

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

A936471999

FACILITY: Hutchinson Antivibration Systems, Inc		SRN / ID: A9364
LOCATION: 600 Seventh St., CADILLAC		DISTRICT: Gaylord
CITY: CADILLAC		COUNTY: WEXFORD
CONTACT: Al Gatt , HSE Coordinator		ACTIVITY DATE: 01/22/2024
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: FCE site inspection (onsite and records review) for 2024 fiscal year. Compliance issues have been noted, and Facility has plan to retest in conjunction with 2024 permit modification. sgl		
RESOLVED COMPLAINTS:		

On January 22, 2024, AQD District Staff conducted an unscheduled site inspection of Hutchinson Antivibration Systems, Inc. the Automotive Anti-Vibration and Noise Reduction Systems division of Hutchinson North America (AKA Hutchinson) (SRN A9364) located 600 Seventh Street, Cadillac, Wexford County, Michigan. The referenced Facility operates under MI-ROP-A9364-2022, issued on August 10, 2022. The purpose of the site inspection was to determine compliance with permit conditions.

Prior to this inspection, the most recent site inspection was conducted on June 21, 2023. The Full Compliance Evaluation (FCE) for this site was advanced from the 2025 fiscal year to the 2024 fiscal year to better distribute inspections for the new inspector associated with the Facility.

Record requests were sent electronically on January 4th, 2024 and February 22, 2024. With records received on February 5th, March 15th and the week of April 22, 2024, with multiple phone discussions between those dates. These documents were reviewed and the information incorporated into this document.

On May 7, 2024, AQD District staff met with onsite personnel regarding compliance issues/concerns regarding FGRT0/FGMACTMMMM. These issues are identified within this document.

FACILITY

The referenced Facility is an automotive industry supplier located in an industrial park within the Cadillac city limits. The facility produces a variety of automotive parts consisting of rubber and metal components. The rubber parts are manufactured onsite, and the metal parts are manufactured elsewhere and are bonded to the rubber components onsite. Processes onsite include cleaning of the various metal components, application of adhesives (primer and topcoat), and injection molding/press of rubber components.

Principle coating/adhesive materials used on site used for the bonding of rubber component include a primer (Chemlock 207), an adhesive (Chemlock 6411), and two solvents (toluene and Methyl Ethyl Ketone (MEK)).

Solvents (toluene and MEK) are reported to be received by bulk, coatings are received in 55-gallon drums from suppliers. The material storage area houses materials, and is where mixing in apx. 5-gallon "pots" for use at the various spray booths occurs. Waste materials are reported to be transported to a facility in Wisconsin that recycles the waste materials for use by other Facilities.

The Facility makes use of a “Watchdog” system with respect to the RTO, which monitors appropriate operating parameters for the coating lines, Permanent Total Enclosures (PTE), and the RTO, and will shut down the coating operations should threshold values not be met.

At the time of the inspection, the rubber molding process consisted of approximately 80 presses. The majority of the rubber injection products (60-70%) are sent to a sister plant in Grand Rapids, Michigan for finish assembly, the remaining items are sent to clients for finish assembly.

Weather conditions at the time of the site inspection overcast skies, with temperatures in the low 20’s.

A review of aerials indicated expansion in 2006 and 2011. Wexford County Equalization Records indicated that the Facility consists of two blocks totaling 5.33 acres. Sales records indicated the earliest purchase date of 1986. The property owner being identified as Paulstra CRC Corporation.

EQUIPMENT

MI-ROP-A9364-2022 identifies a total of 12 Emission Units (EUs) and 6 Flexible Groups (FG). The EUs can be divided as follows:

1. Adhesive applicators (eight total)
 - Automatic dip systems for adhesive cement application (EUAUTODIP and EUAUTODIP2)
 - Chain on edge automated system for adhesive cement application (EUcoe1 through EUcoe4)
 - Roll coat adhesive application process (EUROLLCOAT)
 - Rotary Spray Booth adhesive application process (EUROTSPRAY1)
2. Rubber injection and compression presses (EURBRMOLDING)(apx. 80 work booths)
3. Post bond cure ovens (EURBRCUREOVEN)
4. Cold cleaners (EUCOLDCLEANER)
5. Small project spray booth (EUSERVICE-BOOTH)

FGs include:

1. FGAUTODIP (EUAUTODIP and EUAUTODIP2)
2. FGSPRAYMACHINES (EUcoe1 through EUcoe4 and EUROTSPRAY1)
3. FGRTO – ALL EUs associated with the Regenerative Thermal Oxidizer (RTO)
4. FGMACTMMMM – All EUs subject to 40 CFR Part 63 Subpart MMMM
5. FGRULE287(2)(c)
6. FGCOLDCLEANERS

Coating processes were all noted to have material safety data sheets for materials used for that process. Special instructions are also posted.

Control devices associated with equipment onsite include dry fabric filters and/or a Regenerative Thermal Oxidizer (RTO). This later control device uses heat to break down VOCs into carbon dioxide and H2O. Pollution control devices are summarized below:

Emission Unit	Control Device	Controlled Parameters
---------------	----------------	-----------------------

EUROLLCOAT*	Dry Fabric Filters, RTO	PM, VOC and HAPs
EURBRMOLDING	Dry Fabric Filters	PM. PM10 and PM2.5
EURBRCUREOVEN	Dry Fabric Filters	PM
FGAUTODIP* (EUAUTODIP and EUAUTODIP2)	RTO	VOC and HAP by RTO
FGSPRAYMACHINES* (EUcoe1 thru EUcoe4 and EUROTSPRAY1)	Dry Fabric Filters, RTO	VOC and HAP by RTO

***EU/FG has no emission limits**

EU/FGs that are associated with the RTO control device have Permanent Total Enclosures associated with those processes. The RTO stack (SVRTO) is constructed in compliance with ROP conditions (SC VIII.1):

Maximum Exhaust Diameter (inches)	Minimum Height above ground level (feet)
26	UNK*
30 (SC VIII.1)	42 (SC VIII.1)

***Note RTO was reported installed in the 1990s, documentation of the stack height in the form of as-built or construction diagrams were not readily available at the time of document preparation. Stack diameter is confirmed in stack test protocols and reports for the unit. Review of more recent AQD Inspection reports indicated that the RTO stack appeared to be in general compliance with minimum stack height requirements, but no formal measurement was documented in previous inspection reports.**

In addition to the above equipment, the Facility- reports the following exempt EUs:

- EUMAU – various air make up units exempt under Rule 282(2)(b)(i)
- Cooling Tower --
- EUMISCNATGAS -- Misc. exempt NG combustion sources (aka heaters).

Discussions during the May 7, 2024, onsite meeting indicated that the Facility is in the process of permitting an additional line for the Facility, the permit application of which is anticipated to be submitted prior to the end of May 2024.

MATERIALS

USA Safety Data Sheets were provided by the Facility upon request and included the following:

Material type	Product	SDS date	Major components
Primer	Chemlock 207	11/23/2020	Methyl isobutyl ketone (75-80%)
Adhesive	Chemlock 6411	4/22/2016	Xylene (60-65%)
Solvent	Toluene	Not recorded	Toluene (>99%)
Solvent	MEK	Not recorded	MEK (99.5%)
Release Agent	DiamondKote DKW-4185	3/3/2022	Only identified components with PEL values these included Acetic Acid and Sulfuric Acid
Release Agent	Mono-Coat	3/3/2020	Less than or equal to 3% Ethanol
Lubricant	PROSOL 150	2/1/2019	Hydrotreated light naphthenic mineral oil (50-60%) Distillate, petroleum hydrotreated heavy naphthenic (40-45%)
Metal parts cleaner	Safety Kleen Immersion cleaner and cold parts cleaner solvent	Rev 12-16	Solvent naptha (30-60%) 1-Methyl-2-pynolidone (10-30%) Dipropylene monomethyl ether (7-13%) Oleic acid (5-10%) Ethanolamine (3-7%) Naphthalene (3-6%)
Solvent		2/24/2022	Petroleum distillates, hydrotreated light (100%)

	<p>Safety Kleen Premium Solvent</p>		
--	--	--	--

Rubber materials used onsite are discussed under EURBRMOLDING.

