

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

JULY 2, 2021

**PERMIT TO INSTALL
187-10H**

**ISSUED TO
VA MEDICAL CENTER**

**LOCATED AT
5500 ARMSTRONG ROAD
BATTLE CREEK, MICHIGAN 49037**

**IN THE COUNTY OF
CALHOUN**

**STATE REGISTRATION NUMBER
M3546**

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: April 20, 2021	
DATE PERMIT TO INSTALL APPROVED: July 2, 2021	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 ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

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

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

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUCOOLTWR	A two-cell, mechanical draft cooling tower.	7/5/2013	NA
EUMATERIAL	Biomass and ash handling systems.	7/5/2013	NA
EUBIO/NGSYSTEM	Biomass gasifier with a closed coupled oxidizer followed by a 40 MMBtu/hr biomass / natural gas-fired boiler with electrostatic precipitator (ESP) for control.	7/5/2013	NA
EU-Boiler-2	A 24.6 MMBtu/hr natural gas and No. 2 fuel oil-fired boiler with a steam output of 20,000 pounds per hour. Stack IDs: SV-Boiler-2 or SV-Boiler-2+3+4	9/24/2012	FG-Boilers
EU-Boiler-3	A 49.1 MMBtu/hr boiler natural gas and No. 2 fuel oil-fired boiler with a steam output of 40,000 pounds per hour. Stack IDs: SV-Boiler-3 or SV-Boiler-2+3+4	9/24/2012	FG-Boilers
EU-Boiler-4	A 49.1 MMBtu/hr boiler natural gas and No. 2 fuel oil-fired boiler with a steam output of 40,000 pounds per hour. Stack IDs: SV-Boiler-4 or SV-Boiler-2+3+4	9/24/2012	FG-Boilers
EUGENPOWERPLAN T	561 kW MTU/Detroit Diesel - diesel fuel-fired reciprocating internal combustion engine used for orderly shutdown of the CHP plant and to provide emergency power to the natural gas plant.	12/29/2011	NA
EUCHPGEN	A 287 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	NA
EUBLDG8&9&13GEN	500 kW Kohler diesel fuel fired reciprocating internal combustion engine used for emergency power generation (Generator 8&9&13)	12/15/2020	FGGENERATORS
EUGENERATOR30	275 kW Cummins Diesel fuel fired reciprocating internal combustion engine used for emergency power generation (Generator 30). Stack ID: SVGENERATOR30	1968	FGGENERATORS
EUBLDG163GEN	A 500 kilowatts (kW) diesel-fueled emergency engine manufactured in 2012.	2012	FGGENERATORS
EUBLDG24&25GEN	A 50 kilowatts (kW) diesel-fueled emergency engine manufactured in 2010.	2010	FGGENERATORS
EUBLDG165GEN	A 890 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	FGEMERGEN
EUBLDG135AGEN	A 890 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	FGEMERGEN
EUBLDG135BGEN	A 890 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	FGEMERGEN

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUBLDG170GEN	A 668 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	FGEMERGEN
EUBLDG169GEN	A 668 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	FGEMERGEN
EUBLDG161GEN	A 561 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	FGEMERGEN
EUBLDG159GEN	A 448 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	FGEMERGEN
EUBLDG136GEN	A 343 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	10/13/2014	FGEMERGEN
EUBLDG157GEN	A 287 kilowatts (kW) diesel-fueled emergency engine manufactured in 2016.	12/16/2016	FGEMERGEN

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.

EUCOOLTWR EMISSION UNIT CONDITIONS

DESCRIPTION

A two-cell, mechanical draft cooling tower.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Drift eliminators

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUCOOLTWR unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 180 days of initial start-up, 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.

