

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

B620264170

FACILITY: E-T-M Enterprises, Inc.		SRN / ID: B6202
LOCATION: 920 N. Clinton St., GRAND LEDGE		DISTRICT: Lansing
CITY: GRAND LEDGE		COUNTY: EATON
CONTACT: Ron Clewley , Quality Environmental Manager		ACTIVITY DATE: 08/22/2022
STAFF: Matthew Karl	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection to determine compliance with MI-ROP-B6202-2015 and PTI No. 50-15B.		
RESOLVED COMPLAINTS:		

Purpose:

On 08/22/2022, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted a scheduled inspection of E-T-M Enterprises, Inc. (ETM). This facility was last inspected by AQD on 09/22/2020. The purpose of this scheduled inspection was to determine compliance with renewable operating permit (ROP) MI-ROP-B6202-2015 and permit to install (PTI) No. 50-15B.

Environmental contacts:

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Emission Units:

Emission Unit* ID, and Flexible Group ID	Emission Unit description	ROP, Permit to Install (PTI) or exemption rule	Federal regulations, if applicable	Compliance Status
EUFLINERBOOTH; FGMACTPPPP	Coating paint system consisting of solvent wipe/tack off, spray booth, flash off booth, and oven. Coating line used to coat plastic exterior automotive parts.	MI-ROP-B6202-2015	40 CFR Part 63, Compliance Subpart PPPP	
EUBARRELMIXERS; FGPRESSANDMIXING	Two 300 lb capacity barrel mixers.	MI-ROP-B6202-2015	40 CFR Part 63, Compliance Subpart WWWW	
EUBATCHMIXER; FGPRESSANDMIXING	2,500 lb capacity batch mix tank.	MI-ROP-B6202-2015	40 CFR Part 63, Compliance Subpart WWWW	
EUHYDPRESSES; FGPRESSANDMIXING	A fiberglass parts manufacturing process with currently 18 hydraulic presses. Presses range in size from 50-1,000 tons. Presses utilize gel coat, fiberglass	MI-ROP-B6202-2015	40 CFR Part 63, Compliance Subpart WWWW	

	mat, and a catalyzed resin system to manufacture reinforced plastic composite parts.			
EUBONDING; FGMACTPPPP	Bonding and gluing operations.	MI-ROP-B6202- 2015	40 CFR Part 63, Compliance Subpart PPPP	
EUSANDBOOTH; FGSANDGRINDROUT	Sanding booth for sanding plastic parts. Controlled by a dust collector.	MI-ROP-B6202- 2015	NA	Compliance
EUROUTING; FGSANDGRINDROUT	Routing operation for plastic parts 352-83. Controlled by 3 dust collectors.	MI-ROP-B6202- 2015	NA	Compliance
EUGRINDING; FGSANDGRINDROUT	Grinding operation for plastic parts 354-83. Controlled by a dust collector.	MI-ROP-B6202- 2015	NA	Compliance
EUSEALER; FGRULE290	Operation(s) where sealers are applied to plastic parts.	MI-ROP-B6202- 2015	NA	NA
EURTM; FGFIBERGLASS	Resin transfer molding (RTM) operation to manufacture reinforced plastic parts. The resin is applied and cured under vacuum in a closed mold.	PTI No. 50-15B	40 CFR Part 63, Compliance Subpart WWWW	
EUGELCOAT; FGFIBERGLASS	The application of gelcoats will be done in the open. However, the gel coat application for large parts may be done in a booth.	PTI No. 50-15B	40 CFR Part 63, Compliance Subpart WWWW	
EUGELCOAT2; FGFIBERGLASS	The application of gelcoats done in the positive pressure gelcoat booth.	PTI No. 50-15B	40 CFR Part 63, Compliance Subpart WWWW	
EUADHESIVE ; FGFIBERGLASS	Adhesive products used in the manufacturing of parts.	PTI No. 50-15B	40 CFR Part 63, Compliance Subpart WWWW	
EUCLEANUP; FGFIBERGLASS	Miscellaneous cleanup activities.	PTI No. 50-15B	40 CFR Part 63, Compliance Subpart WWWW	
EUMIXER; FGFIBERGLASS	Mixer associated with the reinforced plastic parts manufacturing process.	PTI No. 50-15B	40 CFR Part 63, Compliance Subpart WWWW	

* An emission unit is any part of a stationary source that emits or has the potential to emit an air contaminant.