PERMITTING

The AQD permit database (AKA Permit Cards) for the subject site include a combined total of 52 voided permit applications and permits. The permits were issued to one of the following companies:

- Cadillac Molded Rubber Inc.
- Paulstra CRC Corporation, or
- Hutchinson Antivibration systems Inc.

FEDERAL REGULATIONS

As a Major Source of Hazardous Air Pollutants (HAPs) the subject site is subject to Title V regulations. No EUs at the Facility are subject o Prevention of Significant Deterioration (PSD). Due to the nature of the activities conducted onsite, the following National Emission Standard for Hazardous Air Pollutants (NESHAP) apply to the site:

- 40 CFR Part 63 Subpart A and MMMM (NESHAP for Surface Coating of Misc. Metal Parts and Products), and
- 40 CFR Part 63 Subpart A and PPPP (NESHAP for Surface Coating of Misc. Plastic Parts and Products).

It should be noted that should the Facility calculate and comply with a facility-specific emission limit per Subpart MMMM, 40 CFR 63.3890 (c)(2) the facility is considered in compliance with Subpart PPPP.

Applicable requirements under the Federal Subpart have been incorporated into MI-ROP-A9364-2022. Compliance with the referenced ROP would indicate compliance with applicable Federal Regulations.

COMPLIANCE ASSURANCE MONITORING (CAM)

Pursuant to 40 CFR Part 64, the multiple coating EU/FGs are subject to CAM as they have a combined potential pre-control emissions above the VOC Major Source thresholds of 100 TPY and a shared control device in the RTO. The EUs are also part of FGMACTMMMM and FGRT0. It should be noted that the Facility was believed to not be subject to CAM prior to the most recent ROP Renewal.

The CAM Plan (dated March 2020) for the Facility includes monitoring and operating requirements to assure proper operation of control devices. Specifically, the differential pressure

gauges for the PTEs associated with EUs subject to CAM will operate with a maintained DP of >0.007 inch H₂O. The RTO is required to be operated with a minimum required temperature of 1500 degree F.

REPORTING

In addition to prompt reporting of deviations required under ROP General Conditions 21 and 22 (GC 21 and 22) of Part A, the Facility is required to submit not only semi-annual (Special Condition (SC) VII.2) and annual (SC VII.3) compliance certifications but also to submit annual emissions reporting. These later reports have historically been submitted under the MAERS emission reporting system. Documents received in a timely manner, with proper certification for the 2023 Calendar year and include:

Date Received	Report Type	Comments
9/12/2023	CAM Excess Emissions and Monitor Downtime	Semiannual (FGRT0)
	Part 63, Subpart M MMMM Compliance Reporting	Semiannual
	ROP Semiannual Certification	Semiannual
3/24/2023	Test Protocols	Protocols for RTO DE Tests
3/15/2023	ROP Annual Certification	Annual
	ROP Semiannual Certification	Semiannual
	CAM Excess Emissions and Monitor Downtime	Semiannual (FGRT0)
	Part 63, Subpart M MMMM Compliance Reporting	Semiannual
3/3/2023	MAERS	Annual Emissions Reporting for 2022 calendar year

TESTING

Under MI-ROP-A9364-2022, the following testing activities are required:

EU/FG	Parameter	Frequency	Lastest Event
FGRTO	VOC Destruction Efficiency	Every 5 years (SC V.2 & V.4)	July 11, 2023
FGMACTMMMM (any coating operation(s) using emission rate with add-on control option of compliance)	VOC emission capture efficiency	once	Varied*

*Network Environmental Inc. Compliance Test Protocols dated November 22, 2012, indicated that at the time the coating booths meet the requirements for permanent total enclosures for capture efficiency.

MALFUNCTION ABATEMENT PLAN (MAP)

Under the previous ROP, preparation and submittal of a MAP was required under the source wide conditions. This source wide condition has been changed, in the present version MAPs are required/referenced for the following EUs/FGs:

- EUROLLCOAT (SC III.2)
- EURBRMOLDING (SC III.2)
- EURBRCUREOVEN (SC III.3)
- FGAUTODIP (SC III.2)
- FGSPRAYMACHINES (SC III.3), and
- FGRTO (SC III.1)

The referenced documents have been combined, into a single document and combined with the Startup, Shutdown, Malfunction Plan (SSMP) and Work Practice Plans (WPP) into one document. A review of the MAP document submitted as part of the most recent ROP-Renewal Package (May 29, 2019) indicated that it failed to reference EURBRCUREOVEN. Communications with the Facility indicated that the Facility had revised the document in August 2022, but that a supplemental revision was required. On January 10, 2024, the company was requested to provide an updated MAP for review and approval.

MAP to date include:

--	--	--	--

MAP Document	Date	Date Received	Date Approved
CEP 900.00	August 2015	unknown	unknown
CEP 900.01	August 2018*	May 29, 2019	NA
CEP 900.02	July 2022	January 10, 2024	NA
CEP 900.03	January 29, 2024	February 5, 2024	February 9, 2024

*Component of May 29, 2019, ROP Renewal Package. Revision notation indicated that revision was to include "Rotary Spray Machine". Approval is assumed with issuance of ROP on August 10, 2022.

WASTE DISPOSAL

The permittee is required to capture all waste materials (cements, adhesives, coatings, thinners, additives, catalysts, post bond-oils, etal) and store them in closed containers and dispose of them in an acceptable manner in compliance with all applicable state rules and federal regulations. (SC III.1) At the time of the January 22, 2024, site inspection the Facility was found to be in general compliance with the requirements. This requirement may be found for the following EUs:

- EUROLLCOAT (SC III.1)
- EURBRCUREOVEN (SC III.1 and III.2)
- FGAUTODIP (SC III.1), and
- FGSPRAYMACHINES (SC III.1 and III.2)

COMPLIANCE

A review of records indicates that the Facility was subject to a Consent Order (AQD No. 7-2012) which terminated on October 24, 2018. No complaints are of record for the Facility.

EUROLLCOAT –

This EU is described as a roll coat process with primer and adhesive applications connected by a conveyor system. The cements are dried by an electric dryer. The ROP identifies emissions as controlled by dry fabric filters and an RTO. VOC emissions are controlled by the RTO. This EU is also part of the following FGs: FGRT0 and FGMACTMMMM.

Material handling, MAP and reporting requirements under the ROP have been addressed previously in this report. No emission limits or testing/sampling requirements exist for this EU under EUROLLCOAT.

Design/Equipment Parameters- The Permittee is required to equip and maintain the application booth components of EUROLLCOAT with non-atomizing applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. (SC IV.1) In compliance with the permit condition, the Facility reports using the appropriate non-atomizing applicators, use of test caps is not required and equipment is found to be in compliance with the permit condition.

Monitoring/Recordkeeping- The permittee under EUROLLCOAT is required to install, calibrate, maintain and operate in a satisfactory manner a differential pressure gauge to monitor the pressure differential between the enclosure and outside area on a continuous basis. The present CPMS/"Watchdog system" operates in compliance with the permit requirement. The differential pressure (DP) measurements exceed the requirement that they be recorded once per shift. (SC VI.1). Records provided indicate that the data is collected in 15-minute intervals to meet MACT requirements.

