

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY  
AIR QUALITY DIVISION**

May 25, 2022

**PERMIT TO INSTALL**  
151-05B

**ISSUED TO**  
Pioneer Metal Finishing – Stephens Road

**LOCATED AT**  
13251 Stephens Road  
Warren, Michigan 48089

**IN THE COUNTY OF**  
Macomb

**STATE REGISTRATION NUMBER**  
N6388

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: <b>March 8, 2022</b>	
DATE PERMIT TO INSTALL APPROVED: <b>May 25, 2022</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

## PERMIT TO INSTALL

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### COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
NFE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

### POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H <sub>2</sub> S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO <sub>x</sub>	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

## GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

**EMISSION UNIT SPECIAL CONDITIONS**

**EMISSION UNIT SUMMARY TABLE**

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

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EU-12	The chain on edge (COE) booth consists of a spray coating booth and associated oven. The parts enter a Non-Fugitive Enclosure (NFE) on a chain conveyor and are spray coated with HVLP applicators before entering an oven. Parts (primarily metal automobile parts) are loaded manually onto the chain conveyor. Finished parts are unloaded manually and placed into shipping bins. Particulate matter emissions are controlled by dry filters. The VOC emissions from booth and oven are controlled via Non-Fugitive Enclosure (NFE) and a regenerative thermal oxidizer (RTO). Also, purge and cleanup operations are included.	06-01-2021 / 05-25-2022	FGRTO
EU-02	Large dip drain line consist of a coating reservoir installed inside a non-fugitive enclosure. Parts enter the booth on a conveyor and are dipped into the coating reservoir. After coating the parts are removed from the reservoir and excess coating is drained off the parts back into the coating reservoir. The VOC emissions are controlled via Non-Fugitive Enclosure (NFE) and a regenerative thermal oxidizer (RTO).	05-01-2005 / 06-01-2021 / 05-25-2022	FGRTO
EU-03	Small dip drain line consist of coating reservoir installed inside a non-fugitive enclosure. Parts enter the booth on a conveyor and are dipped into the coating reservoir. After coating the parts are removed from the reservoir and excess coating is drained off the parts back into the coating reservoir. The purge and cleanup solvents are included. The VOC emissions are uncontrolled.	05-15-1998 / 06-01-2021	FGRule621
EU-04	One large spray booth followed by an oven. The particulate emissions are controlled by dry filters. The VOC emissions are controlled via NFE and an RTO.	05-15-1998 / 06-01-2021 / 05-25-2022	FGRTO
EU-05	Batch oven. The VOC emissions are controlled via NFE and an RTO.	05-15-1998 / 06-01-2021 / 05-25-2022	FGRTO
EU-06	One small spray booth followed by an oven. The particulate emissions are controlled by dry filters. The VOC emissions are controlled via NFE and an RTO.	05-15-1998 / 06-01-2021 / 05-25-2022	FGRTO
EU-10	Round table automated coating booth. The VOC emissions are controlled via NFE and an RTO.	05-01-2021 / 05-25-2022	FGRTO

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

**EU-03  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Small dip drain line consist of coating reservoir installed inside a non-fugitive enclosure. Parts enter the booth on a conveyor and are dipped into the coating reservoir. After coating the parts are removed from the reservoir and excess coating is drained off the parts back into the coating reservoir. The purge and cleanup solvents are included. The VOC emissions are uncontrolled.