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 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUCOOLTWR with drift eliminators that have a vendor-certified maximum drift rate of 0.005 percent or less. **(R 336.1331, R 336.1901, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a record, for the life of EU COOLTWR, of the vendor's certification required in SC IV.1. (R 336.1331, R 336.1901, 40 CFR 52.21(c) & (d))

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. SV-COOLTWR1	168	51	R 336.1225, R 336.1901, 40 CFR 52.21(c) & (d)
2. SV-COOLTWR2	168	51	R 336.1225, R 336.1901, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

EUMATERIAL EMISSION UNIT CONDITIONS
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DESCRIPTION

Biomass and ash handling systems.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Enclosures.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUMATERIAL unless a malfunction abatement plan (MAP) as described in Rule 911(2), for operation of the process and emission control equipment is implemented and maintained. 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 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EUMATERIAL unless the associated enclosures are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EUMATERIAL as required in SC III.2. **(R 336.1901, R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EUBIO/NGSYSTEM
EMISSION UNIT CONDITIONS**

DESCRIPTION

Biomass gasifier with a closed coupled oxidizer followed by a 40 MMBtu/hr biomass / natural gas-fired boiler with electrostatic precipitator (ESP) for control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

ESP

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VE	10 percent opacity	6-minute average except one 6-minute average per hour of not more than 20 percent	EUBIO/NGSYSTEM	SC VI.2	R 336.1301(1)(c), 40 CFR 60.43c
2. NO _x	0.20 lb/MMBtu heat input	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)
3. NO _x	8.0 pph	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)
4. CO	0.084 lb/MMBtu heat input	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(d)
5. CO	2.9 pph	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(d)
6. SO ₂	0.025 lb/MMBtu heat input	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), R 336.1401, 40 CFR 52.21(c) & (d)
7. SO ₂	1.0 pph	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)
8. PM	0.020 lb/MMBtu heat input	Test Protocol*	EUBIO/NGSYSTEM	SC V.2	R 336.1205(1)(a), R 336.1331(1)(c), 40 CFR 60.43c
9. PM ₁₀	0.035 lb/MMBtu heat input	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)
10. PM ₁₀	1.4 pph	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)
11. PM _{2.5}	0.027 lb/MMBtu heat input	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)
12. PM _{2.5}	1.1 pph	Test Protocol*	EUBIO/NGSYSTEM	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)

*Test Protocol shall specify averaging time.

II. MATERIAL LIMIT(S)

1. The permittee shall only combust pipeline quality natural gas and gasified biomass in EUBIO/NGSYSTEM. Biomass is defined as non-chemically treated wood and wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sander dust, wood chips, scraps, slabs, millings, shavings, processed pellets made from wood or other forest residues, switch grass, and other similar fuels. **(R 336.1205(1)(a), R 336.1224, R 336.1401, R 336.1702(a), R 336.1901)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUBIO/NGSYSTEM unless a malfunction abatement plan (MAP) as described in Rule 911(2), 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 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.

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 336.1911)**

2. The permittee shall not operate EUBIO/NGSYSTEM unless the AQD District Supervisor has approved a plan that describes how emissions will be minimized during start-up and shutdown. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Unless notified by the AQD District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. **(R 336.1911, R 336.1912)**
3. The permittee shall not operate EUBIO/NGSYSTEM unless Biomass Fuel Procurement and Management Plan (BFPMP) is implemented and maintained. At a minimum, the BFPMP shall specify the following:
 - a. A description of the biomass to be gasified;
 - b. The source or supplier of the biomass material; and
 - c. Odor minimization measures to be taken, if required.

The permittee shall amend the BFPMP within 45 days if any changes are deemed necessary, or upon request by the AQD District Supervisor. The permittee shall submit the BFPMP and any amendments to the AQD District Supervisor for review and approval. **(R 336.1224, R 336.1702(a), R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input rate of EUBIO/NGSYSTEM shall not exceed 40 million British thermal units per hour (MMBtu/hr) on a fuel heat input basis. **(R 336.1205(1)(a))**

2. The permittee shall not operate EUBIO/NGSYSTEM unless the ESP 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 EUBIO/NGSYSTEM as required in SC III.1. **(R 336.1301(1)(c), R 336.1331(1)(c), R 336.1901, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