EURBRMOLDING-

This process is a rubber injection and compression presses. Emissions from the presses and associated oven are controlled by dry fabric filters. It is not associated with any FGs.

MAP and reporting requirements under the ROP have been addressed previously in this report. No testing/sampling requirements or stack requirements exist under EURBRMOLDING.

Emission Limits- SC I.1-I.4 identify 12-month rolling emission limits for VOC, PM, PM10 and PM2.5 associated with EURBRMOLDING. Emissions are calculated on a monthly basis for each 12-month rolling time period (SC VI.3 and VI.4). Emissions reported are summarized below:

12-month rolling time period ending	Parameter	Emissions (ton/month)	Emissions (ton/year)	Limit (ton/year)
June 2023	VOC	0.17	2.12	7.8 (SC I.1)
December 2023	VOC	0.15	2.14	7.8 (SC I.1)
June 2023	PM	0.06	0.64	1.35 (SC I.2)
December 2023	PM	0.05	0.64	1.35 (SC I.2)
June 2023	PM10	0.06	0.64	1.35 (SC I.3)
December 2023	PM10	0.05	0.64	1.35 (SC I.3)

June 2023	PM2.5	0.06	0.64	1.35 (SC I.4)
December 2023	PM2.5	0.05	0.64	1.35 (SC I.4)

Material Limits – SC II.1 limits the permittee to use of mold release agents which do not contain VOCs. Mold release agents associated with EURBRMOLDING include 4185 Bulk US English and Mono-Coat C1892W. SDS provided by the company did not identify VOCs as chemical constituents, and appear to indicate compliance with the condition. The SDS for Mono-Coat C1892W indicates ethanol may be an ingredient. However, per Facility discussions with the supplier and the previous AQD Inspector, the ethanol is formed after packaging and reacts during the rubber molding process.

With respect to rubber, the Facility reports multiple compounds of rubber and provided EPA Method TO-11/HPLC analytical results. The highest total VOCs and HAPS provided were 5.587 E-04 and 8.36 E-05, respectively. No limit with respect to VOC and HAP content are associated with the rubber for EURBRMOLDING.

SC II.2 limits the permittee to processing no more than 18,000,000 lbs of rubber in EURBRMOLDING per year based on a 12-month-rolling average as determined monthly . Records reviewed for 2023 indicated that the monthly compound usage ranged from 115,363 to 849,439 lbs/month.

12-month period ending	Rubber Processed (lbs/month)	12-month Rolling total (lbs/year)
June 2023	837,028	8,487,536
December 2023	601,708	8,561,620
Limit	NA	18,000,000 (SC II.2)

Process/Operational Restrictions – the permittee is required to equip and maintain EURBRMOLDING with fabric filters (SC IV.1). The referenced pollution control device shall be installed, maintained, and operated in accordance with the MAP (SC III.1). A review of the MAP indicates that fabric filters associated with EURBRMOLDING are inspected and replaced on a monthly basis as part of a scheduled maintenance plan. Discussions with Facility staff indicated that fabric filters are evaluated and replaced on a schedule in compliance with the MAP.

Monitoring/Recordkeeping - Records required to be maintained for EURBRMOLDING include the following:

- A current record of the chemical composition of each rubber molding material and mold release agent, including the weight percent of each component.
- Monthly and 12-month rolling total records of :
 - The amount of each rubber molding material processed (SC VI.1)
 - VOC emission calculations (SC VI.3)
 - PM, PM10 and PM2.5 emission calculations (SC VI.4)

As indicated previously the above referenced records are maintained, and readily available in compliance with permit conditions. The monthly and 12-month rolling emission calculations are presented earlier in this document under EURBRMOLDING – Emission Limits.

EURBRCUREOVEN-

This EU is a post-bond cure oven. Dry, cured rubber parts coming off the cementing lines are pushed into metal cans to form an assembly. An oil (AKA post-bond oil) is used to lubricate the form assembly and the parts are placed into the cure oven. Pollution control equipment associated with this EU includes dry fabric filters. This EU is not part of an FG.

Material handling (SC III.1 and III.2), MAP (SC III.3) and reporting requirements under the ROP have been addressed previously in this report. No testing/sampling requirements exist for this EU under EURBRCUREOVEN.

Emission Limit(s)- SC I.1 emission limits are limited to 12-month rolling total VOC emissions of 1.89 TPY. Emissions reported for the 2023 calendar year were provided, and ranged from 0.0-0.02 VOC TPY, data for selected months are summarized below:

12-month rolling time period ending	VOC Emissions (ton/month)	VOC Emissions (ton/year)
June 2023	0.00	0.16
December 2023	0.0	0.07
Limit (ton/year)	NA	1.89 (SC I.1)

Material Limits- the EU is limited to 3.44 lb post bond oil/ 8-hour time period (SC II.1). Monthly records provided for the 2023 calendar year indicates that maximum oil usage ranged from 0.00-2.11 monthly time period. Oil usage per shift ranged from 0.07-2.11 lb/8-hour shift for the period of January 1 though June 30, 2023, well below the permit limit.

Design/Equipment/Operational Restrictions - Operation of EURBRCUREOVEN requires installation, maintenance and proper use of exhaust filters (SC IV.1). The proper monitoring and

maintenance of the fabric filters per the MAP (SC III.3). Filters observed at the time of the January 22, 2024, site visit appeared to be in good condition, and recently changed.

Monitoring/Recordkeeping - SC VI.2 requires that the permittee maintains a current listing from the manufacturer of the chemical composition of each material for EURBRCUREOVEN including the weight percent of each component. In compliance with the permit, the Facility provided a copy of the SDS for Prosol 150.

The Permittee is required to keep records of the following information for EURBRCUREOVEN:

- The pounds of each material used on an 8-hour and month basis (SC VI.3a)
- VOC content (with water) of each material as applied (SC VI.3b)
- VOC mass emission calculations of monthly emission rate in tons/month (SC VI.3c)
- VOC mass emission calculations for 12-month rolling total emission rate, calculated monthly (SC VI.4)

Above records provided by the Facility were in general compliance with monitoring and record keeping requirements for EURBROVEN. Records provided indicated that no material use was reported for the period of June through December 2023. With reference to the VOC content (with water) the Facility reports that the VOC content is 100%.

Stack/Vent Restrictions - The stack for SVPOSTCUREOVEN must meet the following construction requirements (SC VIII.1):

Stack/Vent	Maximum diameter (inches)	Minimum Stack Height (feet above land surface)
Requirement	10	38

Previous inspection reports indicated that the stack appeared to be in general compliance with the permit conditions. Dimensions obtained during the May 7, 2024, site visit/meeting, indicated that the stack is 10-inch diameter, with a minimum height of 38-feet in compliance with permit conditions. Confirmation that the rainguard presently on the stack meets the requirement of a unobstructed vertical discharge (such as a stack-in-stack or up-blast design) will be further determined by the Facility.

FGAUTODIP –

This FG consists of two automatic dip systems (EUAUTODIP and EUAUTODIP2) for applying cement to metal and plastic parts. The processes include both conveyor systems for drying the dipped parts and an electric dryer. VOC emissions are controlled by the RTO.

General compliance with material handling (SC III.1), MAP (SC III.2) and reporting requirements under the ROP have been addressed previously in this report. No emission or material limits,

testing/sampling requirements or monitoring/recordkeeping requirements exist for this EU under FGAUTODIP.

Stack/Vent Restrictions - The stack associated with FGAUTODIP is for the RTO (SVRTO), and the compliance status of the RTO stack has been discussed previously. (SC VIII.1)

FGSPRAYMACHINES –

Consisting of 5 EUs, this FG consists of four chain-on-edge (COE) (EU COE1 through EU COE4) and one rotary-spray booth (EU ROTSPRAY1). Emissions from all 5 lines are controlled by fabric filters and the RTO.

