirements of 40 CFR Part 63, Subpart MMMM for this group as it relates to each unit.

The following compliance determinations must be made:

The organic HAP emission rate for each compliance period must be equal to or less than the applicable emission limits. The facility has established specific emissions limits based on coating plastic and metal parts as allowed by 40 CFR 63, Subparts MMMM and PPPP. This limit is established monthly. Records of this calculated limit are being kept. In August of 2018, the emissions limit was calculated at 31.0 pounds of HAPs per gallon of solids. Emissions for that month were 1.85 pounds of HAPs per gallon of solids. A sample of these records is attached.

Demonstrate continuous compliance with each operating limit that applies. Records indicate the facility is in compliance with all applicable operating limits including pressure drop and RTO combustion chamber temperature requirements.

Demonstrate continuous compliance with the work practice plan. The 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 WPP part of this plan consists of minimization of VOC and HAP emissions when storing and mixing materials containing these and when using them to clean equipment. Inspection of the facility indicated that these plans are being followed. Updates to these plans were submitted recently with the facility's ROP renewal application and will be reviewed as part of the renewal process.

The facility must demonstrate compliance with the applicable emission limits on a 12-month rolling time period basis using the following:

Calculate the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month and, if applicable, calculate the mass of organic HAP in waste materials. These records are being kept. The highest HAPS emissions in the last 12 months was in August of 2018 with 1.85 pounds per gallon of coating solids based on a 12-month rolling time period. A sample of these records is attached.

Calculate the total volume of coating solids used each month. These records are being kept. The highest HAPS coating solids used in the last 12 months was in August of 2018 with 349,096 pounds of coating solids based on a 12-month rolling time period. A sample of these records is attached.

Calculate the mass of organic HAP emission reduction by emission capture systems and add-on control devices. These records are being kept and appeared complete and up to date.

Calculate each month's organic HAP emission rate. These records are being kept. The highest HAPS emissions in the last 12 months was in August of 2018 with uncontrolled HAPS for 4.35 pounds per pound of solids, controlled emissions were 0.12 pounds per pound of solids.

**Calculate each 12-month rolling time period organic HAP emission rate. These records are being kept. The highest average HAPS emissions in the last 12 months was in August of 2018 with uncontrolled HAPS of 67.23 pounds per gallon of solids, controlled emissions were 1.85 pounds per gallon of solids based on a 12-month rolling time period.**

**The facility shall maintain, at a minimum, the following records:**

**A copy of each notification and report that is submitted to comply with Subpart MMMM, and the documentation supporting each notification and report. The facility keeps copies of all reporting sent to the AQD.**

**A current copy of information provided by materials suppliers or manufacturers. These records are being kept and appeared complete and up to date**

**The calculations specified for HAPS for each compliance period. These records are being kept and appeared complete and up to date.**

**The name and mass or volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. These records are being kept and appeared complete and up to date.**

**The mass fraction of organic HAP for each coating, thinner and/or additive, and cleaning material used during each compliance period unless the material is tracked by weight. These records are being kept and appeared complete and up to date.**

**The volume fraction of coating solids for each coating used during each compliance period. These records are being kept and appeared complete and up to date.**

**The density of each coating, thinner and/or other additive, and cleaning material used during each compliance period. These records are being kept and appeared complete and up to date.**

**The date, time, and duration of each deviation. This information is reported to the AQD semiannually. These reports have been previously reviewed and documented.**

**For each deviation, whether it occurred during startup, shutdown, or malfunction. This information is reported to the AQD semiannually. These reports have been previously reviewed and documented.**

**Records relating to startup, shutdown, or malfunction. This information is reported to the AQD semiannually. These reports have been previously reviewed and documented.**

**Records demonstrating continuous compliance with each operating limit in Table 1 of Subpart MMMM that applies. By maintaining PTE and minimum combustion temperature for the RTO, the facility is in compliance.**

**For each capture system that is a PTE, the data and documentation used to support a determination that the capture system meets the criteria in Method 204 of Appendix M to 40 CFR 51 for a PTE and has a capture efficiency of 100 percent. The facility keeps records of pressure drop on each coating booth to ensure that it meets the criteria listed in Method 204 of greater than 0.007 inches of water, gauge. These reports have been previously reviewed and documented.**

**Records of organic HAP capture and destruction efficiency testing. Destruction Efficiency (DE) testing was last performed in May of 2018 and demonstrated a DE of 97%.**

**Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions. Performance testing was last performed in May of 2018 and testing was conducted under representative operating conditions.**

**Records of the data and calculations used to establish the emission capture and add-on control**

**device operating limits. The RTO has a set temperature limit of greater than 1500 degrees. Testing to establish an alternate limit was not performed.**

**Records of the leak checks and audits for the RTO temperature sensor, and emission capture system pressure drop measuring device. These records were reviewed on site by AQD staff and demonstrated compliance.**

**The facility shall monitor and record the RTO combustion chamber temperature as follows:**

**The temperature monitor must complete a minimum of one cycle of operation for each successive 15-minute period. Monitoring frequency of RTO temperature at this facility exceeds this criterion.**

**Determine the average of all recorded temperature readings for each successive 3-hour period of the RTO operation. The data acquisition system recording RTO temperature supplies this calculation.**

**The facility shall monitor and record the pressure drop across each natural draft opening of each PTE as follows:**

**The pressure drop monitor must complete a minimum of one cycle of operation for each successive 15-minute period. Monitoring frequency of pressure drop in each booth exceeds this criterion.**

**Determine the average of all recorded pressure drop readings for each successive 3-hour period of the PTE operation. The data acquisition system collecting pressure drop data supplies this calculation.**

**When relocating or replacing the RTO temperature sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature. No sensors have been relocated or replaced in the last 12 months.**

**FG-RULE 287(c)**

**Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).**

**This group consists of one small, rarely used service booth. The facility tracks all material usage and usage has been nearly zero the last 12 months. Any replacement of dry fabric filters is logged by maintenance.**

**FG-COLDCLEANERS**

**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.**

**Recordkeeping for this facility is in compliance with the conditions of their Renewable Operating Permit.**

NAME [signature] DATE 8/22/19 SUPERVISOR [signature]