Flexible Group Summary Table:

Flexible Group** ID	Flexible Group description	Associated Emission Unit IDs	ROP or PTI
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FGPRESSANDMIXING	A reinforced plastic composite parts manufacturing process with 18 (originally 20) hydraulic presses. Presses range in size from 50-1,000 tons. Presses utilize gel-coat, fiberglass mat, and a catalyzed resin system. Two 300 lb barrel mixers and a 2,500 lb capacity batch mix tank are used to prepare the materials.	EUBARRELMIXERS, MI-ROP-B6202-2015 EUBATCHMIXER, EUHYDPRESSES
FGMACTPPPP	Each new, reconstructed, and existing affected source engaged in the surface coating of plastic parts and products, identified within each of the four subcategories listed in 40 CFR Part 63, Subpart PPPP, 63.4481(a)(2) to (5).	EUFLINERBOOTH, MI-ROP-B6202-2015 EUBONDING
FGSANDGRINDROUT	Sanding, routing, and grinding of plastic automotive parts.	EUSANDBOOTH, MI-ROP-B6202-2015 EURROUTING, EUGRINDING
FGRULE290	Operation(s) where sealers are applied to plastic parts.	EUSEALER MI-ROP-B6202-2015
FGFIBERGLASS	Resin transfer molding (RTM) and the associated gelcoat application process to manufacture reinforced plastic parts.	EURTM, PTI No. 50-15B EUGELCOAT, EUGELCOAT2, EUADHESIVE, EUCLEANUP, EUMIXER
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment.	PTI No. 50-15B

****A flexible group is used in a permit to install (PTI) or Renewable Operating Permit (ROP) to combine two or more emission units that have common or identical requirements.**

Processes in ROP application which do not appear in ROP:

Exempt Emission Unit ID	Description of exempt Emission Unit	Rule 212(4) exemption	Rule 201 exemption
EU001TANKS	Two 6,000-gallon tanks filled with resin containing styrene	Rule 212(4)(b)	Rule 284(i)
EU001BAKEOVEN	Bake oven used to cure molds	Rule 212(4)(c)	Rule 282(a)(i)

Facility description:

ETM manufactures and coats reinforced plastic composite parts for trucks and agricultural machinery.

Manufacturing processes include resin storage and preparation, compression molding of resins into plastic parts, parts trimming and sanding, and surface coating and drying. VOCs are emitted from the coating of the plastic exterior parts, and from manufacture of the plastic parts.

There are 4 kinds of processes for manufacturing parts:

1. Cold molding (liquid compression molding)
2. Sheet Molding Compound (SMC)
3. Bulk Molding Compound (BMC)
4. Vacuum Assisted Resin Transfer Molding (VARTM)

ETM is located on the north end of Grand Ledge, in Eaton County. Residential areas are located mainly to the south and west of the facility. To the north and northeast of the plant is a mostly industrial area, followed by fields and a few residences. The closest residences to ETM are about 175 feet to the south of the plant, 125 feet to the west, 630 feet to the north, and about 800 feet to the east or southeast, as measured in Google Maps.

Inspection:

FGFACILITY/SOURCE-WIDE

I. Emission Limits

Pollutant	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
1. VOC	99.0 TPY	8.2 TPY	12-month rolling	Source- Wide	SC VI.1	205(1)	Compliance (8% of limit)
2. Styrene (CAS# 100-42- 5)	40.6 TPY	6.2 TPY	12-month rolling	FGFACILITY	SC VI.2	225(2)	Compliance (15% of limit)

VI. Monitoring/Recordkeeping

VI.1. The permittee shall maintain monthly records of the FGFACILITY VOC emissions in tons per year based on a 12-month rolling time period. (R 336.1205(1))

Compliance Status: Compliance, the facility is keeping track of VOC emissions based on 12-month rolling total. I reviewed records from July 2021 to June 2022.