The COE rotates the parts through the spray guns. EU COE1, EU COE2 and EU COE4 the parts pass through a pre-heat oven before entering the booths. EU COE3 the parts do not pass through a pre-heated oven.

EU ROTSPRAY1 is a rotary spray booth that applies adhesive to metal and plastic parts. The cements being dried by an electric dryer.

Material handling (SC III.1 and III.2), MAP (SC III.3) and reporting requirements under the ROP have been found to be in general compliance with permit requirements, and are addressed previously in this report. No emission or material limits, testing/sampling requirements or monitoring/recordkeeping requirements exist for this EU under FGSPRAYMACHINES. Only one stack exists for this FG, (SVRTO) (SC VIII.1).

Design/Equipment/Operational Restrictions - Operation of the spray booth portions of FGSPRAYMACHINES requires installation, maintenance and proper use of exhaust filters (SC IV.1) and proper monitoring and maintenance of the fabric filters per the MAP (SC III.3). Compliance with MAP conditions have been previously discussed.

In addition, the spray booths appeared to be in general compliance with the permit in that it appears that they are equipped with properly maintained HVLP applicators, or a comparable technology with equivalent transfer efficiency (SC III.2).

FGRTO –

This FG consists of eight cement/adhesive application lines. These consist of two automatic dip spin lines (EU AUTODIP and EU AUTODIP2), four automated COE lines (EU COE1 through EU COE4), one roll coater (EU ROLLCOAT) and one rotary spray line (EU ROTSPRAY1). Emissions from all of the lines are captured by Permanent Total Enclosures (PTEs) on each coating booth and destroyed by the RTO.

No Material limits are associated with the FG. RTO stack requirements, as well as reporting requirements have been discussed earlier in this document.

Instantaneous operating temperatures for the two combustion chambers at the time of the January 22, 2023, site inspection were reported to be 1587 and 1608 degrees F.

Emission Limits - 12-Month rolling total emissions for VOCs and Ethylbenzene are identified for FGRTO. In addition, VOC limits exist for EU ROTSPRAY1, which is part of the FG. These emissions

are determined monthly by the Facility with VOCs emission from FGRT0 ranged from 0.13 – 0.43 tons/month for the 2023 calendar year. Emission limits and emissions reported by the Facility for select dates are summarized below:

12-Month rolling time period ending	VOC Emissions for FGRT0 (TPY)	VOC Emissions for EUROTSPRAY1 (TPY)	Ethylbenzene Emissions (TPY)
June 2023	2.53	2.19 E-3	0.21
December 2023	3.23	2.01E-3	0.29
LIMIT	56.4 (SC I.1)	4.8 (SC I.2)	10.0 (SC I.3)

Process/Operational Limits- SC III.2 requires that the permittee maintain a minimum of 0.007 inches of water differential pressure between the PTE and the adjacent (interpreted as outside) area on a continuous basis. Differential pressures documented during the January 22, 2024, site inspection (9 am to noon) are summarized below:

Process Area/EU	Differential Pressure (inches of H2O)	Minimum reading required (inches of H2O)
COE1 (primer)	0.017929 - 0.01791	0.007
COE1 (topcoat)	0.18521 - 0.047742	0.007
COE2 (primer)	0.057221 – 0.082647	0.007
COE2 (topcoat)	0.110075 - 0.136072	0.007
COE3 (primer)	0.044995 - 0.56935	0.007
COE3 (Topcoat)	0.0336 - 0.042515	0.007
COE4 (Primer)	0.08541 - 0.130064	0.007
COE4 (Topcoat)	0.014305 - 0.015068	0.007

Puck Machine	0.036374 - 0.040455	0.007
Roll Coater	0.485504 - 0.485523	0.007
Dipline 1	0.485676 - 0.485695	0.007
Dipline 2	0.027905 - 0.30404	0.007

Supplemental data provided by the Facility, indicated that differential pressures were in compliance for the period.

Design/Equipment Parameters - The following ROP requirements pertain to the RTO:

- The permittee shall not operate FGRTO unless the RTO is installed, maintained and operated with a minimum VOC destruction efficiency of 95% (by weight) (SC IV.1)
- The RTO maintains a minimum temperature of 1500 degrees F and a minimum retention time of 0.5 seconds (SC IV.1)
- A temperature monitoring device shall be installed in the combustion chamber of the RTO, calibrated, maintained and operated in a satisfactory manner as to monitor on a continuous basis during operation of FGRTO (SC IV.3)
- Calibration or replacement of the temperature monitoring device shall be conducted annually. (SC VI.7)

The RTO and it's operation has been found to be in compliance with the above permit conditions in part by equipment design. As previously indicated, the Facility operates with a "watchdog" system that acts as a continuous parameter monitoring system (CPMS). The CPMS system documents RTO chamber temperatures in 15-minute intervals. Documentation of VOC destruction efficiency is verified during stack testing (the most recent being July 11, 2023), which is summarized in this report.

Maintenance in the form of calibration and or replacement of thermo couples is documented by the Facility. The most recent event having been conducted on February 27, 2024.

The following ROP requirements pertain to the PTEs associated with the spray booths in FGRTO:

- The permittee shall not operate any spray booth portion of FGRTO unless their respective PTE is installed, maintained and operated such that the pressure is lower than adjacent areas allowing airflow into each PTE though all natural draft openings (defined as any opening not connected to a duct which has a fan or blower installed) (SC IV.2)
- The permittee is required to install, calibrate, maintain and operate a differential pressure gauge to monitor the pressure differential between each PTE in FGRTO and the respective outside area on a continuous basis when operating. (SC IV.4)
- The PTE monitor is to have an instantaneous monitor, with continuous readings being defined as a minimum of one reading every 15 minutes per. (SC VI.8)
- Calibration or replacement of differential pressure monitor to be conducted annually. (SC VI.8)

With respect to the above permit conditions associated with the PTE, the Facility is in compliance with the above referenced permit conditions either through equipment design, or construction. That the capture zones meet the definition of a PTE is documented in test reports for the May 8, 2018, stack testing activities. The PTEs and associated EUS are operated such that a “watch dog” CPMS meets requirements. The Facility checks pressure sensors monthly and a third party checks flowrates to confirm proper operation on a quarterly basis.

With respect to any monitoring system associated with the RTO or PTEs, the permittee appears to be in general compliance with requirements that they properly maintain the monitoring system including keeping necessary parts for routine repair. (SC VI.11)

Testing/Sampling - EUs under FGRT0 are required to not only conduct destruction efficiency verification testing of the RTO (SC V.2 and V.4) but to also verify the VOC content, water content and density of any adhesives and coatings as applied and as received, with all coating tested within a 5 year period or with District Supervisor approval use manufacturer/vendor data to verify content. (SC V.1). It has been noted that historically the Facility has used manufacturer/vendor data to meet this requirement. In compliance with permit requirements, the Facility provided Method 24 VOC content data for materials associate with FGRT0, with VOC content ranging from 72.6 – 100% VOC content.

A review of the most recent testing submittals indicated that test protocols (V.2), 7-day notice (V.5) and test reports (VII.4) were received in a timely manner.

A review of District files identified the following test events associated with FGRT0:

Event Date	RTO Combustion Chamber Temperature*	RTO VOC Destruction Efficiency (%)
June 30, 2011	UNK	97
December 19, 2012	UNK	97.3
May 8, 2018	1698	97.7
July 11, 2023	1655	97.54
LIMIT	1500 degrees F per CAM	Minimum of 95% (SC IV.1)

*RTO combustion chamber temps established during verification testing is used to determine compliance with MACT standards and operational compliance conditions within FGMACTMMMM.