1. Within 180 days of initial start-up on gasified biomass fuel, verification of NO_x, CO, SO₂, PM₁₀, and PM_{2.5} emission rates from EUBIO/NGSYSTEM at maximum routine operating conditions while combusting gasified biomass fuel, by testing at owner's expense, in accordance with Department requirements, will be required. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. 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 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
2. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial start-up on gasified biomass fuel, the permittee shall verify PM emission rates from EUBIO/NGSYSTEM, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and Dc. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 60 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. 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, 40 CFR Part 60 Subpart Dc)**

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), 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate EUBIO/NGSYSTEM using gasified biomass fuel unless a device to monitor and record, on a continuous basis, the opacity of the exhaust gas from EUBIO/NGSYSTEM is calibrated, maintained and operated in a manner satisfactory to the AQD Kalamazoo District Supervisor. **(R 336.1205(1)(a), R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d), 40 CFR 60.47c)**
3. The permittee shall record the amount of fuel combusted for EUBIO/NGSYSTEM on a monthly basis using wood chip delivery manifests. **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d), 40 CFR 60.48c)**
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. Identification, type and the amounts of fuel combusted in EUBIO/NGSYSTEM on a calendar month basis;
 - d. All records required by 40 CFR 60.7;
 - e. Records of the duration of all times EUBIO/NGSYSTEM is operated under start-up or shutdown conditions as defined in SC III.2;
 - f. All calculations 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 AQD District Supervisor and shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1401, R 336.1702(a), R 336.1901, R 336.1912, 40 CFR 52.21(c) & (d), 40 CFR 60.7(f))**

VII. REPORTING

1. The permittee shall provide written notification of construction (or reconstruction as defined under 40 CFR 60.15) and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7, 40 CFR 60.48c(a))**

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. SV-BIO/NGSYSTEM	36	79.5	R 336.1225, R 336.1901, 40 CFR 52.21(c) & (d)
2. SV-Boiler-2+3+4	40	79.5	R 336.1225, R 336.1901, 40 CFR 52.21(c) & (d)

Note: SV-Boiler-2+3+4 is used when the heat recovery system is utilized which can extract more energy from the flue gas leaving the boilers.

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 EUBIO/NGSYSTEM. **(40 CFR Part 60, Subparts A & Dc)**
2. The permittee shall comply with all provisions of the federal National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and JJJJJJ, as they apply to EUBIO/NGSYSTEM. **(40 CFR Part 63, Subparts A & JJJJJJ)**

Footnotes:

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

**EU-Boiler-2
EMISSION UNIT CONDITIONS**

DESCRIPTION

A 24.6 MMBtu/hr natural gas and No. 2 fuel oil-fired boiler with a steam output of 20,000 pounds per hour. Stack IDs: SV-Boiler-2 or SV-Boiler-2+3+4

Flexible Group ID: FG-Boilers

POLLUTION CONTROL EQUIPMENT

Dual-fuel low NOx burner

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO _x	0.05 lb/MMBtu heat input ^A (natural gas)	Test Protocol*	EU-Boiler-2	SC VI.1–SC VI.5	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
2. NO _x	1.23 pph (natural gas)	Test Protocol*	EU-Boiler-2	SC VI.1–SC VI.5	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
3. NO _x	0.138 lb/MMBtu heat input ^A (No. 2 fuel oil)	Test Protocol*	EU-Boiler-2	SC VI.1–SC VI.5	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
4. NO _x	3.39 pph (No. 2 fuel oil)	Test Protocol*	EU-Boiler-2	SC VI.1–SC VI.5	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
5. SO ₂	0.015 lb/MMBtu (No. 2 fuel oil)	Test Protocol*	EU-Boiler-2	GC 13, SC VI.1–SC VI.5	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
6. SO ₂	0.38 pph (No. 2 fuel oil)	Test Protocol*	EU-Boiler-2	GC 13, SC VI.1–SC VI.5	R 336.1205(1)(a) & (3), R 336.1401, 40 CFR 52.21(c) & (d)

*Test Protocol shall specify averaging time.

