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

P077372038

FACILITY: Spring Arbor Coatings -	SRN / ID: P0773				
LOCATION: 895 Garden Lane, FOV	VLERVILLE	DISTRICT: Lansing			
CITY: FOWLERVILLE	CITY: FOWLERVILLE				
CONTACT: Jason Adair , Quality Ma	CONTACT: Jason Adair , Quality Manager				
STAFF: David Rauch	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT			
SUBJECT: An unannounced inspection was conducted to ensure site was in compliance with PTI 116-17B.					
RESOLVED COMPLAINTS:					

On May 16, 2024 the State of Michigan's (SOM), Environment Great Lakes and Energy (EGLE), Air Quality Division (AQD), conducted a routine inspection Spring Arbor Coatings - Fowlerville. The facility location is at 895 Garden Lane, Fowlerville, MI.

The Environmental Contact:

Jason Adair, EHS, 734-593-0666, Jason.adair@springarborcoatings.com

Pete Schira, General Manager, 517-750-2903, pete.schira@springarborcoatings.com

**Facility Description:** 

Spring Arbor is an automotive parts painting facility that uses a dip tank process to apply an ecoat to the parts. The site does small amounts of assembly with taped or buttoned parts.

Spring Arbor Coatings operates under a synthetic minor permit, PTI 116-17B for two electrodeposition coating lines and curing ovens.

# **Regulatory Overview:**

This facility is classified as an Opt-Out source. They have the potential to emit more than a minor source but have less potential to emit than a major source.

#### Fee Status:

Spring Arbor Coatings does report to MiEnviro's Annual Emissions for a fee assessment, however, the site is not currently fee subject based on their emissions category. The site is currently a Category F source.

# **Facility History:**

This site has been in operation since 2018 as Spring Arbor Coatings. There have been no previous violations to report.

#### Location:

Spring Arbor's Fowlerville location is located on an industrial side road on Garden Lane near downtown Fowlerville. The site is surrounded by business on the north and west sides. To the East and South there is the Red Cedar River and forests.

# Inspection:

Arrived at the facility at 12:22PM where I walked into the building and was met by a staff member who took me to meet Pete Schira, the Plant Manager. Pete stated that he is not the environmental contact for the site, but could show me around and help answer some questions, and any questions that I needed more information on, I would be put in contact with Jason Adair. Pete and I began the inspection by looking at the plant's first of two dip lines. I was shown the tanks and all of the first dip e-coat process. I was shown the full process, and then we walked past the shot blast units as we crossed the plant to the second dip line, where I observed the full process. Following the dip lines, I was taken to the assembly stations where small automotive parts were buttoned or taped together to make the parts. The last stop of the plant tour were the testing labs, where the site checks on environmental factors on parts to determine life span of the parts. Following the tour we sat down in a conference room and discussed the special conditions of the permit. We went through each and every special condition and records were sent over via email.

#### **Emission Units:**

Emission Unit	Description	Applicable Regulation	Compliance
EUCOATINGF1	12 chamber electrodeposition steel coatings line with curing oven.	PTI 116-17B	С
EUCOATINGF2	12 chamber electrodeposition steel coatings line with curing oven.	PTI 116-17B	С
Boiler 1	Natural gas fired boiler; 1 million btu. Serves e-coat line 1.	Exempt 282(b)(i)	С
Boiler 2	Natural gas fired boiler; 2 million btu. Serves e-coat line 1.	Exempt 282(b)(i)	С
Shot Blast Cleaner	A metal shot blast unit for cleaning paint off racks.	285(2)(vi)(B)	С
Storage Tanks	Various chemical storage tanks.	284(i)	С
6 Testing Chambers	Small testing units to expose parts to unique environmental conditions.	283(2)(b)	С

