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

September 28, 2023

PERMIT TO INSTALL
75-16C

ISSUED TO
Indeck Niles, LLC

LOCATED AT
2200 Progressive Drive
Niles, Michigan 49120

IN THE COUNTY OF
Berrien

STATE REGISTRATION NUMBER
N6921

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: **January 26, 2023**	
DATE PERMIT TO INSTALL APPROVED: **September 28, 2023**	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_2e	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_2S	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
EUCTGHRSG1	A 3,651 MMBTU/hr natural gas-fired combustion turbine generator (CTG) coupled with a heat recovery steam generator (HRSG). The HRSG is equipped with a natural gas-fired duct burner rated at 71 MMBTU/hr to provide heat for additional steam production. The HRSG is not capable of operating independently from the CTG. The CTG/HRSG is equipped with dry low NO_x burner (DLNB), selective catalytic reduction (SCR), and an oxidation catalyst.	4/1/2021	FGCTGHRSG
EUCTGHRSG2	A 3,651 MMBTU/hr natural gas-fired combustion turbine generator (CTG) coupled with a heat recovery steam generator (HRSG). The HRSG is equipped with a natural gas-fired duct burner rated at 71 MMBTU/hr to provide heat for additional steam production. The HRSG is not capable of operating independently from the CTG. The CTG/HRSG is equipped with dry low NO_x burner (DLNB), selective catalytic reduction (SCR), and an oxidation catalyst.	3/1/2021	FGCTGHRSG
EUAUXBOILER	A natural gas-fired auxiliary boiler rated at 85 MMBTU/hr to facilitate startup of the CTG/HRSG trains and to provide steam to the steam turbine generator seals. The auxiliary boiler is equipped with low NO_x burners (LNB) and flue gas recirculation (FGR).	6/1/2021	NA
EUFUELHTR1	A natural gas-fired 8.5 MMBTU/hr heat input fuel gas dew point heater for superheating the natural gas fuel above the hydrocarbon dew point temperature.	7/15/2021	FGFUELHTR
EUFUELHTR2	A natural gas-fired 8.5 MMBTU/hr heat input fuel gas dew point heater for superheating the natural gas fuel above the hydrocarbon dew point temperature.	7/15/2021	FGFUELHTR
EUEMENGINE	A 2,923 HP (2,180 kW) diesel-fueled emergency engine with a model year of 2011 or later, and a displacement of <10 liters/cylinder.	8/1/2021	NA
EUEMFUELTANK	A 3,500 gallon closed-roof tank for purposes of storing ultra-low sulfur diesel fuel. This tank services the diesel-fueled emergency engine.	8/1/2021	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUCOLDCLEANER	New closed-cover cold cleaner.	8/1/2021	NA

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.

EUAUXBOILER
EMISSION UNIT CONDITIONS

DESCRIPTION

A natural gas-fired auxiliary boiler rated at 85 MMBTU/hr to facilitate startup of the CTG/HRSG trains and to provide steam to the steam turbine generator seals. The auxiliary boiler is equipped with low NO_x burners (LNB) and flue gas recirculation (FGR).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Low NO_x burners and flue gas recirculation for NO_x control.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	0.04 lb/MMBTU	Hourly	EUAUXBOILER	SC V.1, SC VI.4	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810,
2. CO	0.04 lb/MMBTU	Hourly	EUAUXBOILER	SC V.1, SC VI.4	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
3. PM	0.005 lb/MMBTU	Hourly	EUAUXBOILER	SC V.2, SC VI.4	R 336.1331(1)(c), R 336.2810
4. PM10	0.6 pph	Hourly	EUAUXBOILER	SC V.2, SC VI.4	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
5. PM2.5	0.6 pph	Hourly	EUAUXBOILER	SC V.2, SC VI.4	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
6. SO_2	0.6 lb/MMscf	Based upon fuel records.	EUAUXBOILER	SC VI.4	R 336.2803, R 336.2804, R 336.2810
7. VOC	0.004 lb/MMBTU	Hourly	EUAUXBOILER	SC V.2, SC VI.4	R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2810

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
8. GHGs as CO_2e	43,596 tpy	12-month rolling time period as determined at the end of each calendar month.	EUAUXBOILER	SC VI.3, SC VI.4	R 336.1205(1)(a) & (b), 40 CFR 52.21(j)

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in EUAUXBOILER. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60 Subpart Dc, 40 CFR 63.11195(e))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall implement and maintain a malfunction abatement plan (MAP) as described in Rule 911(2) for EUAUXBOILER. 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.