Records Received: 99 Ton Environmental Summary

VI.2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period styrene emission calculation records for FGFACILITY, as required by SC I.2. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1225)

Compliance Status: Compliance, the facility is tracking facility wide/source wide Styrene emissions based on 12-month rolling total. I reviewed records from July 2021 to June 2022.

Records Received: 99 Ton Environmental Summary

EUFLINERBOOTH

I. Emission Limits

Pollutant	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
1. VOC	63.3 lbs/hr	0.5 lbs/hr	Daily average	EUFLINERBOOTH	SC V.1, VI.1-3, VI.5	702	Compliance (1% of limit)
2. VOC	8.0 tons/month	0.003 tons/month	Monthly	EUFLINERBOOTH	SC V.1, VI.1-3, VI.5	702	Compliance (<1% of limit)
3. VOC	85.0 tons/yr	1.5 TPY	12-month rolling	EUFLINERBOOTH	SC V.1, VI.1-3, VI.5	702	Compliance (2% of limit)

II. Material Limits

For coating exterior plastic automotive parts- high bake coatings as specified in Rule 632(20):^{3,4,6,7}

Material	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
1. Prime-Flexible Coating	4.5 lbs VOC/gal of coating (minus water) as applied (GAC)	3.4 lbs/gal	Daily	EUFLINERBOOTH	SC V.1, VI.1- 3, VI.5	702(d)	Compliance. Daily Paint Usage VOC Calculation Report 06/30/22
2. Prime-Non Flexible Category	3.5 lbs VOC/GAC	NA	Daily	EUFLINERBOOTH	SC V.1, VI.1- 3, VI.5	702(d)	NA
3. Topcoat-Basecoat Category	4.3 lbs VOC/GAC	2.8 lbs/gal	Daily	EUFLINERBOOTH	SC V.1, VI.1- 3, VI.5	702(d)	Compliance. Daily Paint Usage VOC Calculation Report 06/30/22
4. Topcoat-Clearcoat Coating	4.0 lbs VOC/GAC	NA	Daily	EUFLINERBOOTH	SC V.1, VI.1- 3, VI.5	702(d)	NA
5. Topcoat-Non- Basecoat/Clearcoat Coating	4.3 lbs VOC/GAC	NA	Daily	EUFLINERBOOTH	SC V.1, VI.1- 3, VI.5	702(d)	NA

For coating exterior plastic automotive parts-air dried coatings as specified in Rule 632(20):^{3,5,6,7}

Prime Coating	4.8 lbs VOC/GAC	NA	Daily	EUFLINERBOOTH	SC V.1, VI.1-3, VI.5	702(d)	NA
Topcoat-Basecoat Coating	5.0 lbs VOC/GAC	NA	Daily	EUFLINERBOOTH	SC V.1, VI.1-3, VI.5	702(d)	NA
Topcoat-Clearcoat Coating	4.5 lbs VOC/GAC	NA	Daily	EUFLINERBOOTH	SC V.1, VI.1-3, VI.5	702(d)	NA
Topcoat-Non-Basecoat/Clearcoat Coating	5.0 lbs VOC/GAC	NA	Daily	EUFLINERBOOTH	SC V.1, VI.1-3, VI.5	702(d)	NA

For touch-up and repair of exterior plastic automotive parts as specified in Rule 632(20):^{5,7}

Material	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
6. Touch-up and repair coatings	5.2 lbs VOC/GAC	2.8-3.4 lbs/gal	Daily	EUFLINERBOOTH	SC V.1, VI.1-3, VI.5	702(d)	Compliance. Minimal use.

³For red and black coatings, the emission limitation shall be determined by multiplying the appropriate limit table by 1.15.

⁴When Method 24 is used to determine the volatile organic compound content of a coating, the applicable emission limitation shall be determined by adding 0.5 to the appropriate limit.