## **Facility Record Keeping:**

# **EU-Coating Line 1**

Month	Total LBs VOC	Lbs/gal VOC (Limit is 1.1)	Tons of VOC	12month Rolling VOCs
January 2022	321.7	0.82	0.16	2.53
February 2022	332.5	0.57	0.16	2.45
March 2022	307.45	0.66	0.15	2.34
April 2022	252.54	0.94	0.10	2.19
May 2022	590.1	0.67	0.30	2.21
June 2022	120	0.55	0.06	2.11
July 2022	409.2	0.66	0.20	2.11
August 2022	386.9	0.66	0.19	2.13
September 2022	257.5	0.64	0.12	2.08
October 2022	180	0.55	0.09	2.02
November 2022	313.5	1.03	0.15	1.91
December 2022	157.5	0.71	0.07	1.75
January 2023	455.5	0.89	0.15	1.77
February 2023	250	0.83	0.13	1.75
March 2023	140.2	0.91	0.07	1.72
April 2023	332.5	0.80	0.17	1.59

May 2023	216.5	0.73	0.11	1.64
June 2023	272.5	0.89	0.14	1.58
July 2023	232.5	1.00	0.12	1.51
August 2023	194.75	1.00	0.1	1.49
September 2023	237.5	0.65	0.12	1.52
October 2023	40	0.55	0.02	1.39
November 2023	190	0.55	0.09	1.29
December 2023	130	1.10	0.06	1.28
January 2024	229.3	0.65	0.11	1.54
February 2024	330	0.95	0.24	1.52
March 2024	251.4	0.76	0.13	1.51
April 2024	292.5	0.86	0.15	1.39
May 2024	455.3	0.76	0.23	1.47
June 2024	190.3	0.67	0.1	1.46

# **Eu-Coating Line 2**

Month		Lbs/gal VOC (Limit is 1.1)		12month Rolling VOCs
January 2022	173.4	0.47	0.09	1.11
February 2022	200.6	0.47	0.10	1.00

		1	1	1
March 2022	125.8	0.47	0.06	0.93
April 2022	96.9	0.47	0.04	0.85
May 2022	123.35	0.66	0.06	0.87
June 2022	86.19	0.47	0.04	0.81
July 2022	92.65	0.47	0.04	0.80
August 2022	86.21	0.51	0.04	0.77
September 2022	63.24	0.47	0.03	0.72
October 2022	80.24	0.47	0.04	0.71
November 2022	160	0.84	0.08	0.71
December 2022	76.5	0.47	0.03	0.65
January 2023	71.4	0.47	0.03	0.59
February 2023	93.16	0.47	0.04	0.53
March 2023	59.84	0.47	0.03	0.50
April 2023	43.35	0.47	0.02	0.48
May 2023	63.75	0.47	0.03	0.45
June 2023	124.5	0.82	0.06	0.47
July 2023	51	0.47	0.03	0.46
August 2023	63.58	0.47	0.03	0.45

September 2023	66.13	0.47	0.03	0.45
October 2023	57.29	0.47	0.03	0.44
November 2023	64.6	0.47	0.03	0.39
December 2023	150.65	1.10	0.07	0.43
January 2024	64.09	0.47	0.03	0.43
February 2024	84.49	0.47	0.04	0.43
March 2024	77.69	0.47	0.04	0.45
April 2024	116.28	0.47	0.06	0.48
May 2024	112.03	0.47	0.06	0.44
June 2024	112.2	0.47	0.06	0.44

Upon review of the site's records and calculations, all emissions are within the limits of PTI No. 116-17B. The site provided spreadsheet of all data that is used for calculating the VOC contents, minus water and including solvent and paint for total VOC's.

Coating Line 1 and Coating Line 2 both have an individual VOC limit of 10 tpy on 12-month rolling time period, with a material limit of 1.1 lb/gal (minus water) of VOC. Both lines are well below their emission limit in the permit.

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

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	10.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUCOATINGF1	SC VI.3	R 336.1702(a)

Result: Site is in compliance with the emissions limit.

#### II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	1.1 lb/gal (minus water) <sup>a</sup> as applied	Instantaneous	EUCOATINGF1	SC V.1	R 336.1702(a)

<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))

Result: Site is in compliance with material limit based on calculations and records review.

