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

D070961974

F070001074				
FACILITY: Toefco Engineered Coa	ating Systems, Inc.	SRN / ID: P0708		
LOCATION: 1919 Industrial Drive,	NILES	DISTRICT: Kalamazoo		
CITY: NILES		COUNTY: BERRIEN		
CONTACT: Artie McElwee , Presid	ent and CEO	ACTIVITY DATE: 02/15/2022		
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR		
SUBJECT: Unannounced Schedul	ed Inspection			
RESOLVED COMPLAINTS:		<del></del>		

On February 15, 2022 AQD Staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Toefco Engineered Coatings (TEC) (SRN: P0708) facility located in Niles, Berrien County. In the past TEC had been a synthetic minor source of hazardous air pollutants (HAPs) but they became a major source in 2018. They submitted an Initial Renewable Operating Permit (ROP) application and the ROP (MI-ROP-P0708-2020) was issued by the AQD in March 2020. The ROP basically incorporated three air permits (PTI Nos. 86-16, 86-16a, and 63-18) that had been issued to them by the AQD. PTI 86-16 was for a Coating Line, 86-18a was to modify Coating Line Permit to remove Opt-Out limits on HAPs prior to submitting the Initial ROP Application, and 63-18 is a General Permit for Coating Lines. Once TEC became a major source of HAPs, they also became subject to 40 CFR Part 63 Subpart MMMM (NESHAP for Surface Coating of Miscellaneous Metal Parts and Products) whose requirements are also included in the ROP. The intent of staff's inspection was to determine the facilities compliance with their ROP and any other state and/or federal air regulations. Staff departed for the facility at approximately 9:00 a.m.

<u>NOTE:</u> Toefco has two facilities in Niles which include the Main Plant (N2610) and this one which they refer to as Plant 2 (Plant 2a/2b)(P0708). The Main Plant (N2610) is located off of 14<sup>th</sup> Street and Plant 2 (P0708) is located off of Industrial Drive which is a couple of miles away and in the Industrial Park.

Staff arrived at the main TEC facility at approximately 10:15 a.m. Staff then proceeded into the building and into the reception area. Once in the reception area, staff introduced themself to an employee (Brooke) and mentioned the purpose of the visit. Brooke then contacted Artie McElwee (President and CEO) to let him know staff was present and staff was let in and allowed to proceed back to Artie's Office. Once in Artie's office, staff stated why they were there and mentioned that they had planned on inspecting both facilities. Artie stated that was fine but mentioned he had a meeting later in the morning with an insurance company. In order not to interfere with that, staff mentioned that we could tour both plants first and then staff could review records on their own in the conference room. Artie said that would work out great. Staff took a tour of the Main Plant first and then we drove over to this Plant. Prior to taking a tour though, staff had asked some general questions about both plants when they were back at the Main Plant. The following is a summary of the discussion pertaining to this Plant along with what staff observed during the tour. It will be followed by the applicable ROP Special Conditions and staff's comments pertaining to them.

As mentioned previously, they refer to the 2<sup>nd</sup> Toefco facility as Plants 2a and 2b. They both are 20,000 square feet buildings that are connected by a short tunnel. Each building has one conveyorized coating system and only three coatings are

used (Magni C-600a, Magni GD3430, and JVC/PPG KB 1947). These are all single coat coatings that don't require a primer. The basic operations at each are as follows: 1) Parts Load, 2) Parts Wash (Alkaline Based), 3) Parts Blow Off, 4) Drying Oven, 5) Coating Application, 6) Cure Oven at 250 degrees F, 7) Parts Unload. Artie went on to say the Plant 2a is all manual coating applications and 2b is about 95% robotic and 5% manual which is mainly just touch-up work. Artie said that at this location they still strictly coat automotive parts consisting of mainly exhaust components or brackets that need a high heat/performance coating applied to them.

Staff then asked how business has been and Artie mentioned it has been steady and as mentioned for the Main Plant, has been starting to pick up. Staff then asked how many employees they have at this location and Artie thought it was about 20. They work the same schedule as the Main Plant which is currently 1 shift from 7:00 a.m. until 3:30 p.m. Monday through Friday during the wintertime. During the summer, it is from 6:00 a.m. until 2:30 p.m.