^A Maximum design heat input rate of 24.6 MMBtu/hr.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. No. 2 fuel oil	12,000 gallons per year	12-month rolling time period as determined at the end of each calendar month	EU-Boiler-2	SC VI.3	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)

2. The permittee shall only receive and burn pipeline quality natural gas or No. 2 fuel oil with a maximum sulfur content of 15 ppm (0.0015 percent) by weight in EU-Boiler-2. **(R 336.1205(1)(a) & (3), R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-Boiler-2 unless a malfunction abatement plan (MAP), which includes start-up and shut-down operations, as described in Rule 911(2) is implemented and maintained. 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 associated with the EU-Boiler-2 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 operation changes to achieve compliance with all applicable emissions limits. **(R 336.1911, R 336.1912)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input rate of EU-Boiler-2 shall not exceed 24.6 MMBtu/hr on a fuel heat input basis. **(R 336.1205(1)(a) & (3))**

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(1)(a) & (3), 40 CFR 52.21(c) & (d))**
2. The permittee shall monitor emissions and operating information for EU-Boiler-2 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available upon request. **(40 CFR Part 60 Subparts A & Dc)**
3. The permittee shall keep, in a satisfactory manner, hourly, monthly, and 12-month rolling time period natural gas use and No. 2 fuel oil use records for EU-Boiler-2. 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) & (3), 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**
4. The permittee shall verify the heat input capacity required to show compliance with the SC IV.1. 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) & (3))**
5. The permittee shall certify the fuel oil sulfur content for each shipment of fuel oil that, at a minimum, contains the following:
 - a. The name of the fuel oil supplier;
 - b. A statement from the fuel oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41(c); and
 - c. The sulfur content of the fuel oil.

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) & (3), 40 CFR 52.21 (c) & (d), 40 CFR 60.42c(h))**

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. SV-Boiler-2	24	79.5	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-Boiler-2+3+4	40	79.5	R 336.1225, 40 CFR 52.21(c) & (d)

Note: SV-Boiler-2+3+4 is used when the heat recovery system is utilized which can extract more energy from the flue gas leaving the boilers.

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 EU-Boiler-2. **(40 CFR Part 60 Subparts A & Dc)**

Footnotes:

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

EU-Boiler-3
EMISSION UNIT CONDITIONS

DESCRIPTION

A 49.1 MMBtu/hr boiler natural gas and No. 2 fuel oil-fired boiler with a steam output of 40,000 pounds per hour. Stack IDs: SV-Boiler-3 or SV-Boiler-2+3+4

Flexible Group ID: FG-Boilers

POLLUTION CONTROL EQUIPMENT

Dual-fuel low NOx burner

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VE	20 percent opacity (No. 2 fuel oil)	6-minute average except one 6-minute average per hour of not more than 27 percent	EU-Boiler-3	SC VI.1	R 336.1301(1)(c), R 336.1901, 40 CFR 60.43c(c)
2. NO _x	0.05 lb/MMBtu heat input ^A (natural gas)	Test Protocol*	EU-Boiler-3	SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
3. NO _x	2.47 pph (natural gas)	Test Protocol*	EU-Boiler-3	SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
4. NO _x	0.138 lb/MMBtu heat input ^A (No. 2 fuel oil)	Test Protocol*	EU-Boiler-3	SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
5. NO _x	6.78 pph (No. 2 fuel oil)	Test Protocol*	EU-Boiler-3	SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
6. SO ₂	0.015 lb/MMBtu (No. 2 fuel oil)	Test Protocol*	EU-Boiler-3	GC 13, SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
7. SO ₂	0.76 pph (No. 2 fuel oil)	Test Protocol*	EU-Boiler-3	GC 13, SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), R 336.1401, 40 CFR 52.21(c) & (d)

*Test Protocol shall specify averaging time.