   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 336.1205(1)(a) & (b), R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for EUAUXBOILER shall not exceed 85 MMBTU/hr on a fuel heat input basis. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR Part 60 Subpart Dc)**

2. The permittee shall not operate EUAUXBOILER unless the low NO_x burners and flue gas recirculation system are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining the air pollution control equipment in accordance with the MAP required in SC III.1. **(R 336.1205(1)(a) & (b), R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

V. TESTING/SAMPLING

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

1. The permittee shall verify CO and NOx emission rates from EUAUXBOILER by testing at owner's expense, in accordance with Department requirements. The permittee shall complete the required testing once every five years, unless an alternate testing schedule is approved by the District Supervisor. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
CO	40 CFR Part 60, Appendix A
NOx	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. 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 336.1205(1)(a) & (b), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

2. Upon request of the AQD District Supervisor, the permittee shall verify VOC, PM, PM10, and PM2.5 emission rates from EUAUXBOILER by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
VOCs	40 CFR Part 60, Appendix A
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	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. 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. 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 336.1205(1)(a) & (b), R 336.1331(1)(c), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

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(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.48c(g))**

2. The permittee shall calculate and keep monthly natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis and a 12-month rolling time period basis. 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) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.48c(d))**

3. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO_2e mass emissions for EUAUXBOILER, as required by SC I.8. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed according to Appendix B or an alternate method approved by the District Supervisor. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

4. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
   a) Compliance tests and any testing required under the special conditions of this permit.
   b) Monitoring data.
   c) Verification of heat input capacity required to show compliance with SC IV.1.

d) Identification, type and the amounts of fuel combusted in EUAUXBOILER on a calendar month basis.
e) All records required by 40 CFR 60.7 and 60.48c.
f) All calculations or documents necessary to show compliance with the limits contained in this permit.

All of the above information shall be stored in a format acceptable to the Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7(f). The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1331(1)(c), R 336.1702(a), R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.7(f), 40 CFR Part 60 Subpart Dc)**

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. SVAUXBOILER	48	85	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to EUAUXBOILER. **(40 CFR Part 60 Subparts A & Dc)**

EUEMENGINE
EMISSION UNIT CONDITIONS

DESCRIPTION

A 2,923 HP (2,180 kilowatts (kW)) diesel-fueled emergency engine with a model year of 2011 or later, and a displacement of <10 liters/cylinder.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. $NMHC^{B}+NO_x$	6.4 g/kW-hr[C]	Hourly	EUEMENGINE	SC V.1, SC VI.2, SC VI.3	R 336.1702(a), R 336.2803, R 336.2804, R 336.2810[D], 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 1039
2. CO	3.5 g/kW-hr[C]	Hourly	EUEMENGINE	SC V.1, SC VI.2, SC VI.3	R 336.2804, R 336.2810, 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 1039
3. PM	0.20 g/kW-hr[C]	Hourly	EUEMENGINE	SC V.1, SC VI.2, SC VI.3	R 336.1331(1)(c), R 336.2810, 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 1039
4. PM10	1.58 pph	Hourly	EUEMENGINE	SC V.2	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
5. PM2.5	1.58 pph	Hourly	EUEMENGINE	SC V.2	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
6. GHGs as CO_2e	928 tpy	12-month rolling time period as determined at the end of each calendar month.	EUEMENGINE	SC VI.4	R 336.1205(1)(a) & (b), 40 CFR 52.21(j)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
[B] NMHC = nonmethane hydrocarbon [C] These emission limits are for certified engines; if testing becomes required to demonstrate compliance, then the tested values must be compared to the Not to Exceed (NTE) requirements determined through 40 CFR 60.4212(c). [D] The NMHC+NO_x emission limit is a combined NO_x and VOC BACT limit for PSD review. Note that in PSD regulations, VOCs include formaldehyde, regardless of the NSPS-designated testing method.					

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel in EUEMENGINE with the maximum sulfur content of 15 ppm (0.0015 percent) by weight, and a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4207(b), 40 CFR 1039.305)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUEMENGINE for more than 4 hours per day, except during emergency conditions and required stack testing in SC V.1, and not more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 4 hours and the 500 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.2. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee may operate EUEMENGINE for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. EUEMENGINE may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f))**

3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart IIII, for the same model year and maximum engine power, the permittee shall meet the following requirements for EUEMENGINE:
   a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions;
   b) Change only those emission-related settings that are permitted by the manufacturer; and
   c) Meet the requirements as specified in 40 CFR 89, 94, and/or 1068, as they apply to EUEMENGINE.