Staff then proceeded on a tour of both buildings and the coating process / equipment is set-up in the sequence described earlier above. During the previous inspection staff had also noticed a small paint booth that is used for touch-up purposes. According to Artie, they strictly use an 8 oz touch up gun that is air assisted and/or an aerosol can depending on what coating is being used per customer specifications. This booth/operation would appear to be exempt under the AQD Rule 287(b) PTI exemption. Staff noted that they were coating Jeep Mufflers in Plant 2a and coating muffler tips (Artie referred to them as Clam Shells) for GM in Plant 2b. Staff then asked Artie what they do with the coating racks when they need to be cleaned. Artie mentioned that they had been blasting the coating off in the shot blast building over in the Main Plant. However, he did mention that since business has been picking up that they will probably be looking to outsource that work again like they used to do. Staff then proceeded to follow Artie back to the main plant to review records. Once we returned to the main plant Artie led staff to a conference room. He then left to and returned with the records that staff wanted to look at. The following is what staff noted when it came to the records review.

NOTE: STAFF DELETED SOME REQUIREMENTS BELOW THAT WERE LISTED AS N/A.

#### **SOURCE-WIDE CONDITIONS**

## DESCRIPTION

All process equipment source-wide including grand-fathered equipment and exempt equipment.

## POLLUTION CONTROL EQUIPMENT

N/A

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Ethylbenzene (CAS 100-41-4)	5.7 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	SOURCE- WIDE	SC VI.2	R 336.1225(2)
2. VOC	30 tpy²	12-month rolling time period as determined at the end of each calendar month	SOURCE- WIDE	SC VI.3	R 336.1225 R 336.1702(d)

AQD Comment: Appears to be in Compliance with the above emission limits. 12-Month Rolling Emission Records ending in December 2021 that were reviewed by staff showed Ethylbenzene emissions at 1.17 tons and VOCs at 10.4 tons.

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>1</sup> (R 336.1225(2))

## AQD Comment: Appears to be in Compliance.

- 2. The permittee shall keep the following information on a monthly basis for the source:
  - a. Gallons or pounds of each ethylbenzene (CAS No. 100-41-4) containing material used and, if applicable, reclaimed.
  - b. Ethylbenzene (CAS No. 100-41-4) content, in pound per gallon or pounds per pound, of each ethylbenzene (CAS No. 100-41-4) containing material used.
  - c. Ethylbenzene (CAS No. 100-41-4) emission calculations determining the monthly emission rate in tons per calendar month.
  - d. Ethylbenzene (CAS No. 100-41-4) emission calculations determining 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 using mass balance or alternate method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>1</sup> (R 336.1225(2))

# AQD Comment: Appears to be in Compliance with the a through d above.

3. The permittee shall keep VOC mass emission calculations, on a monthly basis determining the annual emission rate in tons per 12-month rolling time period for all coating lines and associated purge and clean-up operation at the source. The permittee shall keep all records in the format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1225, R 336.1702(d))

AQD Comment: Appears to be in Compliance.

## VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

AQD Comment: Appears to be in Compliance with the Reporting Requirements above.

See Appendix 8

## Footnotes:

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201 (1)(b).

### **EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

**Emission Unit Description** 

Installation

**Emission Unit ID** 

(Including Process Equipment & Control Device(s))

Date/

Flexible Group ID

Modification Date

EU-COATINGLINE1 A metal parts coating line

utilized to apply heat-resistant, high-performance coating to automotive, agricultural, and heavy equipment exhaust components and other metallic parts. The line consists of a blast booth, pretreatment

11/11/2016 FG-MACTMMMM

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1) (a).

**Emission Unit Description** 

Installation

**Emission Unit ID** 

(Including Process Equipment & Control Device(s))

Date/ Flexible Group ID

Modification Date

washer with blow-off zone, a dry-off oven heated by a 2.0 MMBTU/hr heater, powder booth, coating booth #1, coating booth #2, a cure oven heated by a 1.5 MMBTU/hr heater, and a cooling tunnel.

EU-COATINGLINE2 One or more coating lines and

all associated purge and clean -up operations, where each coating line is a single series in a coating process and is comprised of one or more coating applicators, any associated flash-off areas, drying areas, and ovens where one or more surface coatings are applied and subsequently dried or cured. Coating lines may be used to coat any substrate except cans, coils, large appliances, metal furniture, magnet wire, fabrics, paper, vinyl, flat wood paneling, or graphic arts lines.