⁵When Method 24 is used to determine the volatile organic compound content of a coating, the applicable emission limitation shall be determined by adding 0.1 to the appropriate limit.

⁶Air-dried coating means a coating that is dried by the use of air or forced warm at temperatures up to 90 degrees Celsius (194 degrees Fahrenheit)- above this temperature would be considered a high baked coating.

⁷Limits must be met for each batch of coating used.

III. Process/Operational Restrictions

III.1. The permittee shall not operate EUFLINERBOOTH unless all exhaust filters are in place and operating properly. (R 336.1910)

Compliance Status: Compliance. I observed the downdraft booth coating operation during production. The exhaust filters appeared to be in place and operating properly, pulling coating overspray from the HVLP applicator gun down into the filters. Facility staff informed me that filters are changed monthly, at the end of each month.

V. Testing/Sampling

V.1. The VOC content of the five most frequently used coatings plus five random coatings, as applied, minus water, shall be tested using Method 24 on an annual basis. Alternatively, the VOC content may

be determined from manufacturer's formulation data, derived from Method 24 analysis on a batch specific basis, with written approval by the AQD District Supervisor (R 336.2040(5)(a))

Compliance Status: Compliance. However, requires follow up. Facility tracks VOC content based on SDS, but has not yet received written approval for the AQD District Supervisor to use these for compliance purposes. This will be followed up on and either written approval to use those records for compliance purposes or a request to perform Method 24 testing will be specified.

Records Received: Current SDS Paint List 08-08-2022; [ETM Enterprises - Online-SDS \(kha.com\)](#)

VI. Monitoring/Recordkeeping

VI.1. The permittee shall maintain records of the following information EUFLINERBOOTH on a daily and monthly basis.

- a. Identification of the applicable coating category for each coating (R 336.1201(3))
- b. Hours of operation. (R 336.1201(3))
- c. Gallons of coating/reducer used. (R 336.2041)
- d. VOC content of each coating/reducer in pounds/gallon as applied (R 336.2041)
- e. Mixing ratio of each coating and reducer. (R 336.1201(3))

Compliance Status: Compliance, facility is maintaining records. There was some confusion from the facility staff about a) the applicable coating categories for each coating, so this could be improved in the facility's records. Specifically, the distinction between high-bake and air-dried, since the facility operates the curing oven around 199-200°F, the coating application would be considered "high-bake" because the temperature $\geq 194^\circ\text{F}$. The facility staff are tracking hours of operation, gallons of coating/reducer used, VOC content, and mixing ratios.

Records Received: Daily Paint Usage VOC Calculation Report

VI.2. The permittee shall maintain (a) current listing of the manufacturer's formulation data for each coating/reducer. (R 336.1201(3))

Compliance Status: Compliance, facility is maintaining an SDS inventory.

Records Received: Current SDS Paint List 08-08-2022; [ETM Enterprises - Online-SDS \(kha.com\)](#); Daily Paint Usage VOC Calculation Report

VI.3. The permittee shall maintain monthly records of the amount in gallons/month and VOC content in pounds/gallon of all purge and/or cleanup solvents used and reclaimed. (R 336.1201(3))

Compliance Status: Compliance, facility is tracking use in gallons/month and VOC content in pounds/gallon of all purge and/or cleanup solvents used. The solvent used for cleanup is AMLAC C-1 SLOW DRY, 6.92 lb/gal VOC.

Records Received: Daily Paint Usage VOC Calculation Report; [ETM Enterprises - Online-SDS \(kha.com\)](#)

VI.4. The permittee shall maintain a daily log of the condition of exhaust filters, and a record of the date filters are changed. (R 336.1213(3))

Compliance Status: Compliance. The facility maintains preventative maintenance (PM) logs that record the date filters are changed. Filters are changed monthly at the end of the month. Noted to facility staff that they could hang a log on the outside of the booth to meet this condition, so this could be improved.

