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

P070873213

FACILITY: Toefco Engineered C	SRN / ID: P0708			
LOCATION: 1919 Industrial Driv	DISTRICT: Kalamazoo			
CITY: NILES	COUNTY: BERRIEN			
CONTACT: Artie McElwee , President and CEO		ACTIVITY DATE: 08/22/2024		
STAFF: Chance Collins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR		
SUBJECT: Scheduled inspection	n for FCE			
RESOLVED COMPLAINTS:				

On August 22, 2024 AQD Staff traveled to Berrien County to perform and inspection of Toefco Engineered Coatings (TEC) (SRN: P0708). The purpose of the inspection was to determine the facility's compliance with MI-ROP-P0708-2020 and applicable state and federal air pollution control regulations 40 CFR Part 63 Subpart MMMM (NESHAP for Surface Coating of Miscellaneous Metal Parts and Products) and any other state and/or federal air regulations.

NOTE: 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 14th Street and Plant 2 (P0708) is located off of Industrial Drive which is a couple of miles away and in the Industrial Park.

AQD staff arrived at the main TEC facility at approximately 10:40 a.m to sunny conditions with a temperature of 70°F, and a N wind of 0 mph. There were no noticeable odors upon arrival. AQD staff met with Artie McElwee (President and CEO) who answered all questions and escorted staff around the site.

The facility refers to the 2nd Toefco facility (P0708) 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. Mr. McElwee 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.

The facility also has 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.

The following discusses the results of the on-site inspection and review of records:

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 Equipment Monitoring/ Underlying
Scenario Applicable
Testing Requirements
Method

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

Facility appears to be in Compliance with the above emission limits.

VI. MONITORING/RECORDKEEPING

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

 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.¹ (R 336.1225(2))

Facility 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.
 - 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.¹ (R 336.1225(2))

Facility 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.² (R 336.1225, R 336.1702(d))

Facility 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))

Facility appears to be in Compliance with the Reporting Requirements above.

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. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	30.0 tpy ² Actual:	12-month rolling time period as determined		SC VI.3	R 336.1702(a)
	5.48 tpy	at the end of each calendar month	a .		
2. Acetone, (CAS No. 67-64 1), Dimethyl Carbonate		rolling time	EUCOATINGLINE1	SC VI.3	R 336.1224(1
(CAS No. 616-38-6), and t- Butyl Acetate (CAS No. 540-	Actual:	period as determined	4		
88-5) combined	5.0 tpy	at the end of each calendar month	•		

Facility appears to be in Compliance with the above emission limits.

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)
	(minus water) ^a as applied				

^a 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))

Facility appears to be in Compliance with the above limit.

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.² (R 336.1224, R 336.1702(a))
- 2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. 2 (R 336.1224, R 336.1370)
- 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.² (R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))

Facility appears to be in Compliance.

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.² (R 336.1301, R 336.1910)

Facility 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.² (R 336.1702(a))

Facility appears to be in Compliance. HVLP spray guns are used.

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.² (R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

Facility appears to be in Compliance.

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.² (R 336.1224, R 336.1225, R 336.1702)

Facility 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.² (R 336.1224, R 336.1225, R 336.1702)

Facility apears 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.² (R 336.1224, R 336.1702)

Facility appears to be in Compliance with a through f above.

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))

Facility 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:

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

Facility appears to be in Compliance. The stack heights and diameter dimensions appear to be correct.

FG-GENERALPERMIT

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 ² Actual: Within limits	Calendar Month	Each coating line plus all associated purge and clean-up operations.		R 336.1225 R 336.1702(d)
2. VOC	10 tpy²	12-month rolling time period as	Each coating line	SC VI.3	R 336.1225

Pollutant

Limit

Time Period/

Equipment **Operating Scenario**

Monitoring/

Underlying

Testing

Applicable Requirements

Method

Actual:

determined at the

associated purge

end of each calendar and clean-up

7.95 tpy

month

operations.

R 336.1702(d)

Facility appears to be in Compliance with 1 and 2 above

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. 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. (R 336.1702(d))

2. Facility 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.² (R 336.1702(d))

Facility appears to be in Compliance. HVLP spray guns are used.

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.² (R 336.1331)

Facility appears to be in Compliance. The spray booth had particulate dry filters.

Facility does not have a thermal oxidizer or catalytic oxidizer. Therefore, the requirements for these were not noted.

1. 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.2 (R 336.2001, R 336.2003, R 336.2004, R 336.1702(d))

Facility to be in Compliance.

VI. MONITORING/RECORDKEEPING

The facility does not use a thermal oxidizer.

The facility does not use a catalytic oxidizer.

- 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.² (R 336.1201a(1), R 336.1225, R 336.1702(d)).

Facility 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.² (R 336.1224, R 336.1225, R 336.1702(d))

Facility appears to be in Compliance. The facility maintains SDS sheets.

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))

Facility 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).¹ (R 336.1225)

Facility 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 met² (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.

Facility appears to be in Compliance with the above.

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. TEC is currently basing their compliance with the emission rate without addon 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.

The facility appears to be in Compliance with the terms and conditions contained in ROP No. MI-ROP-P0708-2020.

NAME

DATE 8/27/24

SHPERVISOR