   If the permittee does not install, configure, operate, and maintain EUEMENGINE according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the engine may be considered an uncertified engine. **(40 CFR 60.4211(a) & (c), R 336.2810, 40 CFR 52.21(j))**

4. If the permittee purchased an uncertified engine or a certified engine operating in an uncertified manner, the permittee shall keep a maintenance plan for EUEMENGINE and shall, to the extent practicable, maintain and operate engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g)(3), R 336.2810, 40 CFR 52.21(j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUEMENGINE with a non-resettable hours meter to track the operating hours. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4209(a))**

2. The maximum rated power output of EUEMENGINE shall not exceed a nameplate capacity of 2,180 kW (2,923 HP). **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

V. TESTING/SAMPLING

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

1. If EUEMENGINE is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
   a) Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
   b) If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.
   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.
   d) If a performance test is required, the test plan and complete report must describe how the NMHC+NO_x verification meets the requirements of 40 CFR Part 60 Subpart IIII and of PSD BACT.

   No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1331(1)(c), R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4211(g)(3), 40 CFR 60.4212)**

2. Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates from EUEMENGINE by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10 / PM2.5	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. 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. 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 336.1205(1)(a) & (b), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

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(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4211, 40 CFR 60.4214)**

2. The permittee shall keep, in a satisfactory manner, the following records for EUEMENGINE:
   a) For certified engine: The permittee shall keep records of the manufacturer certification documentation.

b) For uncertified engine: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for EUEMENGINE:
   a) For certified engine: The permittee shall keep records of the manufacturer's emission-related written instructions, and records demonstrating that the engine has been maintained according to those instructions, as specified in SC III.3.
   b) For uncertified engine: The permittee shall keep records of a maintenance plan, as required by SC III.4, and maintenance activities.

   The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

4. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO_2e mass emissions for EUEMENGINE, as required by SC I.6. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed according to Appendix B or an alternate method approved by the District Supervisor. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

5. The permittee shall monitor and record the total hours of operation for EUEMENGINE on a daily, monthly, and 12-month rolling time period basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hours meter for EUEMENGINE, on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of EUEMENGINE, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4211, 40 CFR 60.4214)**

6. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EUEMENGINE, demonstrating that the fuel meets the requirement of 40 CFR 1090.305 as specified in SC II.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 1090.305, 40 CFR 60.4207(b))**

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. SVEMENGINE	21.6	40	R 336.1225, R 336.2803, R 336.2804

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 IIII, as they apply to EUEMENGINE. **(40 CFR Part 60 Subparts A & IIII, 40 CFR 63.6590)**

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 EUEMENGINE, upon startup. **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

EUCOLDCLEANER
EMISSION UNIT CONDITIONS

DESCRIPTION

New closed-cover cold cleaner.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Closed cover when not in use.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1225, R 336.1702(a), R 336.1707(3)(b))**

2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements: **(R 336.1225, R 336.1702(a))**
   a) The air/vapor interface of the cold cleaner is no more than ten square feet.
   b) The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment.

2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1225, R 336.1702(a), R 336.1707(3)(b))**

3. The cold cleaner shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1707(3)(a), R 336.1910, R 336.2810)**

4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1225, R 336.1702(a), R 336.1707(3)(a))**

5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions: **(R 336.1225, R 336.1702(a), R 336.1707(2)(a), (b), & (c))**
   a) The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7.

b) The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0.
c) The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD.

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. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1225, R 336.1707)**

2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1225, R 336.1702(a), R 336.1707(2))**
   a) A serial number, model number, or other unique identifier for each cold cleaner.
   b) The date the unit was installed, manufactured or that it commenced operation.
   c) The air/vapor interface area.
   d) The Reid vapor pressure of each solvent used.
   e) If applicable, the option chosen to comply with SC IV.5.

3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1910, R 336.1707(4))**

4. As noted in Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1225, R 336.1702(a), R 336.1707(3)(c))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

EUEMFUELTANK
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

One (1) closed-roof tank for storing ultra-low sulfur diesel fuel.

Flexible Group: NA

POLLUTION CONTROL EQUIPMENT

Conservation vent valves for VOC control.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only store ultra-low sulfur diesel fuel in EUEMFUELTANK. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, maintain and operate in a satisfactory manner, conservation vent valves on EUEMFUELTANK. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2810)**

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 keep, in a satisfactory manner, fuel supplier certification records demonstrating that the fuel stored in the tank is ultra-low sulfur diesel. The permittee shall make the records available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)**

2. The permittee shall keep, in a satisfactory manner, documentation of the design of the tanks demonstrating that the tank has conservation vent valves. The permittee shall make the records available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2810)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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
FGCTGHRSG	Two (2) combined-cycle natural gas-fired CTG with HRSG in a 2x1 configuration with a steam turbine generator. Each CTG/HRSG is equipped with dry low NO_x burners (DLNB), selective catalytic reduction (SCR), and an oxidation catalyst.	EUCTGHRSG1, EUCTGHRSG2
FGFUELHTR	Two (2) natural gas-fired fuel gas dew point heaters.	EUFUELHTR1, EUFUELHTR2

FGCTGHRSG
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) combined-cycle natural gas-fired CTG with HRSG in a 2x1 configuration with a steam turbine generator. Each CTG/HRSG is equipped with dry low NO_x burners (DLNB), selective catalytic reduction (SCR), and an oxidation catalyst.