Other parameters of interest are summarized below:

Event	Inlet (lb/hr)	Outlet (lb/hr)	RTO Temp
December 19, 2012	45.01	1.23	Unk
May 8, 2018	96.14	2.22	1698
July 11, 2023	89.79	2.20	1655

Monitoring/Recordkeeping – The following records are required to be maintained by the Facility for FGRT0:

- Permittee is required to maintain a current listing from manufacturer of the chemical composition of each cement, adhesive, coating, thinner, solvent, additive and catalyst, including the weight percent of each component. (SC VI.2)

In compliance with permit conditions, the Facility maintains appropriate manufacturer listings for material associated with processes onsite. Upon review of the documents, the following summarizes VOC, HAP and Ethylbenzene content:

Material	VOC content (%)	HAP Content (%)	Ethyl Benzene Content (%)
205A	76	71	0
207	80	78	0
6254	73	72	3
6260	72.6	72	14
MEK	100	100	0
Xylene	100	100	0
6220	73.7	100	15

6411	76.1	76	18
207*	82.1	78.2	0
6411*	72.7	76	15.1
Rubber	0.05	0	0

The Facility is in compliance with the following material usage information is requirements, which are to be kept on a monthly basis for FGRT0 (SC VI.3 and VI.4):

- Gallons (with water) of each material used and if applicable reclaimed.
- Gallons (with water) of each ethylbenzene containing material used and, if applicable, reclaimed.
- VOC content (with water) and ethylbenzene (with water) of each material as applied.
- VOC and ethylbenzene mass emission calculations determining the monthly emission rate in tons per calendar month.
- VOC and ethylbenzene mass emission calculations determining the annual emission rate in tons per 12-month rolling total.

The required content, usage and emissions calculations data was reviewed, and found to be in compliance with the above referenced permit conditions. Select data is presented below:

Material Used	Usage (gallon/month)
Chemlock 207	429-1603
Chemlock 6411	718-2317
MEK	81-305
Xylene	194-700
Toluene	136-582

Calendar Month 2023			VOC Emissions	Ethylbenzene Emissions
--------------------------------	--	--	--------------------------	-----------------------------------

	VOC Emissions (ton/month)	Ethylbenzene Emissions (ton/month)	(tons/12-month rolling total)	(tons/12-month rolling total)
July	0.31	0.03	2.73	0.23
August	0.20	0.01	2.77	0.23
September	0.34	0.03	2.94	0.25
October	0.30	0.03	3.06	0.27
November	0.43	0.05	3.35	0.31
December	0.07	0.00	3.23	0.29

The Facility provided the following information in compliance with permit conditions for the 2023 calendar year. Information provided was found to be complete, and was kept on a monthly basis for EUROTSPRAY1 (SC VI.3):

- Gallons (with water) of each material used and if applicable reclaimed.
- VOC content (with water) of each material as applied.
- VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
- VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling total:

Select data for EUROTSPRAY1 includes the following:

Calendar Month	Material Usage (gallon/month)	VOC monthly emission rate (tons/calendar month)	VOC 12-Month Rolling Emissions (TPY)
June 2023	193	0.41	1.65E-2
December 2023	24	0.07	2.01 E-3

With respect to the RTO, the following records are required to be collected and documented/kept:

- RTO combustion chamber temperatures to be monitored continuously and documented at equally spaced intervals not to exceed 15-minutes per interval (SC VI.5)

As previously indicated, proper operation of the RTO is shown by a minimum combustion chamber temperature of 1500 degrees F during operation (SC VI.7) A review of data provided for the July 1 through December 28, 2023 period confirmed that with the exception of those dates in which the adhesive operations were shut down (July 7-9, August 18, September 3 and 23, October 7, November 24 and December 28-31, 2023) the RTO did not drop below the required 1500 degrees. Data provided confirmed that 15-minute average temperatures are recorded by the CPMS operated by the Facility, in compliance with permit requirements.

Excursions are defined as :

- A 3-hour block average temperature that is lower than the required 1500 degree F temperature (SC VI.7)

Should an excursion occur for the RTO, the permittee is required to follow the corrective action in the approved MAP, as well as reporting in Semi-annual Reports (SC VI.9). No excursions were reported for the 2023 calendar year, therefore no corrective actions were required.

With respect to the PTE, the permittee is required to monitor and record in a satisfactory manner:

- Differential pressure between each PTE for FGRT0 and the outside area on a continuous basis to verify that air is entering the PTE. (SC VI.6)
- Data is to be recorded on a data acquisition system (or other method) or be manually logged once per day. (SC VI.8)
- Continuous monitoring is defined in SC VI.8 as at least one reading every 15 minutes.

As previously indicated a “watchdog” system/CPMS has been installed and monitors PTEs associated with the EUs and control devices onsite. The Information provided by the Facility confirms that the data acquisition is within compliance with the above requirements.

An excursion is defined as a pressure drop reading of less than 0.007 inches of water while the equipment is in operation. SC VI.9 indicates that should readings drop below the required minimum for 5 minutes, that the interlocks will shut down the operations of the machine. Should the interlocks fail, logging and reporting the event in a semi-annual report are required. No excursions are of record for 2023.

Data collected during monitoring malfunctions, associated repairs and required quality assurance or control activities shall not be used to show compliance (SC VI.10). Records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and activities taken to implement the plan shall be maintained. (SC VI.12) The above referenced records were not required for the 2023 calendar year.

Other requirements – FGRT0 is required under a high-level citation to comply with all applicable requirements of 40 CFR Part 64 (AKA CAM) (SC IX.1). The ROP has incorporated requirements

under CAM, and therefore compliance with permit conditions are believed to indicate compliance with the Federal requirements of CAM. Information provide appears to indicate compliance with the high-level CAM citation.

Should the permittee identify a failure to achieve compliance with an emission limit or standard for which the approved monitoring (PTE differential pressure or RTO temperature) did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance performance testing document indicate a need to adjust the operating ranges or designated conditions within the CAM Plan or ROP (SC IX.2). At the time of the January 22, 2024, site inspection, it appears that the existing CAM Plan does ensure compliance with appropriate permit conditions.

FGMACTMMMM –

This FG includes requirements for subcategories under 40 CFR Part 63, Subpart MMMM, 40 CFR 63.3881(a)(2) through (6) that meet the requirement of 40 CFR 63.3881(b), which is engaged in the surface coating of miscellaneous metal parts and products. EUs under this FG include EUAUTODIP, EUAUTODIP2, EUCOE1 through EUCOE4, EUROLLCOAT and EUROTSPRAY1. The referenced process EUs have PTE on each coating booth and RTO emission controls.

Initial compliance with the requirements of the referenced subpart was required no later than January 2, 2007, therefore initial compliance requirements in the ROP are no longer applicable, as they would have been previously conducted. In addition, a number of process/operational and monitoring/recordkeeping requirements are contained in the ROP which may not apply to the Facility, depending on how they determine compliance under Subpart MMMM.

Emission Limits - Emission limits associated with FGMACTMMMM consist of organic HAP concentrations in lbs/gallon of coating solids as determined monthly for a 12-month rolling time period. These limits consist of the following :

- 2.6 lbs of organic HAP per gallon of coating solids for existing-General Use coating (SC I.1) and
- 37.7 lbs of organic HAP per gallon of coating solids for existing- Rubber-to-metal coating (SC I.2)

Three compliance options exist under 40 CFR 63.3890 to determine compliance with the above referenced organic HAP limits (SC I.3) and include:

- Compliant material option,
- Emission rate without add-on controls option, or
- Emission rate with add-on controls option.