**Flexible Group ID:** FGRule621

**POLLUTION CONTROL EQUIPMENT**

Dry filters to control particulate matter.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	2,000 pounds per month	Each calendar month	EU-03	SC VI.2 SC VI.3	R 336.1702(d)
2. VOC	3.9 tpy	12-month rolling time period as determined at the end of each calendar month	EU-03	SC VI.2 SC VI.3	R 336.1205(3), R 336.1702(d)

**II. MATERIAL LIMIT(S)**

1. The permittee shall not use more than 5 gallons of total coatings per calendar day in the EU-03.<sup>1</sup> **(R 336.1225)**
2. The permittee shall not use more than 1,200 gallons of total coatings per rolling 12-month time period in the EU-03.<sup>1</sup> **(R 336.1225)**

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall capture all waste coatings and cleanup solvents (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 336.1225, 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. **(R 336.1224, R 336.1370(1))**
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. **(R 336.1205(3), R 336.1225, R 336.1702(a))**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate EU-03 unless all respective exhaust filters are installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1301, R 336.1910)**

**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. (R 336.1205, R 336.1225, R 336.1702)

**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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1702)
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 336.1224, R 336.1225, R 336.1702)
3. The permittee shall keep the following information on a calendar month basis for EU-03:
  - a) Gallons (with water) of each material used.
  - b) VOC content (with water) of each material as applied.
  - c) VOC mass emission calculations determining the monthly emission rate in pounds per calendar month and tons per calendar month.
  - e) 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 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. (R 336.1205, R 336.1702(d))

4. The permittee shall keep a separate written record for the following for EU-03:
  - a) Actual operating hours per day
  - b) The amount of each coating used, per calendar day.
  - c) The amount of each coating used, per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file and make them available to the Department upon request.<sup>1</sup> (R 336.1225)

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged 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. SV-03 (EU-03)	10	15 (With Rain Cap)	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

### FLEXIBLE GROUP SPECIAL CONDITIONS

#### FLEXIBLE GROUP SUMMARY TABLE

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

<b>Flexible Group ID</b>	<b>Flexible Group Description</b>	<b>Associated Emission Unit IDs</b>
FGRule621	All metal parts coating lines source-wide, including metal parts coating lines covered by other permits, which are exempt by R 336.1621(10)(b).	EU-03 (As of April 2021)
FGRT0	Six (6) emissions units for coating of metal parts. The purge and cleanup solvents are included. The particulate emissions are controlled by dry filters. The VOC emissions are controlled via Non-Fugitive Enclosure (NFE) associated with each emission unit and a common regenerative thermal oxidizer (RTO).	EU-02, EU-04, EU-05, EU-06, EU-10, EU-12

<b>FGRule621 FLEXIBLE GROUP CONDITIONS</b>
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**DESCRIPTION**

All metal parts coating lines source-wide, including metal parts coating lines covered by other permits, which are exempt by R 336.1621(10)(b).

**Emission Unit:** EU-03 (As of April 2021)

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	30.0 tpy	12-month rolling time period as determined at the end of each calendar month	All metal parts coating lines source-wide, including metal parts coating lines covered by other permits, which are exempt by R 336.1621(10)(b).	SC VI.2, SC VI.3	R 336.1702(d)

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

**V. TESTING/SAMPLING**

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

NA

**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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1702(d))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, cleanup solvents, etc. (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 336.1702(d))**

3. The permittee shall keep the following information on a calendar month basis for all metal parts coating lines source-wide, including metal parts coating lines covered by other permits, which are exempt by R 336.1621(10)(b):
- a) Gallons or pounds of each VOC containing material used.
  - b) VOC content, in pounds per gallon or pounds per pound as applied, of each VOC containing material used.
  - c) VOC emission calculations determining the monthly emission rate in tons per calendar month.
  - d) VOC 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 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. **(R 336.1702(d))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

**FGRTO  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Six (6) emissions units for coating of metal parts. The purge and cleanup solvents are included. The particulate emissions are controlled by dry filters. The VOC emissions are controlled via Non-Fugitive Enclosure (NFE) associated with each emission unit and a common regenerative thermal oxidizer (RTO).