FGPRESSANDMIXING

I. Emission Limits

Pollutant	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
1. VOC	16.5 lbs/hr from clean-up solvents	0.2 lbs/hr	Daily average	FGPRESSANDMIXING	SC VI.1-3, VI.5	702(a)	Compliance (1% of limit)
2. VOC	17.4 tons/yr from clean-up solvents	0.3 tons/yr	12-month rolling	FGPRESSANDMIXING	SC VI.2-3, VI.5, VI.7	702(a)	Compliance (2% of limit)
3. Styrene	10.5 lbs/hr	1.6 lbs/hr	Daily average	FGPRESSANDMIXING	SC VI.1, VI.4-5	225	Compliance (15% of limit)
4. Styrene	26.3 tons/yr	2.2 tons/yr	12-month rolling	FGPRESSANDMIXING	SC VI.1, VI.4-5, VI.7	225	Compliance (8% of limit)

II. Material Limits

Material	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
1. Polyester resin	1,500 lbs/hr	Mixed 353 lb/hr Neat 176 lb/hr	Daily average	FGPRESSANDMIXING	SC VI.1	225	Compliance
2. Polyester resin	28,000 lbs/day	8,482 lbs/day	Daily	FGPRESSANDMIXING	SC VI.1	225	Compliance (30% of limit)
3. Polyester resin	7,500,000 lbs/yr	144,200 lbs/yr	12-month rolling	FGPRESSANDMIXING	SC VI.1	225	Compliance (2% of limit)

III. Process/Operational Restrictions

III.1. The permittee shall only use low styrene resins in the process with a maximum styrene content of 40.0 percent by weight. (R 336.1201(3))

Compliance Status: Compliance. I reviewed recent shipment records from 01/06/2022 to 08/17/2022 and noted the average Styrene content was 36.73%, with a maximum Styrene content of 37.7% and a minimum Styrene content of 35.5%.

Records Received: Molding Resin – Styrene Content

III.2. The permittee shall comply with the applicable emission limits and work practice standards specified in Tables 1 through 5 of 40 CFR Part 63, Subpart WWWW. (40 CFR 63.5805)

Compliance Status: Compliance. Facility is subject to Table 4 – Work Practice Standards

1. A new or existing closed molding operation using compression/injection molding

You must uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.

The charges were loaded into molds using blue 10-gallon buckets. Noted to the facility to only have open charge per mold machine exposed. Facility staff noted that operators were trained on this.

3. A new or existing materials HAP-containing materials storage operation

Keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.

I noted that the HAP-containing materials were closed/covered.

Records Received: 40 CFR Part 63 WWW Compliance Review Summary**VI. Monitoring/Recordkeeping**

VI.1. The permittee shall maintain records of the following information for FGPRESSANDMIXING on a daily and monthly basis.

- a. Hours of operation. (R 336.1213(3))
- b. Pounds of Polyester resin and gel-coat used. (R 336.1201(3))

Compliance Status: Compliance, facility is tracking hours of operation and pounds of materials used.

Records Received: 2022 Resin Calculations Summary 2022

VI.2. The permittee shall maintain (a) current listing of the manufacturer's formulation data for each cleanup solvent used. (R 336.1201(3))

Compliance Status: Compliance. The facility staff track SDS for cleanup solvents.

Records Received: [ETM Enterprises - Online-SDS \(kha.com\)](#)

VI.3. The permittee shall maintain monthly records of the amount in pounds/month and VOC content in pounds/gallon of all cleanup solvents used and reclaimed. (R 336.1201(3))

Compliance Status: Compliance. Facility records the amount of cleanup solvent 75 pounds/month for July 2022, VOC content of 8.4 pounds/gallon.

Records Received: 2022 Resin Calculations Summary 2020

VI.4. The permittee shall maintain records of styrene content of each polyester resin and gel-coat shipment received. (R 336.1201(3))

Compliance Status: Compliance. The facility keeps a list of the styrene content of the resin and gel-coat shipments.

Records Received: Molding Resin – Styrene Content

VI.6. The permittee shall calculate the monthly and annual styrene and VOC emission rates from gel-coat use, in tons per month and tons per 12 month rolling time period, as determined at the end of each calendar month. Calculations shall be completed in a manner and format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1213(3))

Compliance Status: Compliance.

