

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

January 13, 2022

**PERMIT TO INSTALL**  
195-19B

**ISSUED TO**  
Compassionate Advisors-Pincanna LLC

**LOCATED AT**  
419 East Pinconning Road  
Pinconning, Michigan 48650

**IN THE COUNTY OF**  
Bay

**STATE REGISTRATION NUMBER**  
P1098

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>November 30, 2021</b>	
DATE PERMIT TO INSTALL APPROVED: <b>January 13, 2022</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

**PERMIT TO INSTALL**

**Table of Contents**

COMMON ACRONYMS ..... 2  
POLLUTANT / MEASUREMENT ABBREVIATIONS..... 3  
GENERAL CONDITIONS ..... 4  
EMISSION UNIT SPECIAL CONDITIONS..... 6  
    EMISSION UNIT SUMMARY TABLE ..... 6  
FLEXIBLE GROUP SPECIAL CONDITIONS..... 7  
    FLEXIBLE GROUP SUMMARY TABLE ..... 7  
    FGENGINES..... 8  
    FGBOILERS ..... 13  
    FGPROCESSES..... 15  
APPENDIX A ..... 17

## 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 <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.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Flexible Group ID
EUGEN1	A 650 kilowatts (kW) (939 Brake horsepower, bhp) natural gas-fueled engine manufactured in 2019.	FGENGINES
EUGEN2	A 1030 kilowatts (kW) (1431 bhp) natural gas-fueled engine manufactured in 2019.	FGENGINES
EUGEN3	A 1030 kilowatts (kW) (1431 bhp) natural gas-fueled engine manufactured in 2019.	FGENGINES
EUBOILER1	2 MMBtu/hr Natural Gas Boiler.	FGBOILERS
EUBOILER2	2 MMBtu/hr Natural Gas Boiler.	FGBOILERS
EUBOILER3	2 MMBtu/hr Natural Gas Boiler.	FGBOILERS
EUEXTRACT1	Cannabis extraction unit that uses Ethanol for cannabis extraction.	FGPROCESSES
EUEXTRACT2	Cannabis extraction unit that uses Butane or Propane for cannabis extraction.	FGPROCESSES

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.

## 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>
FGENGINES	Three natural gas fired engines used for electricity generation for the cannabis cultivation, extraction, processing, and distribution operations. EUGEN1 is equipped with AeriNO <sub>x</sub> SCR and Oxicat oxidation catalyst for control of NO <sub>x</sub> , CO, VOC, and formaldehyde. EUGEN2 & EUGEN3 are equipped with Oxicat. The AeriNO <sub>x</sub> SCR system includes a 1,100-gallon diesel exhaust fluid (DEF) tank.	EUGEN1 EUGEN2 EUGEN3
FGBOILERS	Three 2.0 MMBtu/hr natural gas-fired boilers.	EUBOILER1 EUBOILER2 EUBOILER3
FGPROCESSES	Two solvent based cannabis extraction units.	EUEXTRACT1 EUEXTRACT2

**FGENGINES  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Three natural gas fired engines used for electricity generation for the cannabis cultivation, extraction, processing, and distribution operations.

**Emission Unit:** EUGEN1, EUGEN2, EUGEN3

**POLLUTION CONTROL EQUIPMENT**

EUGEN1 is equipped with AeriNO<sub>x</sub> SCR and Oxicat oxidation catalyst for control of NO<sub>x</sub>, CO, VOC, and formaldehyde. EUGEN2 & EUGEN3 are equipped with Oxicat. The AeriNO<sub>x</sub> SCR system includes a 1,100-gallon diesel exhaust fluid (DEF) tank.

**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. NO <sub>x</sub>	1.0 g/hp-hr Or 82 ppmvd @15%O <sub>2</sub>	Hourly	Each engine in FGENGINES	SC III.2, SC V.2.	40 CFR 60.4233(e), Table 1 of 40 CFR Part 60, Subpart JJJJ
2. NO <sub>x</sub>	1.0 g/hp-hr	Hourly	Each engine in FGENGINES	SC V.1.	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
3. CO	2.0 g/hp-hr Or 270 ppmvd @15%O <sub>2</sub>	Hourly	Each engine in FGENGINES	SC III.2, SC V.2.	40 CFR 60.4233(e), Table 1 of 40 CFR Part 60, Subpart JJJJ
4. CO	0.7 g/hp-hr	Hourly	Each engine in FGENGINES	SC V.1.	R 336.1205(1)(a) & (3), 40 CFR 52.21 (d)
5. VOC <sup>A</sup>	0.7 g/hp-hr Or 60 ppmvd @15%O <sub>2</sub>	Hourly	Each engine in FGENGINES	SC III.2, SC V.2.	40 CFR 60.4233(e), Table 1 of 40 CFR Part 60, Subpart JJJJ
6. VOC <sup>B</sup>	0.4 g/hp-hr	Hourly	Each engine in FGENGINES	SC V.1.	R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a))

g/hp-hr = grams per horsepower hour

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

<sup>A</sup> Per footnote "d" of Table 1 of 40 CFR Part 60 Subpart JJJJ, when calculating emissions of VOCs, emissions of formaldehyde should not be included.