^A Maximum design heat input rate of 49.1 MMBtu/hr.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. No. 2 fuel oil	24,000 gallons per year	12-month rolling time period as determined at the end of each calendar month	EU-Boiler-3	SC VI.4	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)

2. The permittee shall only receive and burn pipeline quality natural gas or No. 2 fuel oil with a maximum sulfur content of 15 ppm (0.0015 percent) by weight in EU-Boiler-3. **(R 336.1205(1)(a) & (3), R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-Boiler-3 unless a malfunction abatement plan (MAP), which includes start-up and shut-down operations, as described in Rule 911(2) is implemented and maintained. 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 associated with the EU-Boiler-3 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 operation changes to achieve compliance with all applicable emissions limits. **(R 336.1911, R 336.1912)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input rate of EU-Boiler-3 shall not exceed 49.1 MMBtu/hr on a fuel heat input basis. **(R 336.1205(1)(a) & (3))**

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 perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 on a daily basis when EU-Boiler-3 is operating with No. 2 fuel oil only. If during the observations there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observed, EPA Method 9 observations that are performed, the reason for any visible emissions observed, and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1301, R 336.1901, 40 CFR 52.21 (c) & (d), 40 CFR 60.43c(c))**
2. 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) & (3), 40 CFR 52.21(c) & (d))**
3. The permittee shall monitor emissions and operating information for EU-Boiler-3 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available upon request. **(40 CFR Part 60 Subparts A and Dc)**
4. The permittee shall keep, in a satisfactory manner, hourly, monthly, and 12-month rolling time period natural gas use and No. 2 fuel oil use records for EU-Boiler-3. 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) & (3), 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**
5. The permittee shall verify the heat input capacity required to show compliance with the SC IV.1. 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) & (3))**

6. The permittee shall certify the fuel oil sulfur content for each shipment of fuel oil that, at a minimum, contains the following:
- a. The name of the fuel oil supplier;
 - b. A statement from the fuel oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41(c); and
 - c. The sulfur content of the fuel oil.

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) & (3), 40 CFR 52.21 (c) & (d), 40 CFR 60.42c(h))**

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. SV-Boiler-3	30	79.5	R 336.1225, R 336.1901, 40 CFR 52.21(c) & (d)
2. SV-Boiler-2+3+4	40	79.5	R 336.1225, R 336.1901, 40 CFR 52.21(c) & (d)

Note: SV-Boiler-2+3+4 is used when the heat recovery system is utilized which can extract more energy from the flue gas leaving the boilers.

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 EU-Boiler-3. **(40 CFR Part 60 Subparts A and Dc)**

Footnotes:

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

EU-Boiler-4
EMISSION UNIT CONDITIONS

DESCRIPTION

A 49.1 MMBtu/hr boiler natural gas and No. 2 fuel oil-fired boiler with a steam output of 40,000 pounds per hour. Stack IDs: SV-Boiler-4 or SV-Boiler-2+3+4

Flexible Group ID: FG-Boilers

POLLUTION CONTROL EQUIPMENT

Dual-fuel low NOx burner

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VE	20 percent opacity (No. 2 fuel oil)	6-minute average except one 6-minute average per hour of not more than 27 percent	EU-Boiler-4	SC VI.1	R 336.1301(1)(c), R 336.1901, 40 CFR 60.43c(c)
2. NO _x	0.05 lb/MMBtu heat input ^A (natural gas)	Test Protocol*	EU-Boiler-4	SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
3. NO _x	2.47 pph (natural gas)	Test Protocol*	EU-Boiler-4	SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
4. NO _x	0.138 lb/MMBtu heat input ^A (No. 2 fuel oil)	Test Protocol*	EU-Boiler-4	SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
5. NO _x	6.78 pph (No. 2 fuel oil)	Test Protocol*	EU-Boiler-4	SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
6. SO ₂	0.015 lb/MMBtu (No. 2 fuel oil)	Test Protocol*	EU-Boiler-4	GC 13, SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
7. SO ₂	0.76 pph (No. 2 fuel oil)	Test Protocol*	EU-Boiler-4	GC 13, SC VI.2–SC VI.6	R 336.1205(1)(a) & (3), R 336.1401, 40 CFR 52.21(c) & (d)

*Test Protocol shall specify averaging time.