10/01/2018 FG-

**GENERALPERMIT** 

FG-MACTMMMM

# EU-COATINGLINE1 EMISSION UNIT CONDITIONS

# **DESCRIPTION**

A metal parts coating line utilized to apply heat-resistant, high-performance coating to automotive, agricultural, and heavy equipment exhaust components and other metallic parts. The line consists of a blast booth, pretreatment washer with blow-off zone, a dry-off oven heated by a 2.0 MMBTU/hr heater, powder booth, coating booth

#1, coating booth #2, a cure oven heated by a 1.5 MMBTU/hr heater, and a cooling tunnel.

Flexible Group ID: FG-MACTMMMM

POLLUTION CONTROL EQUIPMENT: Dry filters on coating booths

# I. <u>EMISSION LIMITS</u>

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	30.0 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUCOATINGLINE1	SC VI.3	R 336.1702(a)
2. Acetone, (CAS No. 67-64-1), Dimethyl Carbonate (CAS No. 616-38-6), and t-Butyl Acetate (CAS No. 540-88-5) combined	30.0 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUCOATINGLINE1	SC VI.3	R 336.1224(1

AQD Comment: Appears to be in Compliance with the above emission limits. 12 -Month Rolling Emission Records ending in December 2021 that were reviewed by staff showed VOC emissions 4.30 tons and the combined Acetone, Dimethyl Carbonate, and t-Butyl Acetate emissions at 5.05 tons.

# II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	3.5 lb/gal²	Instantaneous	EUCOATINGLINE1	SC V.1	R 336.1702(d)

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
	(minus water)ª as applied				

<sup>&</sup>lt;sup>a</sup> The phrase "minus water" shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. (R 336.1602(4))

AQD Comment: Appears to be in Compliance with the above limit. The facility has mainly been using the Magni C600A coating which is 3.00 lb/gal and Magni GD3430D coating which is 2.20 lb/gal without water, as applied.

# III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations.<sup>2</sup> (R 336.1224, R 336.1702(a))

AQD Comment: Appears to be in Compliance. Staff did not observe any issues and Superior Chemical disposes of their wastes. They don't reclaim any materials.

2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air.<sup>2</sup> (R 336.1224, R 336.1370)

AQD Comment: Appears to be in Compliance. Staff did not observe any issues and will assume that they are disposing of the filters properly.

3. The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary.<sup>2</sup> (R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))

AQD Comment: Appears to be in Compliance. Staff assumes that the facility is doing this.

## IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUCOATINGLINE1 unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner.<sup>2</sup> (R 336.1301, R 336.1910)

AQD Comment: Appears to be in Compliance. Filters were in place.

2. The permittee shall equip and maintain EUCOATINGLINE1 with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing.<sup>2</sup> (R 336.1702(a))

AQD Comment: Appears to be in Compliance. HVLP spray guns are used. Staff did not ask about test caps.

## V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.<sup>2</sup> (R 336.1225, R 336.1702, R 336.2001, R 336.2004, R 336.2004, R 336.2040(5))

AQD Comment: Appears to be in Compliance. TEC tested their most widely used coating (Magni Black GD3430) that is used at each of their facilities and it had a similar VOC composition as stated on the SDS. The results of the testing might just be in the correspondence file for the main plant (N2610).

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702)

AQD Comment: Appears to be in Compliance.

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, including the weight percent of each component. The data may consist of 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 and make them available to the Department upon request.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702)

AQD Comment: Appears to be in Compliance. The facility maintains SDS for all materials used.

- 3. The permittee shall keep the following information on a monthly basis for EUCOATINGLINE1:
  - a. Gallons (with water) of each coating and clean-up solvent used and, if applicable, reclaimed.

- b. VOC content (minus water and with water), acetone (CAS No. 67-64-1) content, dimethyl carbonate (CAS No. 616-38-6) content, and t-butyl acetate (CAS No. 540-88-5) content of each coating and clean-up solvent, as applied.
- c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
- d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
- e. Acetone (CAS No. 67-64-1), dimethyl carbonate (CAS No. 616-38-6), and t-butyl acetate (CAS No. 540-88-5) combined mass emission calculations determining the monthly emission rates in tons per calendar month.
- f. Acetone (CAS No. 67-64-1), dimethyl carbonate (CAS No. 616-38-6), and t-butyl acetate (CAS No. 540-88-5) combined mass 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 using mass balance or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1224, R 336.1702)

AQD Comment: Appears to be in Compliance with a through f above.

# VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

AQD Comment: Appears to be in Compliance with the Reporting Requirements above.

# VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOOTH1	<b>42</b> <sup>2</sup>	36 <sup>2</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBOOTH2	<b>42</b> <sup>2</sup>	36²	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVOVEN	14 <sup>2</sup>	40 <sup>2</sup>	R 336.1225, 40 CFR 52.21(c) & (d)

AQD Comment: Appears to be in Compliance. The stack heights and diameter dimensions appear to be correct.

## Footnotes:

<sup>1</sup>This condition is state-only enforceable and was established pursuant to Rule 201(1) (b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1) (a).

#### D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

## FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

**Associated** 

Flexible Group ID

Flexible Group Description

Emission Unit IDs

**Associated** 

Flexible Group ID

**Flexible Group Description** 

Emission Unit IDs

FG-GENERALPERMIT One or more coating lines and all EUassociated purge and clean-up COATINGLINE2 operations, where each coating line is a

operations, where each coating line is a single series in a coating process and is comprised of one or more coating applicators, any associated flash-off areas, drying areas, and ovens where one or more surface coatings are applied and subsequently dried or cured. Coating lines may be used to coat any substrate except cans, coils, large appliances, metal furniture, magnet wire, fabrics, paper, vinyl, flat wood paneling, or graphic arts lines.

## **FG-MACTMMMM**

Each new, reconstructed, and existing EUaffected source described in 40 CFRCOATINGLINE1 63.3881(a)(1), including the subcategories listed in 40 CFR Part 63, Subpart MMMM, EU-63.3881(a)(2) through (6), meeting the COATINGLINE2 applicability requirements of 40 CFR 63.3881(b), which is engaged in the surface coating of miscellaneous metal parts and products. The affected source includes the collection of all the items listed in 40 CFR 63.3882(b)(1) through (4). Surface coating is defined by 40 CFR 63.3881 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating. 40 CFR Part 63, Subpart MMMM does not apply to surface coating or a coating operation that meets any of the criteria of 40 CFR 63.3881(c)(1) through (17).

### **FLEXIBLE GROUP CONDITIONS**

## **DESCRIPTION**

Coating lines installed at the Facility under a General Permit emitting up to 10 tons per year of VOC. A coating line is an operation, which is a single series in a coating process, and is comprised of one or more coating applicators and any associated flash-off areas, drying areas, and ovens wherein one or more surface coatings are applied and subsequently dried or cured. Surface coating may include any paint, lacquer, varnish, adhesive, or other coating material applied on a surface. Surfaces include any substrate except cans, coils, large appliances, metal furniture, magnet wire, fabrics, paper, vinyl, flat wood paneling, or graphic arts lines.

**Emission Units: EU-COATINGLINE2** 

POLLUTION CONTROL EQUIPMENT: Dry Filters on Coating Booths

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	2000 lb/month <sup>2</sup>	Calendar Month	Each coating line plus all associated purge and clean-up operations.	SC VI.3	R 336.1225 R 336.1702(d)
2. VOC	10 tpy²	12-month rolling time period as determined at the end of each calendar month	Each coating line plus all associated purge and clean-up operations.	SC VI.3	R 336.1225 R 336.1702(d)

AQD Comment: Appears to be in Compliance with 1 and 2 above. Records reviewed by staff indicated the highest monthly emissions at 1,015 pounds (0.51 tons) during March 2021. 12-Month Rolling VOC emissions ending in December 2021 indicated 6.09 tons.

# III. PROCESS/OPERATIONAL RESTRICTION(S)

 The permittee shall capture all purge/clean-up solvents and waste coatings from all coating applicators used in FG-GENERALPERMIT. The permittee shall store these materials in closed containers and shall dispose of them in an acceptable manner in compliance with all applicable state rules and federal regulations.<sup>2</sup> (R 336.1702(d))

AQD Comment: Appears to be in Compliance

# IV. DESIGN/EQUIPMENT PARAMETER(S)

The permittee shall equip and maintain FG-GENERALPERMIT with high volume-low pressure (HVLP) spray applicators or comparable technology with equivalent transfer efficiency (e.g., electrostatic spray, dip, flowcoat, roller, dip-spin). For HVLP applicators, the permittee shall keep test caps available for pressure testing.<sup>2</sup> (R 336.1702(d))

AQD Comment: Appears to be in Compliance. HVLP spray guns are used. Staff did not ask about test caps.

