

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

February 7, 2024

**PERMIT TO INSTALL
13-24**

**ISSUED TO
Cadillac Casting Incorporated**

**LOCATED AT
1500 Fourth Avenue
Cadillac, Michigan 49601**

**IN THE COUNTY OF
Wexford**

**STATE REGISTRATION NUMBER
B2178**

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: December 18, 2023	
DATE PERMIT TO INSTALL APPROVED: February 7, 2024	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
PTE	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 ₂ 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 ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	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 ₂	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.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUCOREMOLDMAKING	Catalyzed core making (core room) process using sand, binders and catalysts to produce cores for use in EUSPOGREENSAND of FGSPOLINE for iron castings production. Emissions are controlled by one sulfuric acid scrubber.	05-30-1996 / 12-10-2010 04-27-2016	FGFORMALDEHYDESRL
EUALINEMOLD	A-line core and mold making process utilizing four Sutter mold machines to produce molds and mold cores for the metal pouring process in EUALINE. Emissions are controlled by two sulfuric acid scrubbers. EUALINEMOLD has applicable Preventative Maintenance plans.	12-19-2003 / 09-28-2009	FGFORMALDEHYDESRL
EUSPOPOURANDCOOL	FGSPOLINE pouring and cooling of molten iron using green sand molds and set cores. Equipment consists of a pouring station and covered conveyor for cooling. Emissions are exhausted uncontrolled from multiple stacks along the cooling line.	05-30-1996	FGSPOLINE FGFORMALDEHYDESRL
EUSPOGREENSAND	Green sand mold production line used to produce green sand molds for FGSPOLINE. Equipment includes Spomatic cope and drag machines, and sand preparation. Emissions are controlled by a wet scrubber and a baghouse. EUSPOGREENSAND has applicable CAM, MAP, and Preventative Maintenance plans.	05-30-1996	FGSPOLINE FGFORMALDEHYDESRL

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUSPOBREAKSORT	FGSPOLINE process used to remove iron parts from the green sand molds. Equipment includes the breaking and sorting line. Emissions are controlled by two baghouses. EUSPOBREAKSORT has applicable CAM, MAP, and Preventative Maintenance plans.	05-30-1996 09-11-2013	FGSPOLINE FGFORMALDEHYDESRSL
EUSPOSHAKEOUT	FGSPOLINE process used to remove sand from cast parts and recover sand for the green sand mold process. Emissions are controlled by a wet scrubber. EUSPOSHAKEOUT has applicable CAM, MAP, and Preventative Maintenance plans.	05-30-1996	FGSPOLINE FGFORMALDEHYDESRSL
EUENGINE	2763 HP natural gas-fired 4-stroke rich-burn internal combustion engine (ICE) controlled by an oxidation catalyst.	TBD	FGFORMALDEHYDESRSL

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.

**EUENGINE
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A four-stroke rich-burn (4SRB) spark ignition (SI) natural-gas fired reciprocating internal combustion engine (RICE) constructed after June 12, 2006, manufactured on or after July 1, 2007, and installed after December 19, 2002. The engine is used for non-emergency purposes and is rated at 2763 brake horsepower (bhp).

Flexible Group ID: FGFORMALDEHYDESRL

POLLUTION CONTROL EQUIPMENT

EUENGINE is controlled by an oxidation catalyst.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO _x ^A	2.0 g/hp-hr or 160 ppmvd at 15% O ₂	Hourly	EUENGINE	SC V 1, SC V 2, SC VI 3	R 336.1205(1)(a), 40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60
2. CO ^A	4.0 g/hp-hr or 540 ppmvd at 15% O ₂	Hourly	EUENGINE	SC V 1, SC V 2, SC VI 3	R 336.1205(1)(a), 40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60
3. VOC ^{A, B}	1.0 g/hp-hr or 86 ppmvd at 15% O ₂	Hourly	EUENGINE	SC V 1, SC V 2, SC VI 3	R 336.1205(1)(a), 40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60
4. Formaldehyde	0.183 pph ¹	Hourly	EUENGINE	SC V 1, SC V 2	R 336.1225

ppmvd = parts per million by volume at 15 percent oxygen and on a dry gas basis

^A For non-certified engines, the permittee may choose to comply with either g/hp-hr or ppmvd at 15% O₂.

^B For purposes of Part 60 Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline-quality natural gas, as defined in 40 CFR 60.4248, in EUENGINE. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 60.4230)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. No later than 60 days after the initial startup of EUENGINE, the permittee shall submit to the AQD District Supervisor, for review and approval, a preventative maintenance/malfunction abatement plan (PM/MAP) for EUENGINE. After approval of the PM/MAP by the AQD District Supervisor, the permittee shall not operate EUENGINE unless the PM/MAP, or an alternate plan approved by the AQD District Supervisor, is implemented, and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:
 - a) Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.