^A Maximum design heat input rate of 49.1 MMBtu/hr.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. No. 2 fuel oil	24,000 gallons per year	12-month rolling time period as determined at the end of each calendar month	EU-Boiler-4	SC VI.4	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)

2. The permittee shall only receive and burn pipeline quality natural gas or No. 2 fuel oil with a maximum sulfur content of 15 ppm (0.0015 percent) by weight in EU-Boiler-4. **(R 336.1205(1)(a) & (3), R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-Boiler-4 unless a malfunction abatement plan (MAP), which includes start-up and shut-down operations, as described in Rule 911(2) is implemented and maintained. 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 associated with the EU-Boiler-4 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 operation changes to achieve compliance with all applicable emissions limits. **(R 336.1911, R 336.1912)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input rate of EU-Boiler-4 shall not exceed 49.1 MMBtu/hr on a fuel heat input basis. **(R 336.1205(1)(a) & (3))**

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 perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 on a daily basis when EU-Boiler-4 is operating with No. 2 fuel oil only. If during the observations there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observed, EPA Method 9 observations that are performed, the reason for any visible emissions observed, and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1301, R 336.1901, 40 CFR 52.21 (c) & (d), 40 CFR 60.43c(c))**
2. 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) & (3), 40 CFR 52.21(c) & (d))**
3. The permittee shall monitor emissions and operating information for EU-Boiler-4 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available upon request. **(40 CFR Part 60 Subparts A and Dc)**
4. The permittee shall keep, in a satisfactory manner, hourly, monthly, and 12-month rolling time period natural gas use and No. 2 fuel oil use records for EU-Boiler-4. 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) & (3), 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**
5. The permittee shall verify the heat input capacity required to show compliance with the SC IV.1. 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) & (3))**

6. The permittee shall certify the fuel oil sulfur content for each shipment of fuel oil that, at a minimum, contains the following:
- a. The name of the fuel oil supplier;
 - b. A statement from the fuel oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41(c); and
 - c. The sulfur content of the fuel oil.

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) & (3), 40 CFR 52.21 (c) & (d), 40 CFR 60.42c(h))**

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. SV-Boiler-4	30	79.5	R 336.1225, R 336.1901, 40 CFR 52.21(c) & (d)
2. SV-Boiler-2+3+4	40	79.5	R 336.1225, R 336.1901, 40 CFR 52.21(c) & (d)

Note: SV-Boiler-2+3+4 is used when the heat recovery system is utilized which can extract more energy from the flue gas leaving the boilers.

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 EU-Boiler-4. **(40 CFR Part 60 Subparts A and Dc)**

Footnotes:

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

**EUGENPOWERPLANT
 EMISSION UNIT CONDITIONS**

DESCRIPTION

561 kW MTU/Detroit Diesel - diesel fuel-fired reciprocating internal combustion engine used for orderly shutdown of the CHP plant and to provide emergency power to the natural gas plant.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NMHC + NO _x	6.4 g/kW-hr	Test Protocol*	EUGENPOWERPLANT	SC V.1, SC VI.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), 40 CFR 60.4205
2. CO	3.5 g/kW-hr	Test Protocol*	EUGENPOWERPLANT	SC V.1, SC VI.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(d), 40 CFR 60.4205
3. PM	0.20 g/kW-hr	Test Protocol*	EUGENPOWERPLANT	SC V.1, SC VI.2	R 336.1205(1)(a) & (3), R 336.1224, R 336.1331(1)(c), 40 CFR 60.4205

*Test Protocol shall specify averaging time.

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel, in EUGENPOWERPLANT with the maximum sulfur content of 15 ppm (0.0015 percent) by weight. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 60.4207(b), 40 CFR 80.510)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUGENPOWERPLANT for more than 475 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 475 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) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**
2. The permittee may operate EUGENPOWERPLANT 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, or the insurance company associated with the engine. 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. EUGENPOWERPLANT 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. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or to generate income for a facility 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, the permittee shall meet the following requirements for EUGENPOWERPLANT:
 - 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, as it applies to the engine.