<sup>B</sup> This emission limit is for VOCs and the compliance demonstration must include formaldehyde.

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only pipeline quality natural gas in FGENGINES. **(R 336.1205(1)(a), 40 CFR 60.4230)**

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

1. No later than 30 days after startup of any engine in FGENGINES, the permittee shall submit to the AQD District Supervisor, for review and approval, a preventative maintenance / malfunction abatement plan (PM / MAP) for FGENGINES. After approval of the PM / MAP by the AQD District Supervisor, the permittee shall not operate FGENGINES 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.
  - f) A description of the corrective procedures or operational changes that shall be taken in the event of a leak of malfunction occurs to the DEF tank.

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 336.1702(a), R 336.1910, R 336.1911, R 336.1912, 40 CFR 52.21 (c) & (d))**

2. The permittee shall operate and maintain each engine included in FGENGINES such that it meets the emission limits in SC I.1, I.3, and I.5 over the entire life of the engine. **(40 CFR 60.4234, 40 CFR 60.4243(b))**
3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for each engine included in FGENGINES:
  - a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.
  - b) May only adjust engine settings according to and consistent with the manufacturer's emission-related written instructions.
  - c) Meet the requirements as specified in 40 CFR 1068, Subparts A through D.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and be subject to SC III.4. **(40 CFR 60.4243(b)(1))**

4. 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 for FGENGINES 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. Each engine in FGENGINES shall be certified to meet the applicable emission standard of 40 CFR 60.4233. The permittee shall install and configure each engine according to the manufacturer's specifications. **(40 CFR 60.4243)**
2. The nameplate capacity of EUGEN1 shall not exceed 650 kW (939 bhp), as certified by the equipment manufacturer. **(R 336.1205(1)(a) & (3), 40 CFR 60.4230)**

3. The nameplate capacity of EUGEN2 shall not exceed 1030 kW (1431 bhp), as certified by the equipment manufacturer. **(R 336.1205(1)(a) & (3), 40 CFR 60.4230)**
4. The nameplate capacity of EUGEN3 shall not exceed 1030 kW (1431 bhp), as certified by the equipment manufacturer. **(R 336.1205(1)(a) & (3), 40 CFR 60.4230)**
5. The permittee shall not operate EUGEN1 unless the associated SCR system and oxidation catalyst are installed, maintained, and operated in a satisfactory manner. The permittee shall not operate EUGEN2 & EUGEN3 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 FGEngines as required in SC III.1. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.1911, 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. Upon request of the AQD District Supervisor, , the permittee shall verify NO<sub>x</sub>, CO, and VOC emission factors used to calculate emissions from each engine included in FGEngines, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed below:

<b>Pollutant</b>	<b>Test Method Reference</b>
NO <sub>x</sub>	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	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. 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. No less than 7 days prior to testing, the permittee shall notify the AQD Technical Programs Unit and District Office, in writing, of the time and place of the test and who shall conduct it. 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(1)(a) & (3), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

2. For each non-certified engine included in FGEngines 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 each engine included in FGEngines will be operated, but not later than 180 days after initial startup of each engine included in FGEngines.
  - b) 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, thereafter to demonstrate compliance with the applicable emission standards.

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. **(R 336.2001, R 336.2003, R 336.2004, 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 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. **(R 336.1205(1)(a) & (3), R 3.661225, 40 CFR 52.21 (c) & (d))**

2. For certified engines in FGENGINES, the permittee shall keep, in a satisfactory manner, the following records:
  - a) Documentation indicating that each engine has been maintained according to manufacturer written instructions, is certified to meet the emission standards, and other information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
  - b) The manufacture written instructions shall be on-site and made available to the Department upon request.

The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4233(e), 40 CFR 60.4243(b))**

3. For non-certified engines in FGENGINES (or operated in a non-certified manner), the permittee shall keep, in a satisfactory manner, the following records:
  - a) Testing for each engine, as required in SC V.2.
  - b) Maintenance activities for each engine, as required by SC III.4.