**Emission Units:** EU-02, EU-04, EU-05, EU-06, EU-10, EU-12

**POLLUTION CONTROL EQUIPMENT**

Non-Fugitive Enclosure (NFE) associated with each emission unit and a common Regenerative Thermal Oxidizer (RTO) to control VOC. Overspray exhaust filters to control particulate matter.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	9.3 tpy	12-month rolling time period as determined at the end of each calendar month	FGRTO	SC VI.2, SC VI.3, SC V.2, SC V.3	R 336.1205(1)(a)(ii), R 336.1702(a)
2. Methyl isobutyl ketone (CAS No. 108-10-1)	24.1 pounds per 8-hour	Per 8-hour	FGRTO	SC VI.2, SC VI.4	R 336.1225(1)

**II. MATERIAL LIMIT(S)**

1. The permittee shall not use more than 201 gallons of total coatings per calendar day in the FGRTO.<sup>1</sup> **(R 336.1225)**
2. The permittee shall not use more than 51,300 gallons of total coatings per rolling 12-month time period in the FGRTO.<sup>1</sup> **(R 336.1225)**

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall capture all waste coatings, purge/cleanup solvents, etc. (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 336.1225, 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. **(R 336.1224, R 336.1370(1))**
3. The permittee shall handle all VOC and/or HAP containing materials, 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))**
4. Within 30 days from issuance of this permit the permittee shall submit, implement, and maintain an updated malfunction abatement plan (MAP) as described in Rule 911(2). The MAP shall, at a minimum, specify the following:

- a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
- d) A description of the procedures to capture, handle, and dispose of all materials to minimize the generation of fugitive emissions per SC numbers III.1 and III.3.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 30 days after such an event occurs. The permittee shall also amend the MAP within 30 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**

5. The permittee shall maintain a maximum pressure differential of negative (-) 0.007 inches of water between each Non-Fugitive Enclosure (NFE) and the adjacent area through each natural draft opening (NDO) on a continuous basis. An NDO defined as any opening that is not connected to a duct in which a fan or blower installed. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate FGRTTO unless all respective exhaust filters are installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1301, R 336.1910)**
2. The permittee shall equip and maintain each spray booth of FGRTTO with HVLP or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. **(R 336.1702(a))**
3. The permittee shall not operate FGRTTO unless the RTO and the associated NFE for each emission unit are installed, maintained, and operated in a satisfactory manner acceptable to the AQD District Supervisor. Satisfactory operation of the RTO includes a minimum VOC destruction efficiency of 95 percent (by weight), maintaining a minimum temperature of 1,500°F or the minimum combustion zone temperature from the most recent acceptable stack test, and a minimum retention time of 0.5 seconds. Satisfactory operation includes maintaining a maximum pressure differential between the NFE and the adjacent area through each NDO, as specified in SC III.5, so that air flows into the NFE through all NDOs. **(R 336.1205(1)(a)(ii), R 336.1225, R 336.1702(a), R 336.1910).**
4. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner acceptable to the AQD District Supervisor, a temperature monitoring device in the combustion chamber of the RTO to monitor and record the temperature, on a continuous basis, during operation of FGRTTO. For the purpose of this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes. **(R 336.1205(1)(a)(ii), R 336.1225, R 336.1702(a))**
5. The permittee shall install, calibrate, maintain, and operate, in a satisfactory manner acceptable to the AQD District Supervisor, devices to continuously monitor and record the pressure differential between the NFE and the adjacent areas through each NDO, on a continuous basis during operation of FGRTTO. For the purpose of this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every week. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

## **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 coatings, 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 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**
2. Within 120 days from issuance of this permit, the permittee shall verify the VOC destruction efficiency of the RTO, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1702(a), R 336.1910, R 336.2001, R 336.2003, R 336.2004)**
3. Within 120 days from issuance of this permit and afterward on a semi-annual basis, the permittee shall verify capture efficiency of each enclosure, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 51, Appendix M. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. After two consecutive tests demonstrating that the direction of air flow at all NDOs is into each respective enclosure, the permittee may request in writing that the testing schedule be revised to a less frequent time period as approved by the AQD District Supervisor. **(R 336.1702(a), R 336.1910, R 336.2001, R 336.2003, R 336.2004)**