Emission Unit: EUCTGHRSG1, EUCTGHRSG2

POLLUTION CONTROL EQUIPMENT

DLNB and SCR for NO_x control for each CTG/HRSG unit. An oxidation catalyst for CO and VOC control for each CTG/HRSG unit.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	2 ppmvd at 15% O_2 (each unit)[F]	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCTGHRSG1, EUCTGHRSG2	SC VI.2, SC VI.3	R 336.1205(1)(a) & (b), R 336.2810
2. NO_x	15 ppm at 15% O_2 (each unit)[F]	30-day rolling average as determined each operating day	EUCTGHRSG1, EUCTGHRSG2	SC VI.2, SC VI.3	40 CFR 60.4320(a), Table 1 of 40 CFR Part 60 Subpart KKKK[G]
3. NO_x	27.4 pph (each unit)[F]	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCTGHRSG1, EUCTGHRSG2	SC VI.2, SC VI.3	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
4. NO_x	286 pph (each unit)[H]	Operating hour during startup or shutdown[H]	EUCTGHRSG1, EUCTGHRSG2	SC VI.2, SC VI.3, SC VI.11	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
5. CO	4 ppmvd at 15% O_2 (each unit)[F]	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCTGHRSG1, EUCTGHRSG2	SC VI.2, SC VI.4	R 336.1205(1)(a) & (b), R 336.2810

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
6. CO	24.7 pph (each unit)[F]	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCTGHRSG1, EUCTGHRSG2	SC VI.2, SC VI.4	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
7. CO	3,537 pph (each unit)[H]	Operating hour during startup or shutdown[H]	EUCTGHRSG1, EUCTGHRSG2	SC VI.2, SC VI.4, SC VI.11	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
8. PM	9.9 pph (each unit)	Hourly	EUCTGHRSG1, EUCTGHRSG2	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.1331(1)(c), R 336.2810
9. PM10	19.8 pph (each unit)	Hourly	EUCTGHRSG1, EUCTGHRSG2	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
10. PM2.5	19.8 pph (each unit)	Hourly	EUCTGHRSG1, EUCTGHRSG2	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
11. SO_2	11.7 pph (each unit)	Hourly	EUCTGHRSG1, EUCTGHRSG2	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
12. SO_2	0.060 lb/MMBTU	Hourly	EUCTGHRSG1, EUCTGHRSG2	SC VI.11	40 CFR 60.4330
13. VOC	4 ppmvd at 15% O_2 (each unit)[F]	Hourly	EUCTGHRSG1, EUCTGHRSG2	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2810
14. Sulfuric acid mist (H_2SO_4)	4.6 pph (each unit)	Hourly	EUCTGHRSG1, EUCTGHRSG2	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.2810
15. GHGs as CO_2e	1,911,481 tpy (each unit)	12-month rolling time period as determined at the end of each calendar month.	EUCTGHRSG1, EUCTGHRSG2	SC VI.5, SC VI.6, SC VI.11	R 336.1205(1)(a) & (b), 40 CFR 52.21(j)
16. CO_2	802 lb/MWh	12-operating month rolling average basis as determined at the end of each operating calendar month.[I]	EUCTGHRSG1, EUCTGHRSG2	SC VI.6, SC VI.11	R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.5520(a)[J], Table 2 of 40 CFR Part 60 Subpart TTTT[J]

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
17. Formaldehyde	9.3 tpy	12-month rolling time period as determined at the end of each calendar month.	FGCTGHRSG	SC V.2, SC VI.10, SC VI.11	R 336.1205(1), R 336.1224, R 336.1225

ppmvd = parts per million by volume at 15 percent oxygen (O_2) and on a dry gas basis
lb/MWh = pound per megawatt hour

[F] Does not include startup and shutdown.

[G] Table 1 of 40 CFR Part 60 Subpart KKKK also allows 96 ppm at 15 percent O_2 when the turbines are operating at less than 75 percent of peak load and at temperatures less than 0°F.

[H] Startup is defined as the period of time from initiation of the combustion process (flame-on) from shutdown status and continues until steady state operation (loads greater than a demonstrated percent of design capacity) is achieved. Shutdown is defined as that period of time from the lowering of the turbine output below the demonstrated steady state level, with the intent to shut down, until the point at which the fuel flow to the combustor is terminated. The demonstrated percent of design capacity, or demonstrated steady state level, shall be described in the plan required in SC III.2.