The Facility in their 2023 first semiannual Subpart MMMM MACT report (received September 2023) and 2023 second semiannual Subpart MMMM MACT report (dated March 2024) indicated using the emission rate with add-on controls option to show compliance. Further information provided by the Facility indicated that they have not change compliance options.

A review of the most recent semi-annual MACT compliance report (40 CFR Subpart MMMM semiannual submittal dated March 13, 2024) indicates that rather than meet organic HAP emission limits for existing general use coatings (SC I.1) and organic HAP emission limits for

existing rubber to metal coatings (SC I.2) the facility uses the facility-specific emission limit alternative (SC. I.6), therefore compliance with MACT emission limits are based on the calculated total mass of organic HAPs as required under 63.3890. Organic HAP emissions and emission limits are reported monthly, show continuous compliance with (SC VI.7), and are summarized below:

Month ending 12-month rolling time period	Total Organic HAPs (lbs/lb solids)*	Facility Specific Total Organic HAPs Limit
July 2023	0.12	2.67
August 2023	0.12	2.66
September 2023	0.12	2.65
October 2023	0.12	2.74
November 2023	0.12	2.72
December 2023	0.12	2.73

*as determined by SC V.1

Material Limit(s) -- SC II.1 and SCII.2 apply to those Facilities using the compliant materials option to show compliance with the MACT, and do not apply at this time.

Process/Operational Restrictions – The permittee is required to operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions (SC III.1) As previously indicated, the Facility coating lines are all operated within PTEs, with emissions controlled by an RTO with >95% destruction efficiency.

Coating operations using the emission rate with add-on control options are required to develop and implement a work practice plan, to minimize the organic HAP emissions from the storage, mixing and conveying of coatings, thinners and or other additives, and cleaning practices used in, and waste materials generated by the controlled coating operations(s) (SC III.2) The work plan must specify practices and procedures to ensure at minimum the following elements are implemented:

- All organic HAP containing materials (including waste materials) must be stored in a closed container.
- Spills of organic HAP containing materials (including waste materials) must be minimized.

- Organic HAP containing materials (including waste materials) must be conveyed from one location to another in closed containers or piped.
- Mixing vessels which contain organic HAP must be closed except when adding to removing or mixing the contents.
- Emissions of organic HAPs must be minimized during cleaning of storage, mixing and conveying equipment.

During the January 22, 2024, site inspection, District staff noted that the above practices and procedures had been adopted by the Facility. With regards to a work practice plan, as previously discussed, the document was merged with the Facilities MAP and SSMP, the most recent document of which is dated January 2024. A review of the document indicated that the Facility is following practices and procedures outlined in the document.

SC III.3 requires that the coating operations be in compliance with the operating limits for emission capture systems and all-on control devices required by 40 CFR 63.3892 at all times (except for solvent recovery systems which conduct liquid-liquid material balances which are not applicable at this site). In compliance with the referenced requirement the Facility has established and operates under the following Table 1 operating limits:

- 3-hour block average RTO combustion temperature for RTO combustion chamber (SC IV.1)
- Air flow into the emission capture system (AKA PTE)
- Pressure drop of at least 0.007 inches H2O as established by Method 204

The above referenced data is collected by a CPMS in compliance with SC VI.9. Per the March 13, 2024, semiannual MACT submittal the last CPMS audit was conducted on February 29, 2024.

Records provided show that they are operating in compliance with the above operating requirements. A review of data collected during the July 11, 2023, verification testing as well as data reviewed for the second half of the 2023 calendar year, indicated continuous compliance during normal operations with the requirements. Select data from the period of July 1 through December 28, 2023, is presented below:

	July 1, 2023	December 14, 2023	Measurement Average*
RTO	1574.06	1585.62	Temp
COE 1 top coat	0.045042	0.07063	Differential pressure
COE 1 prime	0.025190	0.03544	Differential pressure
COE 2 top coat	0.069081	0.065692	Differential pressure
COE 2 prime	0.020062	0.032939	Differential pressure

COE 3 top coat	0.033766	0.034563	Differential pressure
COE 3 prime	0.027583	0.03656	Differential pressure
COE 4 top coat	0.017531	0.015542	Differential pressure
COE 4 prime	0.038845	0.058549	Differential pressure
Puck	0.027923	0.022639	Differential pressure
Dip 1	0.0485535	0.0485627	Differential pressure
Dip 2	0.035452	0.028797	Differential pressure
Rollcoat	0.48566382	0.48555645	Differential pressure

*Daily average is representative of 3-hour block averages reported for select days.

SC III.4 requires A coating operation(s) using the emission rate with add-on controls option to be in compliance with the work practice standards in 40 CFR 63.3893. The referenced regulation requires development and implementation of a plan that will minimize HAP emissions and at minimum includes storage of applicable materials in closed containers, and other activities in such a way as to minimize HAP emissions. The Facility shall meet the work practices at all times. The work practices are incorporated into the Facilities MAP, and at the time of the January 22, 2024, site inspection work practices were found to be implemented.

Design/Equipment parameters -- Any coating operations using the emission rate with add on control options, shall meet the operating limits of Table 1 of 40 CFR Part 63, Subpart M MMM as identified, and the permittee shall establish the operating limits during performance testing, and meet them at all times after established (SC IV.1) As previously identified, the add-on control device for the coating operations on site is the RTO. The operating limit per Table 1 requires the average combustion temperature of the RTO in any 3-hour period not fall below the combustion temperature limit established during testing. A review of the test data indicated that the 3-hour block average RTO temperature during the July 11, 2023, verification testing was 1655 degrees F.

A review of data provided by the Facility for the period of September 11, 2023 to December 21, 2023, indicates that with the exception of data for November 2, 2023, in which reported a daily average RTO temperature of 1688 degrees, for all other dates in the period the average RTO temperature has been below the July 11, 2023 testing average temperature of 1655 degrees F, and in non-compliance with Table 1 of 40 CFR Part 63, Subpart M MMM requirements (SC IV.1).

As previously discussed, 1500 degrees F is the required operating temperature per the PTI, as well as the temperature used to show compliance under CAM (FGRTO). Review of the referenced

data has indicated that unless the adhesive lines are not in operation, the RTO temperatures have been in compliance with the CAM minimum operating temperature.

Discussions with the Facility, their consultant, the District Supervisor and the previous site inspector indicated that the RTO as previously indicated is a NG-fired unit, the controls are set to an internal temperature meeting the 1500 degrees F required for CAM. Operating data provided, indicates that for the period evaluated the unit normally operates in the 1550-1575 degree range with some fluctuations up to the 1600s and even 1700 degree operating temperatures. The actual operating temperature of the RTO reflects not only combustion of the NG fuel, but also the combustion of VOC/HAP emissions being destroyed in the RTO. The result being the higher the emission concentrations coming into the RTO, the less NG burned and the less the unit can maintain the temperature at the setpoint, and as incoming VOC/HAP concentrations increase, the higher the temperature in the RTO.

The most recent verification testing has been conducted at the Facilities maximum operating rate, rather than the maximum normal operating rate identified in the test protocol approval letters. The Facility and their representatives indicated that they understood that they were required to test under the maximum operations possible. During normal operations, the Facility reports that one or more lines may not be in operation due to a decrease in orders, or maintenance activities. During the two most recent test events, all lines were reported in operation, reflecting maximum operation and emissions.