Records Received: 2022 MAERS & 99 Ton Info

VI.7. The permittee shall calculate the total monthly and annual styrene and VOC emission rates from FG PRESSANDMIXING, in tons per month and tons per 12-month rolling time period, as determined at the end of each calendar month. Calculations shall be completed in a manner and format acceptable to the AQD District Supervisor and made available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.

Compliance Status: Compliance.

Records Received: 2022 MAERS & 99 Ton Info

FGMACTPPPP

I. Emission Limits

Pollutant	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
1. Organic HAP	0.16 lb per lb of coating solids	0.09 lb per lb of coating solids	12-month rolling time period*	New or Reconstructed - General Use Coating	SC V.1, VI.1-4	40 CFR 63.4490(a)(1)	Compliance (56% of limit)

*As determined at the end of each calendar month

I.2. The permittee shall determine whether the organic HAP emission rate is equal to or less than the applicable emission limits in 40 CFR 63.4490 using at least one of the following three options, which are listed in 40 CFR 63.4491(a) through (c):

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

The permittee shall include all coatings, thinners and/or other additives, and cleaning materials used when determining the emission rate. (40 CFR 63.4491)

Compliance Status: Compliance

Records Received: MACT PPPP Rolling 12 months; PPPP MACT Compliance

I.3. Any coating operation(s) using the compliant material option or the emission rate without add-on controls option shall be in compliance with the applicable emission limits in 40 CFR 63.4490 at all times. (40 CFR 63.4500(a)(1))

Compliance Status: Compliance

I.4. If the surface coating operation(s) meet the applicability criteria of more than one of the subcategory emission limits specified in 40 CFR 63.4490(a) or (b), the permittee may comply separately with each subcategory emission limit or comply using one of the alternatives in 40 CFR 63.4490(c)(1) or (2). (40 CFR 63.4490(c))

Compliance Status: NA. The facility only uses one compliance category: emission rate without add-on controls option.

II. Material Limits

Material	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
1. Each Thinner and/or Additive	No Organic HAP*	No Organic HAP	Continuous	Each Coating Operation using Compliant Material Option	SC VI.1-4	40 CFR 63.4491(a)	Compliance
2. Each Cleaning Material	No Organic HAP*	No Organic HAP	Continuous	Each Coating Operation using Compliant Material Option	SC V.1, VI.2-3	40 CFR 63.4491(a)	Compliance

*Determined according to 40 CFR 63.4541(a).

V. Testing/Sampling

V.1. The permittee shall 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 63.4541, 40 CFR 63.4551, and/or 40 CFR 63.4561. (40 CFR 63.4541, 40 CFR 63.4551, 40 CFR 63.4561)

Compliance Status: Compliance. However, requires follow up. Facility maintains SDS listing which contain HAP content but has not yet received written approval for the AQD District Supervisor to use these for compliance purposes. This will be followed up on and either written approval to use those records for compliance purposes or a request to perform Method 24 testing will be specified.

Records Received: [ETM Enterprises - Online-SDS \(kha.com\)](#)

VI. Monitoring/Recordkeeping

VI.2. The permittee shall maintain, at a minimum, the following records for each compliance period:

- a. A copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart PPPP, and the documentation supporting each notification report. (40 CFR 63.4530(a))
- b. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density of each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. (40 CFR 63.4530(b))
- c. A list of the coating operations on which each compliance option was used, and the beginning and ending dates and times for each compliance option used. (40 CFR 63.4530(c)(1))
- d. For the compliant materials option, the calculation of the organic HAP content for each coating, using Equation 1 of 40 CFR 63.4541. (40 CFR 63.4530(c)(2))
- e. For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or additives, and cleaning materials used each month using Equations 1, 1A through 1C and 2 of 40 CFR 63.4551; and, if applicable, the calculation used to