## **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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1225, R 336.1702)**
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 at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a calendar month basis for FGRT0:
  - a) Gallons (with water) of each material used.
  - b) VOC content (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 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 at the facility and make them available to the Department upon request. **(R 336.1702(a))**

4. The permittee shall keep the following information on 8-hour basis for FGRTO:
  - a) Gallons (with water) of each methyl isobutyl ketone (CAS No. 108-10-1) containing material used.
  - b) Where applicable, gallons (with water) of each methyl isobutyl ketone (CAS No. 108-10-1) containing material reclaimed.
  - c) The methyl isobutyl ketone (CAS No. 108-10-1) content (with water) in pounds per gallon of each material used.
  - d) Methyl isobutyl ketone (CAS No. 108-10-1) mass emission calculations determining the emission rate in pounds per 8-hr time period.

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 at the facility and make them available to the Department upon request.<sup>1</sup> **(R 336.1225(1))**

5. The permittee shall keep a separate written record for the following for FGRTO:
  - a) Actual operating hours per day
  - b) The amount of each coating used, per calendar day.
  - c) The amount of each coating used, per 12-month rolling time period as determined at the end of each calendar month.
  - d)

The permittee shall keep the records on file at the facility and make them available to the Department upon request.<sup>1</sup> **(R 336.1225)**

6. The permittee shall monitor and record, in a satisfactory manner, the temperature in the combustion chamber of the RTO, on a continuous basis, during operation of FGRTO. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a)(ii), R 336.1225, R 336.1702)**
7. The permittee shall monitor and record, in a satisfactory manner acceptable to the AQD District Supervisor, the pressure differential between the NFE for FGRTO and the adjacent area through each NDO, on a continuous basis. Within 90 days of permit issuance, the permittee shall prepare and submit an air pressure differential monitoring plan to the AQD Technical Programs Unit and to the AQD District Supervisor. The monitoring plan shall include a quality assurance plan stating the method proposed to calibrate/audit the monitor in order to verify that the monitoring equipment has been installed and is operating properly. **(R 336.1205(1)(a)(ii), R 336.1225, R 336.1702)**
8. The permittee shall keep records of the pressure differential between the PTE and the adjacent area through each NDO. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a))**

## **VII. REPORTING**

NA

## **VIII. STACK/VENT RESTRICTION(S)**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-RTO (FGRT0)	64.25	45	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

## FGFACILITY CONDITIONS

**DESCRIPTION:** The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 9.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
2. Aggregate HAPs	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
3. ethylbenzene (CAS No. 100-41-4)	1.4 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1225(2)

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

**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 HAP content of any material, as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. **(R 336.1205(3))**

**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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(3))**
2. The permittee shall keep the following information on a calendar month basis for FGFACILITY:
  - a) Gallons or pounds of each HAP containing material used.
  - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
  - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.

- d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
- e) Individual and aggregate HAP emission calculations determining the annual emission rate of each 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. **(R 336.1205(3))**

3. The permittee shall keep the following information on a calendar month basis for FGFACILITY:
- a) Gallons (with water) of each ethylbenzene (CAS 100-41-4) containing material used.
  - b) Where applicable, gallons (with water) of each ethylbenzene (CAS 100-41-4) containing material reclaimed.
  - c) The ethylbenzene (CAS 100-41-4) content (with water) in pounds per gallon of each material used.
  - d) Ethylbenzene (CAS 100-41-4) mass emission calculations determining the monthly emission rate in tons per calendar month.
  - e) Ethylbenzene (CAS 100-41-4) mass emission calculations determining the annual emission rate in tons per year on a 12-month rolling time period basis as determined at the end of each calendar month.

The permittee shall keep the 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.<sup>1</sup> **(R 336.1225(2))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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