[I] Compliance is determined monthly at the end of the initial and each subsequent 12-operating-month period. The first month of the initial compliance period is defined in 40 CFR 60.5525(c)(1)(i).

[J] The emission limit as required in 40 CFR 60.5520(a) and Table 2 of 40 CFR Part 60 Subpart TTTT is 1,000 lb CO_2/MWh. SC I.14 subsumes the NSPS emission limit.

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas in any unit in FGCTGHRSG. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4330)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall implement and maintain a malfunction abatement plan (MAP) as described in Rule 911(2) for EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG. 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 source, and operating variables and ranges for varying loads, shall be monitored and recorded. The normal operating range of these variables and a description of the method of monitoring shall be maintained.
   e) The procedure that will be followed to address a test result that is higher than the emission factor listed in SC V.2.

   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 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(1)(a) & (b), R 336.1224, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate any unit in FGCTGHRSG unless the AQD District Supervisor has approved a plan that describes how emissions will be minimized during startup and shutdown. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices, and shall describe the demonstrated percent of design capacity, or demonstrated steady state level. Unless notified by the District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. **(R 336.1911, R 336.1912, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4333(a))**

3. The total hours for startup and shutdown for each CTG/HRSG train in FGCTGHRSG shall not exceed 500 hours per 12-month rolling time period as determined at the end of each calendar month. **(R 336.2803, R 336.2804, R 336.2810)**

4. The permittee shall operate and maintain EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG, including associated equipment and monitors, in a manner consistent with safety and good air pollution control practice. **(40 CFR 60.4333(a), 40 CFR 60.5525(b))**

5. The permittee shall prepare a monitoring plan to quantify the hourly CO_2 mass emission rate (tons/hr), in accordance with the applicable provisions in 40 CFR 75.53(g) and (h). The electronic portion of the monitoring plan must be submitted using the ECMPS Client Tool and must be in place prior to reporting emissions data and/or the results of monitoring system certification tests under this subpart. The monitoring plan must be updated as necessary. Monitoring plan submittals must be made by the Designated Representative (DR), the Alternate DR, or a delegated agent of the DR (see 40 CFR 60.5555(c)). **(40 CFR 60.5535(a), 40 CFR 60.5535(d)(1))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for each turbine in FGCTGHRSG shall not exceed, on a fuel heat input basis, 3,651 MMBTU/hr and the design heat input capacity for each duct burner in FGCTGHRSG shall not exceed, on a fuel heat input basis, 71 MMBTU/hr. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate EUCTGHRSG1 or EUCTGHRSG2 of FGCTGHRSG unless each respective dry low NO_x burners, selective catalytic reduction, and oxidation catalyst are installed, maintained, and operated in a satisfactory manner, for each CTG/HRSG. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for FGCTGHRSG as required in SC III.1. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, devices to monitor and record the NO_x emissions and oxygen (O_2), or carbon dioxide (CO_2), content of the exhaust gas from both EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG on a continuous basis. The permittee shall install and operate the Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix A. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4340(b)(1), 40 CFR 60.4345, 40 CFR Part 75)**

4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the CO emissions and oxygen (O_2), or carbon dioxide (CO_2), content of the exhaust gas from both EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG on a continuous basis. The permittee shall install and operate the Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix A. **(R 336.1205(1)(a) & (b), R 336.2804, R 336.2810, 40 CFR Part 75)**

5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas flow rate for EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG on a continuous basis. The device shall be operated in accordance with 40 CFR 60.4345(c). **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4345)**

6. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a sufficient number of watt meters to continuously measure and record the hourly gross electric output from EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.5535(d)(1))**

V. TESTING/SAMPLING

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

1. The permittee shall verify PM, PM10, PM2.5, SO_2, VOC, and H_2SO_4 emission rates from EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG at maximum routine operating conditions, by testing at the owner's expense, in accordance with Department requirements. The permittee must complete the required testing once every five years of operation. Upon approval of the AQD District Supervisor, subsequent testing may be conducted upon EUCTGHRSG1 or EUCTGHRSG2 as a representative unit. However, the permittee shall not test the same representative unit in subsequent tests unless approved or requested by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
SO_2	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
H_2SO_4	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. 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 336.1205(1)(a) & (b), R 336.1331(1)(c), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall conduct testing to verify the formaldehyde emission factor from EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG at maximum routine operating conditions, by testing at the owner's expense, in accordance with Department requirements, according to the following schedule:
   a) An initial test within 180 days after commencement of initial startup.
   b) Subsequent tests shall be performed once per year for a period of two years to develop a baseline data set consisting of three separate test reports (the initial test and two subsequent tests).
   c) Each subsequent test after the baseline data set is developed shall be performed once per year.
   d) After the baseline data set is developed, if two consecutive test results are less than 75 percent of the base emission factor, then the subsequent test may be performed once every three years. The emission factor and threshold are below:

Base Emission Factor Annual Timeframe (ppmvd at 15% O_2 on a dry gas basis)	Emission Factor 75% Threshold 3-Year Timeframe (ppmvd at 15% O_2 on a dry gas basis)	Emission Factor 55% Threshold 5-Year Timeframe (ppmvd at 15% O_2 on a dry gas basis)
0.160	0.120	0.088

   e) If a test results in an emission factor at or above the 75 percent threshold, then the subsequent tests shall revert back to an annual timeframe as described in SC V.2(c).
   f) After the baseline data set is developed, if two consecutive test results are less than 55 percent of the base emission factor, then the subsequent test may be performed once every five years. The emission factor and threshold are above.

g) If a test results in an emission factor at or above the 55 percent threshold, then the subsequent tests shall revert back to once every three years if below the 75 percent threshold as described in SC V.2(d) or an annual timeframe as described in SC V.2(c).
h) If a test results in an emission factor above the listed base emission factor, then procedures shall be enacted to address future emissions according to the MAP required in SC III.1.

Upon approval of the AQD District Supervisor, subsequent testing may be conducted upon EUCTGHRSG1 or EUCTGHRSG2 as a representative unit. However, the permittee shall not test the same representative unit in subsequent tests unless approved or requested by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 63, 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. 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), R 336.1224, R 336.1225, 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(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.5540(a) & (b), 40 CFR 60.5560)**

2. The permittee shall continuously monitor and record, in a satisfactory manner, the NO_x and CO emissions and the O_2, or CO_2, emissions from EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG. The permittee shall operate each CEMS to meet the timelines, requirements and reporting detailed in Appendix A and shall use the CEMS data for determining compliance with SC I.1, SC I.2, SC I.3, SC I.4, SC I.5, SC I.6, and SC I.7. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4345)**

3. The permittee shall calculate and keep, in a satisfactory manner, hourly and 24-hour rolling average NO_x concentration and mass emission records, and 30-day rolling average NO_x concentration records for EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG, as required by SC I.1, SC I.2, SC I.3, and SC I.4. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4345)**

4. The permittee shall calculate and keep, in a satisfactory manner, hourly and 24-hour rolling average CO concentration and mass emission records for EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG, as required by SC I.5, SC I.6, and SC I.7. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2804, R 336.2810)**

5. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG on a monthly basis. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

6. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO_2e mass emissions for EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG, as required by SC I.15. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

7. The permittee shall determine the hourly CO_2 mass emissions and hourly gross energy output for both EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG according to 40 CFR 60.5535(b) or (c) and 40 CFR 60.5540(a). The permittee shall keep records of the determined values for hourly CO_2 mass emissions and hourly gross energy output for both EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG. **(40 CFR 60.5535(c), 40 CFR 60.5540(a), 40 CFR 60.5560)**

8. The permittee shall calculate and keep, in a satisfactory manner, records of the monthly and initial and each subsequent 12-operating-month calculation required by SC I.16 according to the procedures described in 40 CFR 60.5540: **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.5540(a) & (b), 40 CFR 60.5560)**
   a) Total data is determined by summing valid operating hours for either CO_2 mass emissions or gross energy output.
   b) To determine compliance with SC I.16, the total CO_2 mass emissions for each unit, EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG, shall be divided by the total gross energy output value of the same unit, EUCTGHRSG1 or EUCTGHRSG2 of FGCTGHRSG.
   c) The final calculated value shall be rounded to two significant figures if the calculated value is less than 1,000 and to three significant figures if the calculated value is greater than 1,000.

9. The permittee shall keep, in a satisfactory manner, a record of the monthly and 12-month rolling total hours of startup and shutdown for each CTG/HRSG train in FGCTGHRSG. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.2803, R 336.2804, R 336.2810)**

10. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total formaldehyde mass emissions for FGCTGHRSG, as required by SC I.17. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1), R 336.1224, R 336.1225)**

11. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit for FGCTGHRSG. This information shall include, but shall not be limited to the following:
    a) Compliance tests and any testing required under the special conditions of this permit.
    b) Monitoring data.
    c) Total sulfur content and potential sulfur emissions, as applicable, of the natural gas as required by 40 CFR 60.4365(a) or (b).
    d) Verification of heat input capacity.
    e) Identification, type, and amount of fuel combusted on a calendar month basis.
    f) Gross energy output on a calendar month basis.
    g) All records required by 40 CFR 60.7.
    h) Records of the duration of all dates and times of startup and shutdown events.
    i) All calculations necessary to show compliance with the limits contained in this permit.
    j) All records related to, or as required by, the MAP and the startup and shutdown plan.