- determine mass of organic HAP in waste materials according to 40 CFR 63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of 40 CFR 63.4551; and the calculation of each 12-month organic HAP emission rate using Equation 3 of 40 CFR 63.4551. (40 CFR 63.4530(c)(3))
- f. The name and mass or volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the compliant material option is used for all coatings at the affected source, the permittee may maintain purchase records for each material used rather than a record of the mass used. (40 CFR 63.4530(d))
- g. The mass fraction of organic HAP for each coating, thinner and/or additive, and cleaning material used during each compliance period. (40 CFR 63.4530(e))
- h. The mass fraction of coating solids for each coating used during each compliance period. (40 CFR 63.4530(f))
- a. The information specified in 40 CFR 63.4530(g)(1) through (3), if an allowance is used in Equation 1 of 40 CFR 63.4551 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to 40 CFR 63.4551(e)(4). (40 CFR 63.4530(g))
- j. The date, time, and duration of each deviation. (40 CFR 63.4530(h))

Compliance Status: Compliance

Records Received: 63pppp_63.4520a-semiannual-compliance-report; MACT PPPP Rolling 12 months; PPPP MACT Compliance

VI.3. For each coating used for the compliant coating option, the permittee shall demonstrate continuous compliance with the emission limit in 40 CFR 63.4490, for each compliance period, using Equation 1 of 40 CFR 63.4541. For each thinner and cleaning material used, the permittee shall determine continuous compliance according to 40 CFR 63.4541(a). (40 CFR 63.4542)

Compliance Status: Compliance

VI.4. For any coating operation or group of coating operations using the emission rate without add-on controls option, the permittee shall demonstrate continuous compliance with the applicable organic HAP emission limit in 40 CFR 63.4490, for each compliance period according to 40 CFR 63.4551(a) through (g).

Compliance Status: Compliance

FGSANDGRINDROUT

I. Emission Limits

Pollutant	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
1. PM	0.10 lb/1000 lbs of exhaust gases, calculated on a dry gas basis	Facility tracks PM as tons/year. Reported 1.65 tons/year	Test protocol	FGSANDGRINDROUT	VI.1	331(1)(c)	Compliance

VI. Monitoring/Recordkeeping

VI.1. The dust collectors shall be inspected, and any filters shall be repaired/replaced, if necessary, at least once every calendar year. Records shall be kept of the dates of inspection and maintenance performed on each dust collector system. (R 336.1213(3))

Compliance Status: Compliance, the dust collector system consists of baghouses, and they appeared to be in good working condition. The facility assumes a control efficiency of 95%. Two baghouses exhaust into the plant building and the facility has asked to use permit exemption R 336.1285(2)(I)(vi) (B) during the ROP renewal. The waste barrels that collect PM are replaced when they are approximately ¾ full. A full dust barrel weighs 150 pounds. The facility had replacement barrels nearby the baghouse collectors.

FGRULE290 (EUSEALER)

Compliance Status: NA, the facility has not recently (within the past 15 years) operated emission unit EUSEALER to apply sealers to plastic parts. The facility staff informed me that they would like to retain the ability to do so and have requested that the emission unit/flexible group remain in the ROP.

FGFIBERGLASS

I. Emission Limits

Pollutant	Limit	Reported	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	UAR	Compliance Status
4. VOC	14.3 TPY	2.9 TPY	12-month rolling	FGFIBERGLASS	SC VI.4	225, 702(a)	Compliance (20% of limit)
5. Acetone (CAS# 67-64-1)	9.5 TPY	4.2 TPY	12-month rolling	FGFIBERGLASS	SC VI.4	224, 225	Compliance (44% of limit)

II. Material Limits

II.1. The styrene content of any resin used in EURTM shall not exceed 50 percent by weight. (R 336.1225, R 336.1702(a))

Compliance Status: Compliance. Ranged from 42% to 25.55% Styrene content.

Records Received: 2022 Gel Coat VARTM Reporting System

II.2. The permittee shall not use more than 723,624 pounds of neat resin in EURTM per 12-month rolling time period as determined at the end of each calendar month (R 336.1225, R 336.1702(a))

Compliance Status: Compliance. Reported 144,616 pounds neat resin used per 12 month rolling from July 2021 to June 2022.