- b) Description of the items or conditions to be inspected and frequency of the inspections or repairs.
- c) Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
- d) Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- e) 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.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the PM / MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies. **(R 336.1205, R 336.1225, R 336.1910, R 336.1911, R 336.1912, 40 CFR 52.21(c) & (d), 40 CFR 60.4243(b)(2))**

2. The permittee shall operate and maintain EUENGINE such that it meets the emission limits in SC I.1 through SC I.3 over the entire life of the engine. **(40 CFR 60.4205, 40 CFR 60.4206, 40 CFR 60.4234, 40 CFR 60.4243(b))**
3. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan and records of conducted maintenance for EUENGINE and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4243(b)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUENGINE unless the associated oxidation catalyst is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EUENGINE as required in SC III.1. **(R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart JJJJ)**

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup of EUENGINE, the permittee shall verify NO_x, CO, VOC, and formaldehyde emission rates, in SC I.1-I.4. 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. 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 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
2. If EUENGINE is a non-certified engine and control device or a certified engine operating in a non-certified manner, per 40 CFR Part 60 Subpart JJJJ, the permittee must demonstrate compliance as follows:
 - a) Conduct an initial performance test to demonstrate compliance with the applicable emission standards in 40 CFR 60.4233(e), within 60 days after achieving the maximum production rate at which the engines will be operated, but no later than 180 days after initial startup.
 - b) If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244.
 - c) Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years, whichever comes first.

If a performance test is required, no less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of 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. **(40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60 Subpart JJJJ)**

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/records 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(a), R 336.1910)**
2. The permittee shall keep, in a satisfactory manner, all records related to, or as required by, the MAP as specified in SC III.1. **(R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.1912, 40 CFR 52.21(c) & (d))**
3. The permittee shall continuously monitor and record, in a satisfactory manner, the inlet and outlet temperatures, and the pressure drop across the oxidation catalyst for EUENGINE. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
4. The permittee shall keep, in a satisfactory manner, the following records for EUENGINE:
 - a) All notifications submitted to comply with this subpart and all documentation supporting any notification.
 - b) Maintenance conducted on the engine.
 - c) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable.
 - d) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner, documentation that the engine meets the emission standards.
 - i. Testing for each engine, as required in SC V.2.
 - ii. Maintenance activities for each engine, as required by SC III.1.

The permittee shall keep all records on file and make them available to the Department upon request.
(40 CFR 60.4245(a))

5. The permittee shall monitor and record, the total hours of operation and fuel usage for EUENGINE, on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUENGINE. **(R 336.1201(7)(a))**
2. The permittee shall submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the following information:
 - a) The date construction of the engine commenced.
 - b) Name and address of the owner or operator.
 - c) The address of the affected source.
 - d) The engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement.
 - e) The emission control equipment.
 - f) Fuel used in the engine.

The notification must be postmarked no later than 30 days after construction commenced for each engine.
(40 CFR 60.7(a)(1), 40 CFR 60.4245(c))

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:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVENGINE	16	15	R 336.1225 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, as specified in 40 CFR 60, Subpart JJJJ, as they apply to EUENGINE. **(40 CFR Part 60, Subpart JJJJ)**
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 ZZZZ, as they apply to any engine included in FGRICEMACTZZZZ. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A & ZZZZ)**

Footnotes:

¹ 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.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGFORMALDEHYDESRL	Facility operations that emit formaldehyde.	EUENGINE, EUCOREMOLDMAKING, EUALINEMOLD EUSPOPOURANDCOOL, EUSPOGREENSAND, EUSPOBREAKSORT, EUSPOSHAKEOUT

**FGFORMALDEHYDESRL
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Facility operations that emit formaldehyde.

Emission Unit: EUENGINE, EUCOREMOLDMAKING, EUALINEMOLD EUSPOPOURANDCOOL, EUSPOGREENSAND, EUSPOBREAKSORT, EUSPOSHAKEOUT

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Formaldehyde	1.93 tpy ¹	12-month rolling period as determined at the end of each month	FGFORMALDEHYDESRL	SC VI 2	R 336.1225(2)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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/records 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))
2. The permittee shall keep the following information for FGFORMALDEHYDESRL:
 - a) Formaldehyde mass emission calculations determining the monthly emission rate in tons per calendar month using emission factors approved by the AQD District Supervisor.
 - b) Formaldehyde 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 using emission factors approved by the AQD District Supervisor.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.¹ (R 336.1225(2))

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:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV003	52 ¹	85 ¹	R 336.1225
2. SV010	52 ¹	85 ¹	R 336.1225
3. SV005A	24 ¹	44 ¹	R 336.1225
4. SV005B	24 ¹	44 ¹	R 336.1225
5. SV005C	24 ¹	44 ¹	R 336.1225
6. SV019	30 ¹	33 ¹	R 336.1225
7. SV020	30 ¹	33 ¹	R 336.1225
8. SV018	28 ¹	60 ¹	R 336.1225
9. SVENGINE	16 ¹	15 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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