    All of the above information shall be stored in a format acceptable to the AQD District Supervisor and shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1331(1)(c), R 336.1702(a), R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.7(f), 40 CFR 60.4345, 40 CFR 60.4365, 40 CFR 60.5525(b), 40 CFR 60.5560)**

VII. REPORTING

1. The permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c) and with 40 CFR 60.4375 and 40 CFR 4380. The reports shall be postmarked by the 30th day following the end of each 6-month period. **(40 CFR 60.7(c), 40 CFR 60.4375(a), 40 CFR 60.4380, 40 CFR 60.4395)**

2. The permittee shall prepare and submit the notifications specified in 40 CFR 60.19, as applicable, and 40 CFR 75.61, as applicable, for each unit, EUCTGHRSG1 and EUCTGHRSG2 of FGCTGHRSG. **(40 CFR 60.5550(a) & (b))**

3. The permittee shall submit electronic quarterly reports as follows: **(40 CFR 60.5555(a) & (b))**
   a) After each unit has accumulated the first 12-operating months, the permittee shall submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter.
   b) Thereafter, the permittee shall submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.
   c) Each quarterly report shall include the information specified in 40 CFR 60.5555(a)(2).

d) The final quarterly report of each calendar year shall include the information specified in 40 CFR 60.5555(a)(3).
e) All electronic reports shall be submitted using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA.

4. The permittee shall meet all applicable reporting requirements and submit reports as required under 40 CFR Part 75 Subpart G in accordance with 40 CFR 75.64(a), which is also listed in 40 CFR 60.5555(c)(3)(i). **(40 CFR 60.5555(c)(1) & (3)(i))**

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. SVCTGHRSG1	264	170	R 336.1225, R 336.2803, R 336.2804
2. SVCTGHRSG2	264	170	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and KKKK, as they apply to each unit in FGCTGHRSG. **(40 CFR Part 60 Subparts A and KKKK)**

2. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and TTTT, as they apply to each unit in FGCTGHRSG. **(40 CFR Part 60 Subparts A and TTTT)**

FGFUELHTR
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) natural gas-fired fuel gas dew point heaters.

Emission Unit: EUFUELHTR1, EUFUELHTR2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	0.8 pph (each unit)	Hourly	EUFUELHTR1, EUFUELHTR2	SC VI.3, SC VI.5	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
2. CO	0.7 pph (each unit)	Hourly	EUFUELHTR1, EUFUELHTR2	SC VI.3, SC VI.5	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
3. PM	0.03 pph (each unit)	Hourly	EUFUELHTR1, EUFUELHTR2	SC V.1 SC VI.5	R 336.1331(1)(c), R 336.2810
4. PM10	0.1 pph (each unit)	Hourly	EUFUELHTR1, EUFUELHTR2	SC VI.3, SC VI.5	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
5. PM2.5	0.1 pph (each unit)	Hourly	EUFUELHTR1, EUFUELHTR2	SC VI.3, SC VI.5	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
6. VOC	0.05 pph (each unit)	Hourly	EUFUELHTR1, EUFUELHTR2	SC VI.3, SC VI.5	R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2810
7. GHGs as CO_2e	8,720 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFUELHTR	SC VI.4, SC VI.5	R 336.1205(1)(a) & (b), 40 CFR 52.21(j)

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in either unit of FGFUELHTR. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 63.11195(e))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for each unit in FGFUELHTR shall not exceed 8.5 MMBTU per hour on a fuel heat input basis. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

V. TESTING/SAMPLING

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

1. Upon request by the AQD District Supervisor, the permittee shall verify the PM emission rates through testing of one or both units of FGFUELHTR. The permittee shall not test the same representative unit in subsequent tests unless approved or requested by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A and Part 10 of the Michigan Air Pollution Control Rules. 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. 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 336.1331(1)(c), R 336.2001, R 336.2003, R 336.2004, R 336.2810)**

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(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall calculate and keep monthly natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis for each unit in FGFUELHTR and a 12-month rolling time period basis for FGFUELHTR. 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) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall calculate and keep, in a satisfactory manner, records of hourly NO_x, CO, PM10, PM2.5, and VOC mass emissions for each unit in FGFUELHTR, as required by SC I.1, SC I.2, SC I.4, SC I.5, and SC I.6. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using a method approved by the AQD District Supervisor. **(R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2803, R 336.2804, R 336.2810)**

4. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO_2e mass emissions for FGFUELHTR, as required by SC I.7. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed according to Appendix B or an alternate method approved by the District Supervisor. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

5. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
   a) Compliance tests and any testing required under the special conditions of this permit.
   b) Monitoring data.
   c) Verification of heat input capacity required to show compliance with SC IV.1.

d) Identification, type and the amounts of fuel combusted in each unit in FGFUELHTR on a calendar month basis.
e) All calculations or documents necessary to show compliance with the limits contained in this permit.