2. The permittee shall not operate any spray application unless particulate control (dry filters or a water curtain) is installed, maintained and operated in a satisfactory manner.<sup>2</sup> (R 336.1331)

AQD Comment: Appears to be in Compliance. The spray booth had particulate dry filters.

- 3. A thermal oxidizer or catalytic oxidizer may be installed, maintained and operated in a satisfactory manner to meet the requirements of this general permit. If a thermal oxidizer or catalytic oxidizer is used for FG-GENERALPERMIT, satisfactory operation requires an overall minimum of 76 percent reduction of VOC emissions to the atmosphere<sup>2</sup> (R 336.1224, R 336.1702(d)):
- a. Satisfactory operation of a thermal oxidizer includes maintaining a minimum combustion chamber temperature of 1400°F and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, an average temperature of 1400°F based upon a three-hour rolling average may be used.
- b. Satisfactory operation of the catalytic oxidizer includes maintaining a minimum catalyst bed inlet temperature of 600°F. In lieu of a minimum temperature, an average temperature of 600°F based upon a three-hour rolling average may be used.

AQD Comment: N/A at present time.

1. For a coating line using a thermal oxidizer: The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the thermal oxidizer to monitor and record the temperature on a continuous basis, during operation of FG-GENERALPERMIT. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.<sup>2</sup> (R 336.1201a(1))

AQD Comment: N/A at present time.

5. For a coating line using a catalytic oxidizer: The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device to continuously monitor the inlet and outlet temperatures of the catalytic oxidizer catalyst bed during operation of FG-GENERALPERMIT. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.<sup>2</sup> (R 336.1201a(1))

AQD Comment: N/A at present time.

## V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. Within 60 days of notification by the AQD, verification of VOC emissions and VOC content (in pounds per gallon) of any coating, reducer or purge/clean-up solvent, as applied or as received, using federal Reference Test Method 25A, Method 24 or other EPA approved reference method, may be required for continued operation. Verification of the emission rates includes the submittal of a complete report of the test results to the AQD with 60 days following the last date of the test. Upon prior written approval by the AQD District Supervisor, VOC content may alternatively be determined from manufacturer's formulation data. If the Method 25A or Method 24 should differ from the formulation values, the permittee shall use the Method 25A or Method 24 results to determine compliance.<sup>2</sup> (R 336.2001, R 336.2003, R 336.2004, R 336.1702(d))

AQD Comment: Appears to be in Compliance. No testing of coatings has been specifically requested to date for this facility, although one of the main coatings used (Magni Black GD3430), had been previously tested at the Main Plant as mentioned earlier.

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. For a coating line using a thermal oxidizer: The permittee shall monitor the temperature in the combustion chamber of the thermal oxidizer and record the temperature on a continuous basis, during operation of FG-GENERALPERMIT. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.<sup>2</sup> (R 336.1201a(1))

AQD Comment: N/A

 For a coating line using a catalytic oxidizer: The permittee shall continuously monitor the inlet and outlet temperatures of the catalytic oxidizer catalyst bed during operation of FG-GENERALPERMIT. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.<sup>2</sup> (R 336.1201a(1))

AQD Comment: N/A

- 3. The permittee shall keep the following information on a monthly basis for FG-GENERALPERMIT:
- a. Purchase orders and invoices for all coatings, reducers, and purge/clean-up solvents.
- b. VOC content, in pounds per gallon, of each coating, reducer and purge/clean-up solvent used.
- c. Gallons of each coating, reducer and purge/clean-up solvent used and reclaimed.
- d. VOC mass emission calculations determining the monthly emission rate for each coating line, in tons per calendar month, in a format acceptable to the AQD District Supervisor.
- e. VOC mass emission calculations determining the annual emission rate for each coating line, in tons per 12-month rolling time period as determined at the end of each calendar month, the permittee shall keep all records in a format acceptable to the AQD District Supervisor.

The permit shall keep all records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.<sup>2</sup> (R 336.1201a(1), R 336.1225, R 336.1702(d))

AQD Comment: Appears to be in Compliance with A through E above.

 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records and make them available to the Department upon request.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702(d))

AQD Comment: Appears to be in Compliance. The facility maintains SDS sheets.