Records Received: 2022 Gel Coat VARTM Reporting System

II.3. The permittee shall not exceed the styrene monomer and methyl methacrylate (MMA) content limits listed in the following table for EUGELCOAT and EUGELCOAT2. (R 336.1225, R 336.1702(a))

Material ID	Maximum Styrene Content (% wt)	Reported	Maximum (MMA) (% wt)	Reported

a. White Gelcoat	26.1	NA	5.0	NA
b. Pigmented Gelcoat (non-white)	42.0	42.0 SDS#C000201 RES#1225	5.0	5.0 charcoal SDS#P000110 RES#1255 5.0 yellow SDS#P000111 RES#1256
c. Clear Gelcoat	40.0	39.0 SDS#P000109 RES#P1254	5.0	2.0 SDS#P000109 RES#P1254

Compliance Status: Compliance

Records Received: 2022 Gel Coat VARTM Reporting

III. Process/Operational Restrictions

III.1. The permittee shall capture all waste cleanup solvent(s), promoter(s), resin(s), and gel coat(s) used in FGFIBERGLASS and store them in closed containers. The permittee shall dispose of all waste cleanup solvent(s), promoter(s), resin(s), and gelcoat(s) in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1702(a))

Compliance Status: Compliance. During my walkthrough inspection I noted closed waste containers. The facility staff use small red "Justrite" waste containers for cleanup rag storage. Larger drums are used for waste materials. I visited the chemical storage shed and noted all drums were kept closed and were elevated on pallets. The facility contracts with a 3rd party waste handler to dispose of wastes.

IV. Design/Equipment Parameters

IV.1. The permittee shall not operate any gelcoat booth unless the respective exhaust filters are each installed, maintained, and operated in a satisfactory manner. (R 336.1301, R 336.1331, R 336.1910)

Compliance Status: Compliance. The gel coat booths are both updraft booths. Gel coat booth 2 is temperature controlled to be warmer than ambient air. Facility staff informed me that filters are changed monthly, at the end of each month for both booths. I noted that gel coat booth 2 was equipped with a pressure gauge and was drawing a vacuum of 0.1-0.08" H₂O.

VI. Monitoring/Recordkeeping

VI.2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (i.e., resin, gelcoat, promoter, etc.), including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1225, R 336.1702(a))

Compliance Status: Compliance. Facility tracks SDS sheets for each material.

Records Received: [ETM Enterprises - Online-SDS \(kha.com\)](#)

VI.3. The permittee shall keep a separate record of the styrene and MMA monomer contents, as applicable, for each shipment of resin and gelcoat received. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1225, R 336.1702(a))

Compliance Status: Compliance. Facility tracks SDS sheets for each material.

Records Received: [ETM Enterprises - Online-SDS \(kha.com\)](#)

VI.4. The permittee shall keep the following information for each calendar month for FGFIBERGLASS:

- a. The identity and amount (in pounds) of each resin (RTM), gelcoat, promoter, adhesive, and cleanup solvent used.
- b. The styrene, MMA and VOC content of each resin, gelcoat, adhesive, promoter, and cleanup solvent used.
- c. The appropriate emission factors for each raw material used (The Unified Emission Factors (UEF-1-2011a) Table 1 for Open Molding of Composites from the American Composites Manufacturers Association (ACMA), October 2011 may be used for gel coat, Section 8 of UEF-1-2011a may be used for the vacuum RTM operations, or an alternate factor approved by the AQD District Supervisor may be used).
- d. VOC mass emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
- e. Acetone mass emission calculations determining the monthly emission rate in tons per calendar month, and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in the format specified in Appendix A, or in a format acceptable to the AQD District Supervisor. The permittee shall keep all records and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a))

Compliance Status: Compliance. Facility is maintaining emissions calculation spreadsheet with the required information.

Records Received: 2022 Gel Coat VARTM Reporting System

Conclusions:

Facility appeared to be in compliance with the conditions of permits MI-ROP-B6202-2015 and 50-15B.

NAME Matthew R. Hood

DATE 8/24/2022

SUPERVISOR RB