The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4233(e), 40 CFR 60.4243(b))**

4. The permittee shall keep records of notifications submitted for the completion of construction and start-up of each engine in FGENGINES. **(40 CFR 60.4245(a))**
5. The permittee shall monitor and record the hours of operation of each engine in FGENGINES, on a monthly and 12-month rolling basis in a manner acceptable to the District Supervisor, Air Quality Division. **(R 336.1205(1)(a) & (3), R 336.1702(a), 40 CFR 52.21 (c) & (d))**
6. The permittee shall keep, in a satisfactory manner, all records related to, or as required by, the PM / MAP. **(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))**

## **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 each engine in FGENGINES. **(R 336.1201(7)(a))**
2. The permittee must submit an initial notification as required in 40 CFR 60.7(a)(1), for each engine in FGENGINE. The notification must include the following information:
  - a) The date construction commenced.
  - b) Name and address of the owner or operator.
  - c) The address of the engine.
  - d) Information about the engine, including make, model, engine family, serial number, model year, maximum engine power, and engine displacement.
  - e) The engine's emission control equipment.
  - f) Fuel used.

The notification shall be submitted to the AQD District Supervisor and must be postmarked no later than 30 days after the date construction commenced. **(40 CFR 60.7(a)(1), 40 CFR 60.4245(c))**

3. The permittee shall submit a notification specifying whether each engine included in FGENGINES will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. **(R 336.1201(3))**

**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. SVGEN1	12	48	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVGEN2	16	48	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVGEN3	16	48	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to each engine in FGENGINES. **(40 CFR Part 60, Subparts A & JJJJ, 40 CFR 63.6590(c)(1))**
2. The permittee shall comply with the 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 each engine in FGENGINES. **(40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6595)**

**FGBOILERS  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Three 2 MMBtu/hr natural gas-fired boilers.

**Emission Unit:** EUBOILER1, EUBOILER2, EUBOILER3

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only pipeline quality natural gas, in FGBOILERS. **(R 336.1205(1)(a), 40 CFR 60.4230)**

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

1. The heat input capacity of each boiler in EUBOILERS shall not exceed a maximum of 2.0 MM BTU per hour. **(R 336.1205(1))**

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

NA

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

NA

**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. SVBOILER1	14	35	R 336.1225, 40 CFR 52.21(c) & (d)

<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>
2. SVBOILER2	14	35	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVBOILER3	14	35	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**FGPROCESSES  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two solvent based cannabis extraction units.

**Emission Unit:** EUEXTRACT1, EUEXTRACT2

**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	24.75 tpy	12-month rolling time period as determined at the end of each calendar month	FGPROCESSES	SC VI.2	R 336.1205, R 336.1225, R 336.1702(a)

**II. MATERIAL LIMIT(S)**

1. The permittee shall only use Ethanol in EUEXTRACT1. **(R 336.1205, R 336.1225, R 336.1702(a))**
2. The permittee shall only use butane or propane in EUEXTRACT2. **(R 336.1205, R 336.1225, R 336.1702(a))**
3. A request to use an alternative solvent in FGPROCESSES can be submitted to the AQD District Supervisor for approval. **(R 336.1205, R 336.1225, R 336.1702(a))**

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

1. The permittee shall not operate FGPROCESSES unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 60 days of permit issuance, and is implemented and maintained. 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) 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 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 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the 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 336.1225, R 336.1702(a), R 336.1911)**

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

1. The permittee shall install, operate and maintain the extraction processes within FGPROCESSES according to the manufacturer specification. **(R 336.1225, R 336.1702(a))**

#### **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 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))**
2. The permittee shall keep the following information on a monthly basis for each extraction process within FGPROCESSES:
  - a) Volume or weight of each solvent used.
  - b) VOC content of each solvent as supplied on Safety data sheets (SDS).
  - 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) Hours of operations.

The permittee shall keep the records on file at the facility, in a format specified in Appendix A or an alternate format that has been approved by the AQD District Supervisor 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)**

NA

#### **IX. OTHER REQUIREMENT(S)**

NA

## APPENDIX A

### Calculating VOC/HAP emissions

The permittee shall demonstrate compliance with the emission limits in this permit by keeping track of the solvent usage in the extraction process. Then completing a mass balance assuming the entire solvent contents in the products are emitted. The calculation can be done using the following equation or an alternative method can be submitted to the AQD District Supervisor.

$$VOC_{emissions} = (Product_{consumption}) * (VOC \%)$$

Where:

$$Product_{consumption} = [Beginning Inventory] + [New Purchases] - [End Inventory]$$

VOC % is in weight percent (i.e. VOC's weight percent in the product)