 For a coating line using a thermal or catalytic oxidizer: The permittee shall keep records of the date, duration and description of any malfunction of the control equipment, any maintenance performed, any replacement of catalyst and any testing results.<sup>2</sup> (R 336.1201a (1))

AQD Comment: N/A

3. For a coating line using a thermal oxidizer: The permittee shall keep, in a satisfactory manner, operating temperature records for the thermal oxidizer as required by SC VI.1. If the measured operating temperature of the thermal oxidizer falls below 1400°F during operation of FG-GENERALPERMIT, the permittee may demonstrate compliance based upon a three-hour average temperature, by calculating the average operating temperature for each three hour period which includes one or more temperature readings below 1400°F. The permittee shall keep all records and make them available to the Department upon request.<sup>2</sup> (R 336.1201a(1))

AQD Comment: N/A

7. For a coating line using a catalytic oxidizer: The permittee shall keep, in a satisfactory manner, operating temperature records for the catalytic oxidizer as required by SC VI.2. If the measured operating temperature of the catalytic oxidizer falls below 600°F during operation of FG-GENERALPERMIT, the permittee may demonstrate compliance based upon a three-hour average temperature, by calculating the average operating temperature for each three hour period which includes one or more temperature readings below 600°F. The permittee shall keep all records and make them available to the Department upon request.<sup>2</sup> (R 336.1201a (1))

AQD Comment: N/A

## VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

AQD Comment: Appears to be in Compliance with the above.

## VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from FG-GENERALPERMIT shall be discharged unobstructed vertically upwards to the ambient air at exit points not less than one and one half times the building height (from ground level to point of discharge).<sup>1</sup> (R 336.1225)

AQD Comment: Appears to be in Compliance.

# IX. OTHER REQUIREMENT(S)

- 1. The permittee shall not replace or modify any portion of FG-GENERALPERMIT, including control equipment or coatings, nor install additional coating lines (or any portion of, including control equipment or coatings) unless all of the following conditions are met<sup>2</sup> (R 336.1201):
- a. The permittee shall update the general permit by submitting a new Process Information form (EQP5759) to the Permit Section and District Supervisor, identifying the existing and new equipment a minimum of 10 days before the replacement, modification or installation of new equipment.
- b. The permittee shall continue to meet all general permit to install applicability criteria after the replacement, modification or installation of new equipment is complete.
- c. The permittee shall keep records of the date and description of the replacement or modification, installation of new equipment, or any coating change. All records shall be kept on file for a period of at least five years and made available to the Department upon request.

AQD Comment: Appears to be in Compliance with the above.

2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart MMMM for Surface Coating of Miscellaneous Metal Parts and Products by the initial compliance date.<sup>2</sup> (40 CFR Part 63, Subparts A and MMMM)

AQD Comment: Appears to be in Compliance. See comments made under FG-MACTMMMM below.

#### FG-MACT MMMM

## **FLEXIBLE GROUP CONDITIONS**

## **DESCRIPTION**

Each new, reconstructed, and existing affected source described in 40 CFR 63.3881 (a)(1), including the subcategories listed in 40 CFR Part 63, Subpart MMMM, 63.3881 (a)(2) through (6), meeting the applicability requirements of 40 CFR 63.3881(b), which is engaged in the surface coating of miscellaneous metal parts and products. The affected source includes the collection of all the items listed in 40 CFR 63.3882(b)(1) through (4). Surface coating is defined by 40 CFR 63.3881 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating. 40 CFR Part

63, Subpart MMMM does not apply to surface coating or a coating operation that meets any of the criteria of 40 CFR 63.3881(c)(1) through (17).

Emission Units: EU-COATINGLINE1, EU-COATINGLINE2

AQD Comment: Appears to be in Compliance. The above coating lines (Emission Units) are subject to 40 CFR Part 63, Subpart MMMM. The Organic HAP content for Existing – High Performance Coatings allowed by this regulation is limited to 27.5 pounds/gallon of coating solids based on a 12-Month Rolling Time Period determined at the end of each calendar month. Records reviewed by staff ending December 2021 indicate 6.6 pounds/gallon of Organic HAP. TEC is currently basing their compliance with the emission rate without add-on controls. As for notification and reporting requirements, the facility has now submitted and is submitting all the required reports which include the Initial MACT Notification and on-going Notification of Compliance Status Reports. The Semi-Annual Compliance Status Reports can be submitted as part of the Semi-Annual ROP Deviation/Certification Reports as long as the Reports contain the required MACT MMMM Reporting Information.

Inspection Summary: The facility appears to be in Compliance with the terms and conditions contained in ROP No. MI-ROP-P0708-2020 at the present time.

NAME Matt Del	DATE 2-23-27	SUPERVISOR RL 3/9/22
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