If you do 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 must demonstrate compliance as specified in SC III.4. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1911, 40 CFR 52.21(c) & (d), 40 CFR 60.4206, 40 CFR 60.4211(a))**

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 EUGENPOWERPLANT 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 60.4211(g)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUGENPOWERPLANT with non-resettable hours meters to track the operating hours. **(R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4209)**
2. The nameplate capacity of EUGENPOWERPLANT shall not exceed 561 kW, as certified by the equipment manufacturer. **(R 336.1205(1)(a) & (3))**

V. TESTING/SAMPLING

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

1. Unless the engine has been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII, the permittee shall conduct an initial performance test for EUGENPOWERPLANT within one year after startup of the engine, or within one year of a certified engine becoming non-certified, to demonstrate compliance with the emission limits in 40 CFR 60.4205. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. 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. **(40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

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) & (3), 40 CFR 52.21(c) & (d))**
2. The permittee shall keep, in a satisfactory manner, a record of testing required in SC V.1 or manufacturer certification documentation indicating that EUGENPOWERPLANT meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If EUGENPOWERPLANT becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. 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 records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter, on a calendar year basis. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. **(40 CFR 60.4211, 40 CFR 60.4214)**
4. The permittee shall monitor and record the total hours of operation for EUGENPOWERPLANT, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
5. 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 EUGENPOWERPLANT, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510. The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 80.510)**

VII. REPORTING

1. The permittee shall submit a notification specifying whether EUGENPOWERPLANT 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. **(40 CFR Part 60 Subpart IIII)**

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. SV-GENPOWERPLANT	10	43	R 336.1225, 40 CFR 52.21(c) & (d)

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 IIII, as they apply to EUGENPOWERPLANT. **(40 CFR Part 60 Subparts A and IIII, 40 CFR 63.6590)**
2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines, upon start-up. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

Footnotes:

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

**EUCHPGEN
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A 287 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NMHC + NO _x	4.0 g/kW-hr	Test Protocol*	EUCHPGEN	SC V.1, SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a)
2. CO	3.5 g/kW-hr	Test Protocol*	EUCHPGEN	SC V.1, SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a)
3. PM	0.20 g/kW-hr	Test Protocol*	EUCHPGEN	SC V.1, SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a)

*Test Protocol shall specify averaging time.

II. MATERIAL LIMIT(S)

- The permittee shall burn only diesel fuel, in EUCHPGEN with the maximum sulfur content of 15 ppm (0.0015 percent) by weight, and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EUCHPGEN for more than 475 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 475 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) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**
- The permittee may operate EUCHPGEN 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, or the insurance company associated with the engine. 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. EUCHPGEN 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. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or to generate income for a facility 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, the permittee shall meet the following requirements for EUCHPGEN:
 - 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, as it applies to the engine.

If you do 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 must demonstrate compliance as specified in SC III.4. **(40 CFR 60.4211(a))**

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 EUCHPGEN 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 60.4211(g)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUCHPGEN with a non-resettable hours meter to track the operating hours. **(R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4209(a))**
2. The nameplate capacity of EUCHPGEN shall not exceed 287 kW, as certified by the equipment manufacturer. **(R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a), 40 CFR 89.113)**

V. TESTING/SAMPLING

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

1. Unless the engine has been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII, the permittee shall conduct an initial performance test for EUCHPGEN within one year after startup of the engine, or within one year of a certified engine becoming non-certified, to demonstrate compliance with the emission limits in 40 CFR 60.4205. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. 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. **(40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

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) & (3), 40 CFR 52.21 (c) & (d))**
2. For EUCHPGEN, the permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that EUCHPGEN meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If EUCHPGEN becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. 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 records of the operation of the engine in emergency and non-emergency services that are recorded through the non-resettable hour meter, on a calendar year basis. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. **(40 CFR 60.4211, 40 CFR 60.4214)**
4. The permittee shall monitor and record the total hours of operation for EUCHPGEN, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
5. 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 EUCHPGEN, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