Testing at maximum operating rate results in higher-than-normal emission concentrations being combusted in the RTO, driving the temperature in the chambers up, and reducing NG fuel use, to the point where the combustion of the emissions is driving the temperature rather than the RTO set point. Reducing the set point of the RTO internal temperature to maintain an internal temp of 1500 degrees or slightly above is not possible when operating/testing at maximum operations. Furthermore, information provided indicates that the RTO is not designed to operate long-term at the elevated testing temperatures, and would result in damaging the control device overtime.

It appears that the Facility in testing under maximum operating conditions has inadvertently under Subpart M MMM established minimal operational temperatures above the 1500 degree setpoint. As a result of continuing to operate with the 1500 degree setpoint the Facility has failed to meet operational limits that are reestablished during the 5 year performance testing (63.3960(a)(ii) and/or (b)(ii)) under FGMACT MMM SC IV.1, which require RTO operating temps at or above those identified during the most recent test event. This has created a non-compliance issue which normally would be resolved either through supplemental testing and/or increasing the set point on the RTO to achieve the compliant operating temperature of 1655 degrees F.

It should be noted that the Hutchinson Facility in Grand Rapids had a similar occurrence, which resulted in testing activities in May 2019 being at levels that reestablished an operating temperature just slightly above their permit limit of 1450 degrees F.

A comparison of testing data for stack test events appears to support the statement that the higher the VOC concentration coming into the RTO the higher the average temperature:

Test Date				
-----------	--	--	--	--

	RTO 3-hour Block Average (degrees F)	VOC Influent Concentration (lb/hr)	Average Air Flow In (CFM)	RTO Destruction Efficiency (%)
July 11, 2023	1655	89.79	9247	97.54
May 8, 2018	1696	96.14	9204	97.7
December 19, 2012	1480-1540 (1510)	45.01	UNK	97.3
June 28-30, 2011*	UNK	50.16	8549	97.61
May 23, 2019 - GR**	1476	28.3	9233	95.51

*Note that capture efficiency of RTO was reported to be 83.65%.

**Grand Rapids Facility Data – Note that the required operating temperature for the Facilities RTO is 1450 degrees F.

Stack test data available and presented above indicates that RTO destruction efficiencies of > 97%, for VOC influent concentrations reported to range from 45.01 to 96.14 lb VOC/Hr. The data can further be broken into groupings of 45-50 lb VOC/Hr uncontrolled emissions and 89-96 lb VOC/Hr uncontrolled emissions, this higher grouping reported to represent maximum operating loads. If assumed that for all test events a RTO set point of approximately 1500 degrees F, (required minimum operating temperature under PTI/ROP) was used, there appears to be a correlation with higher average operating temperatures and influent VOC content.

The data from the Grand Rapids Hutchinson Antivibration Facility would appear (assuming a set point of 1450 degrees F as required per permit) to have met the 95 % RTO destruction efficiency with 28.3 lb VOC per hour at slightly above the setpoint.

A review of data provided for the 2cnd semiannual 2023, indicated a high monthly VOC emission of 0.43 tons/month, and 672 hours of operation for all coating lines during the month of November 2023. Monthly averages determined by reported emissions that average pre- RTO VOC concentrations for that period are in in general less than half of VOC influent concentrations reported at 2018 maximum operating levels. Monthly operating data is summarized below:

Month	Uncontrolled VOC Emissions (lbs)	Total Operating Hours	Monthly Average Uncontrolled VOC Emissions (lb/Hr)
July 2023	24,890.86	720	30.40
August 2023	15,969.91	744	21.46
September 2023	27,360.54	720	38.00
October 2023	24,156.87	744	32.46
November 2023	35,211.40	672	52.39
December 2023	5,426.17	600	9.04

Should the RTOs for the Hutchinson Grand Rapids and Hutchinson Cadillac be comparable RTO units, it appears compliance with the 95% destruction efficiency at the above uncontrolled VOC concentrations would be achieved at the Facility at an RTO setpoint of 1500.

Based on the data at the time of report preparation, the Facility is in non-compliance with respect to MACT minimum operating temperature requirements for the RTO (FGMACTMMMM SC IV.1). With respect to emissions it appears that based on the test data, that even at lower operating rates greater than 95% destruction efficiency would be anticipated, and no exceedances of emission limits had occurred. However, as discussed with Facility Staff and Management on May 7, 2024, compliance at this point requires operating with a minimum RTO temperature of 1655 degrees F, or retesting to reverify at the lower temperature. As previously indicated, the RTO is not designed for extended operations at the higher temperature, which results in retesting being the required route to return to compliance. The Facility indicated their intent to install a new line at the Facility, which upon issuance of the permit would require verification testing. The permit application for the new line is anticipated to be submitted before the end of May 2024. District Staff indicated that the Facility should in the interim and in anticipation of testing activities evaluate their data on a daily and per line basis, to determine what operating conditions would truly reflect a normal daily average and hourly average operation.

Testing/Sampling -- The permittee is required to determine the mass fraction of organic HAP for each material used, the mass fraction of coating solids for each coating and the density of each material used in accordance with 40 CFR 63.3941, 63.3951 and /or 63.3961 (SC V.1). Records provided in association with this compliance evaluation appeared to indicate compliance with the permit condition.

Facilities using the emission rate with add-on controls option are required to conduct performance testing for each emission capture system according to 40 CFR 63.3695, and each add-on control device according to 40 CFR 63.3966 (SC V.2). A review of records indicated that the most recent performance test for the PTEs was conducted on July 11, 2023. Records provided in association with this compliance evaluation appeared to indicate compliance with the permit condition and sufficient monitoring requirements to meet SC VI.8.

Monitoring/Recordkeeping - SC VI.2 requires to keep all records required by 40 CFR 63.3930, which includes not only records of the initial compliance demonstration (SC VI.1), but records associated with any subsequent compliance demonstrations, records of coating use, manufacturer information, emission calculations, disposal records, deviations, etal. SC VI.3 identifies at minimum the following records be kept for each compliance period. For the emission rate with add-on controls options the following are required:

- A copy of each notification and report that is submitted to comply with Subpart Mmmm and supporting documentation for each. (SC VI.3a)
- Current copy of information provided by materials suppliers or manufacturers used to determine the mass fraction of organic HAP and density of the materials of interest. (SC VI.3b)
- A list of the coating operations, compliance option used and the beginning and end dates for each compliance option. (SC VI.3c)
- The mass fraction of organic HAP and the density for each coating, thinner and/or additive and cleaning material used during each compliance period unless the material is tracked by weight. (SC VI.3h & VI.3j)
- The volume fraction of coating solids for each coating used during each compliance period. (SC VI.3i)
- Dates, times and durations for each deviation per 40 CFR 63.3930(k)(8). (SC VI.3l)
- Records required to show continuous compliance, capture efficiency, and/or deviations (SC VI.3m)

A review of annual and semiannual records, as well as supplemental data provided for review as part of the January 2024 compliance evaluation, appeared in general compliance with the above record keeping requirements.

For any coating operations(s) using the emission rate with add-on controls option, the permittee shall demonstrate continuous compliance with the operating limits specified in Table 1 of 40 CFR Part 63, (SC VI.4). As previously discussed, 1500 degrees F is the temperature used to show compliance under CAM (FGRTO). In compliance with the ROP, the Facility maintains records of 3-hour average combustion temperatures of the RTO. As discussed above, though the data collected from the CPMS meets the requirements of the MACT, (SC VI.4 (a) (i-iii)) the operating temperatures since the July 11, 2023, fails to show compliance with the minimum operating temperature set during verification testing (SC VI.4(a)).

Reporting – Requirements for FGMACTMMMM include not only annual and semiannual reporting of deviations (SC VII.2 & 3) but also deviations of 40 CFR 63.3910(c)(6) and 40 CFR 63.3920(a)(7) (SC VII.6) which include the following:

- Exceedance of the applicable organic HAP emission rates (SC VII.6)

- Operating parameters out of allowed ranges,
- Opening of any by-pass lines. And
- Deviations from any work practice standards.