#### 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. (R 336.1702(a))

Result: Site is in compliance. Waste container for spend paint product is kept in a closed container.

2. 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. (R 336.1205(3), R 336.1225, R 336.1702(a))

Result: Site is in compliance with minimizing fugitive emissions.

#### V. <u>TESTING/SAMPLING</u>

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 material, 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. (R 336.1225, R 336.1702, R 336.2001, R 336.2004, R 336.2004, R 336.2040(5))

Result: Compliance, site uses manufacturers formulations for determining VOC content of paint and solvent.

#### 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 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1702(a))

Result: Compliance, site had up to date records.

 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, 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 and make them available to the Department upon request. (R 336.1225, R 336.1702)

Result: Compliance, site provided all SDS forms for chemicals used on site.

- 3. The permittee shall keep the following information on a monthly basis for EUCOATINGF1:
  - a) Gallons (with water) of each material used.
  - b) VOC content (minus water and with water) of each material 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.

The permittee shall keep records using mass balance or an 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. (R 336.1702(a))

Results: Site is in compliance with all applicable conditions listed above. Site uses a spreadsheet for each month to record all required data.

## 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. SVOVENF1	15	36	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVCLEANERF1	30	37	R 336.1225, 40 CFR 52.21(c) & (d)

Result: I did not use a range finder, however based on observation and height of building all stacks appear to meet the required heights.

The following conditions apply to: EUCOATINGF2

# I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	10.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUCOATINGF2	SC VI.3	R 336.1702(a)

Result: Site is in compliance with the emissions limit.

#### II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	1.1 lb/gal (minus water) <sup>a</sup> as applied	Instantaneous	EUCOATINGF2	SC V.1	R 336.1702(a)

<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))

Result: Site is in compliance with the emissions 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. (R 336.1702(a))

Result: Site is in compliance. Waste container for spend paint product is kept in a closed container.

2. 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. (R 336.1205(3), R 336.1225, R 336.1702(a))

Result: Site is in compliance with minimizing fugitive emissions.

#### 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 material, 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. (R 336.1225, R 336.1702, R 336.2001, R 336.2004, R 336.2004, R 336.2004(5))

Result: Compliance, site uses manufacturers formulations for determining VOC content of paint and solvent.

### 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 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1702(a))

Result: Compliance, site had up to date records

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, 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 and make them available to the Department upon request. (R 336.1225, R 336.1702)

Result: Compliance, site provided all SDS forms for chemicals used on site

- 3. The permittee shall keep the following information on a monthly basis for EUCOATINGF2:
  - a) Gallons (with water) of each material used.
  - b) VOC content (minus water and with water) of each material 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.

The permittee shall keep records using mass balance or an 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. (R 336.1702(a))

Results: Site is in compliance with all applicable conditions listed above. Site uses a spreadsheet for each month to record all required data.

#### **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. SVOVENF2	16	36	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVCLEANERF2 36		37	R 336.1225, 40 CFR 52.21(c) & (d)

Result: I did not use a range finder, however, based on observation and height of building all stacks appear to meet the required heights.

#### FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

The following conditions apply Source-Wide to: FGFACILITY

# I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 8.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1205(3)
2. Aggregate HAPs	Less than 22.4 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1205(3)
3. Methyl isobutyl ketone (CAS# 108-10-1)	3.0 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.4	R 336.1225(2)

Results: Site stated they no longer use HAP containing materials on site and they have not used Methyl Isobutyl ketone. Site records would confirm this. Compliance.

Other conditions about HAPs and MIK are not applicable at this time. The site was made aware if they have chemical changes and begin using HAP/MIK chemicals, all conditions will be required. Reviewed conditions with Pete Schira.

<u>Conclusion</u>: There were no odors or visible emissions observed while on site. No complaints have been received for the site. Following a full review of the site's records and a tour of the plant, it can be determined Spring Arbor Coatings is in compliance with PTI 116-17B.

David Rauch	DATE 07/11/2024	SUPERVISOR RB