All of the above information shall be stored in a format acceptable to the Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1331(1)(c), R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.7)**

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. SVFUELHTR1	19	30	R 336.1225, R 336.2803, R 336.2804
2. SVFUELHTR2	19	30	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

NA

APPENDIX A
Continuous Emission Monitoring System (CEMS) Requirements

1. Within 30 calendar days after commencement of initial start-up, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS.

2. Within 150 calendar days after commencement of initial start-up, the permittee shall submit two copies of a complete test plan for the CEMS to the AQD for approval.

3. Within 180 calendar days after commencement of initial start-up, the permittee shall complete the installation and testing of the CEMS.

4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table:

Pollutant	Applicable PS
NO_x	2
O_2 & CO_2	3
CO	4

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.

6. The CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and the PS, listed in the table above, of Appendix B to 40 CFR Part 60.

7. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F).

8. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
   a) A report of each exceedance above the limits specified in the conditions of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
   b) A report of all periods of CEMS downtime and corrective action.
   c) A report of the total operating time of EUCTGHRSG1, or EUCTGHRSG2 during the reporting period.
   d) A report of any periods that the CEMS exceeds the instrument range.
   e) If no exceedances or CEMS downtime occurred during the reporting period, the permittee shall report that fact.

The permittee shall keep all monitoring data on file for a period of at least five years and make them available to the AQD upon request.

APPENDIX B
CO_2e Emission Calculations

For EUAUXBOILER and FGFUELHTR:

CO_2e emissions (tons/month) = [(Fuel Usage (MMscf/month) x Higher Heating Value (MMBTU/MMscf)) x (CO_2 EF (kg/MMBTU) x CO_2 GWP + CH_4 EF (kg/MMBTU) x CH_4 GWP + N_2O EF (kg/MMBTU) x N_2O GWP)] x 2.20462 (lb/kg) x 1/2000 (ton/lb)

Where:
Fuel Usage (MMscf/month) = monthly fuel usage data from fuel flow meter
Heat Content (MMBTU/MMscf) = standard value in AP-42 for natural gas or supplier data, if available
CO_2 EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-1 (December 9, 2016)
CH_4 EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (December 9, 2016)
N_2O EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (December 9, 2016)
CO_2 GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
CH_4 GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
N_2O GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)

For EUEMENGINE:

CO_2e emissions (tons/month) = [(Fuel Usage (gallons/month) x Higher Heating Value (MMBTU/gallons)) x (CO_2 EF (kg/MMBTU) x CO_2 GWP + CH_4 EF (kg/MMBTU) x CH_4 GWP + N_2O EF (kg/MMBTU) x N_2O GWP)] x 1/2000 (ton/lb)

Where:
Fuel Usage (gallons/month) = monthly fuel usage data
Heat Content (MMBTU/gallons) = standard value in AP-42 for natural gas or supplier data, if available
CO_2 EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-1 (December 9, 2016)
CH_4 EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (December 9, 2016)
N_2O EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (December 9, 2016)
CO_2 GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
CH_4 GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
N_2O GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)

For EUCTGHRSG1 and EUCTGHRSG2:

If not utilizing a CO_2 CEMS:

CO_2 emissions (tons/month) = CO_2 EF (scf/MMBTU) x Fuel Usage (MMscf/month) x Higher Heating Value (MMBTU/MMscf) x CO_2 MW (lb/lb-mol) x CO_2 GWP / molar volume (scf/lb-mol)

Where:
CO_2 EF (scf/MMBTU) = carbon based F-factor for natural gas according to the methodology from equation G-4 of Appendix G to Part 75
Fuel Usage (MMscf/month) = monthly fuel usage data from fuel flow meter
Heat Content (MMBTU/MMscf) = standard value in AP-42 for natural gas or supplier data, if available
CO_2 MW (lb/lb-mol) = 44 [C = 6; O = 8; 6 + (8 x 2) = 22]
CO_2 GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
Molar volume (scf/lb-mol) = 385

CO_2e emissions (tons/month) = CO_2 emissions (tons/month) + [((Fuel Usage (MMscf/month) x Higher Heating Value (MMBTU/MMscf)) x (CH_4 EF (kg/MMBTU) x CH_4 GWP + N_2O EF (kg/MMBTU) x N_2O GWP)) x 2.20462 (lb/kg) x 1/2000 (ton/lb)]

Where:
Fuel Usage (MMscf/month) = monthly fuel usage data from fuel flow meter
Heat Content (MMBTU/MMscf) = standard value in AP-42 for natural gas or supplier data, if available
CH_4 EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (December 9, 2016)
N_2O EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (December 9, 2016)
CH_4 GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
N_2O GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)