In addition to the above reporting requirements, the Facility is required to submit initial as well as supplemental compliance status. (SC VII.7 &8) The referenced reports are required reporting under the CEDRI interface. (SC VII.9) A review of reports received indicated compliance with reporting requirements under FGMACTMMMM.

Other Requirements - The ROP includes a high level citation requiring the permittee to comply with all applicable provisions of 40 CFR Part 63, Subparts A & MMMM. (SC IX.1) All applicable requirements are believed to have been incorporated into the ROP. Compliance with the ROP would indicate general compliance with the subpart.

FGRULE287(2)(c) –

This FG is described as any emission unit that emits air contaminants and is exempt from permitting under Rule 201 pursuant to Rule 278, Rule 278a and Rule 287(2)(c). The existing EUs associated with this FG includes EUSERVICE-BOOTH installed prior to December 20, 2016, and associated dry fabric filter as the control device. EUSERVICE-BOOTH is reported to not have operated at all for the 2023 calendar year, and has not been operated as part of this compliance evaluation.

FGCOLDCLEANERS –

This FG includes any cold cleaners that are grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaner were placed into operation prior to July 1, 1979. One cold cleaner is reported to be associated with the site, and located in the maintenance room. It should be noted that the cold cleaners are maintained by a third party, not be the Facility itself, and some of the “required” information is not available.

No emission Limits are associated with this FG, nor any testing/sampling requirements.

Material Limits – SC II.1 restricts that no cleaning solvents containing more than 5% by weight of halogenated compounds. A review of SDS sheets cleaning solutions by Safely Kleen indicated compliance with the requirement. Solvent data is summarized below.

Material type	Product	SDS date	Major components
Metal parts cleaner	Safety Kleen Immersion cleaner and cold parts cleaner solvent	Rev 12-16	Solvent naptha (30-60%) 1-Methyl-2-pynolidone (10-30%) Dipropylene monomethyl ether (7-13%) Oleic acid (5-10%) Ethanalamine (3-7%)

			Naphthalene (3-6%)
Solvent	Safety Kleen Premium Solvent	2/24/2022	Petroleum distillates, hydrotreated light (100%)

Process/Operational Restrictions – SC III.1 requires cleaned parts to be drained for no less than 15 seconds or until dripping ceases (SC III.1). The Facility reports general compliance with the permit condition.

The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer (SC III.2) The Facility reports the cold cleaners is maintained monthly by Safety Kleen.

Design/Equipment Parameters – Under SC IV.1 the cold cleaner must meet one of the following design requirements:

- The air/vapor interface of the cold cleaner is no more than 10 square feet. (SC IV.1(a))
- The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment (SC IV.1(b)).

No square foot measurement was collected at the time of the inspection, but as previously reported the units are located in the maintenance room, therefore the emissions are released into the general in-plant environment. Both the cold cleaners are required to be equipped with a device for draining cleaned parts (SC IV.2) and a cover to be closed whenever parts are not being handled in the cold cleaner. (SC IV.3)

The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated (SC IV.4) The psia of the solvent is reported to be 0.017403 psia. Therefor mechanical assistance is not required.

The Reid VP is reported to be 0.5 mmHg at 20 degrees C, and 0.9 mmHg at 37.7degrees C. The solvent is not reported to be heated, therefore SC IV.5 is not applicable at this time.

Monitoring/Recordkeeping –

The permittee as required by SC VI.2 shall maintain the following records:

Unit	Vendor owned-maintained
Serial No-Model No.	UNK*
Date of Installation	UNK*

<p>Air/vapor interface</p>	<p>NA – unit is a sump/recirculating design, no solvent is retained in the unit when not in use.</p>
<p>Applicable Rule 201 Exemption</p>	<p>R. 281(2)(h)</p>
<p>The Reid vapor pressure of solvent</p>	<p><0.4mmHg @ 68 degrees F</p>
<p>If applicable, the option chosen to comply with 707 (2)</p>	<p>Reid vapor pressure below 0.6</p>

***Units are maintained by third parties, who are responsible for installation and records. The specified data was not verifiable at the time of report prep.**

Reporting -- Reporting requirements are limited to prompt reporting of deviations, as well as annual and semiannual compliance reporting. (SC VII.1, .2 and .3). A review of reports received indicates compliance with permit conditions.

SUMMARY

On January 22, 2024, AQD District Staff conducted an unscheduled site inspection of Hutchinson Antivibration Systems, Inc. the Automotive Anti-Vibration and Noise Reduction Systems division of Hutchinson North America (AKA Hutchinson) (SRN A9364) located 600 Seventh Street, Cadillac, Wexford County, Michigan. The referenced Facility operates under MI-ROP-A9364-2022, issued on August 10, 2022. The purpose of the site inspection was to determine compliance with permit conditions.

The referenced Facility is an automotive industry supplier located in an industrial park within the Cadillac city limits. The facility produces a variety of automotive parts consisting of rubber and metal components. The rubber parts are manufactured onsite, and the metal parts are manufactured elsewhere and are bonded to the rubber components onsite. Processes onsite include cleaning of the various metal components, application of adhesives (base coat and topcoat), and injection molding/press of rubber components.

Principle coating/adhesive materials used on site used for the bonding of rubber component include a primer (Chemlock 207), an adhesive (Chemlock 6411), and two solvents (toluene and Methyl Ethyl Ketone (MEK)).

Solvents (toluene and MEK) are reported to be received by bulk, coatings are received in 55-gallon drums from suppliers. The material storage area houses materials, and is where mixing in apx. 5-gallon “pots” for use at the various spray booths occurs. Waste materials are reported to

be transported to a facility in Wisconsin that recycles the waste materials for use by other Facilities.

The Facility makes use of a "Watchdog" system with respect to the RTO, which monitors appropriate operating parameters for the coating lines, Permanent Total Enclosures (PTE), and the RTO, and will shut down the system should threshold values not be met.

The most recent site inspection was conducted on June 21, 2023. The Full Compliance Evaluation (FCE) for this site was advanced from the 2025 fiscal year to the 2024 fiscal year to better distribute inspections for the new inspector associated with the Facility.

Record requests were sent electronically on January 4th, 2024 and February 22, 2024. With records received on February 5th, March 15th and the week of April 22, 2024, with multiple phone discussions between those dates. These documents were reviewed and the information incorporated into this document.

On May 7, 2024, AQD District staff met with onsite personnel regarding compliance issues/concerns regarding FGRT0/FGMACTMMMM. As discussed within this document a review of data indicated that the Facility operates the RTO at a setpoint of 1500 degrees F, incoming VOC emissions result in an increased operating temperature above the RTO setpoint. Verification testing conducted in 2018 and 2023 were at maximum operating rates, rather than the more representative maximum normal operating rates, which as previously discussed resulted in elevated RTO temperatures well above normal operating temperatures becoming the required minimum operating temperatures for the RTO under the MACT. In order to be able to return the minimum required operating temperature for the RTO back to the setpoint of 1500 degrees F, the Facility will need to retest at a more appropriate operating load on the RTO. At this time they anticipate installation of a new line at the Facility, the permit application to be submitted in May 2024. The new line will require testing, and the RTO verification testing will be conducted at that time. Based on data from the 2012 testing onsite, this will bring the Facility back in compliance with the MACT.

With the exception of the above referenced compliance issue, the Facility at the time of the January 22, 2024, site visit appeared to be in general compliance with ROP conditions. sgl

NAME Mason J LeBlanc

DATE 7-22-24

SUPERVISOR Shane Nixon