VII. REPORTING

1. The permittee shall submit a notification specifying whether EUCHPGEN 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. **(40 CFR Part 60 Subpart IIII)**

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. SVCHPGEN	5.1	9.9	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 IIII, as they apply to EUCHPGEN. **(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 EUCHPGEN, upon startup. **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

Footnotes:

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

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-Boilers	Three (3) dual-fuel boilers. One 24.6 MMBtu/hr natural gas and No. 2 fuel oil-fired boiler with a steam output of 20,000 pounds per hour. Two 49.1 MMBtu/hr natural gas and No. 2 fuel oil-fired boilers with a steam output of 40,000 pounds per hour.	EU-Boiler-2, EU-Boiler-3, EU-Boiler-4
FGGENERATORS	Four (4) emergency power generators providing service to seven (7) buildings. Two of the generators service five buildings (EUBLDG8&9&13GEN and EUBLDG24&25GEN). Each diesel fuel-fired reciprocating internal combustion engine is used for emergency power generation.	EUBLDG8&9&13GEN, EUGENERATOR30, EUBLDG163GEN, EUBLDG24&25GEN
FGEMERGEN	Nine (9) emergency engines providing service to eight (8) buildings. Each diesel fuel-fired reciprocating internal combustion engine is used for emergency power generation.	EUBLDG165GEN, EUBLDG135AGEN, EUBLDG135BGEN, EUBLDG170GEN, EUBLDG169GEN, EUBLDG161GEN, EUBLDG159GEN, EUBLDG136GEN, EUBLDG157GEN
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

**FGBOILERS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Three (3) dual-fuel boilers. One 24.6 MMBtu/hr natural gas and No. 2 fuel oil-fired boiler with a steam output of 20,000 pounds per hour. Two 49.1 MMBtu/hr natural gas and No. 2 fuel oil-fired boilers with a steam output of 40,000 pounds per hour.

Emission Unit: EU-Boiler-2, EU-Boiler-3, EU-Boiler-4

POLLUTION CONTROL EQUIPMENT

Dual-fuel low NOx burners on boiler Nos. 2, 3, and 4.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. No. 2 fuel oil	60,000 gallons per year	12-month rolling time period as determined at the end of each calendar month	FG-Boilers	SC VI.2	R 336.1205(1)(a)) & (3), 40 CFR 52.21(c)) & (d)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate all boilers in FG-Boilers in accordance with manufacturer's recommendations for safe and proper operation to minimize emissions during periods of startup, shutdown and malfunction. **(R 336.1912)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations 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) & (3), 40 CFR 52.21(c) & (d))**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period No. 2 fuel oil use records for FG-Boilers. 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) & (3), 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

FGGENERATORS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Four (4) emergency power generators providing service to seven (7) buildings. Two of the generators service five buildings (EUBLDG8&9&13GEN and EUBLDG24&25GEN). Each diesel fuel-fired reciprocating internal combustion engine is used for emergency power generation.

Emission Unit: EUBLDG8&9&13GEN, EUGENERATOR30, EUBLDG163GEN, EUBLDG24&25GEN

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx+ NMHC ^A	6.4 g/kW-hr	Hourly ^B	EUBLDG8&9&13GEN, EUBLDG163GEN	SC VI.5	40 CFR 60.4205(b), 60.4202(a) Table 1 of 40 CFR 89.112
2. CO	3.5 g/kW-hr	Hourly ^B	EUBLDG8&9&13GEN, EUBLDG163GEN	SC VI.5	40 CFR 60.4205(b), 60.4202(a) Table 1 of 40 CFR 89.112
3. PM	0.2 g/kW-hr	Hourly ^B	EUBLDG8&9&13GEN, EUBLDG163GEN	SC VI.5	40 CFR 60.4205(b), 60.4202(a) Table 1 of 40 CFR 89.112
4. NOx+ NMHC ^A	7.5 g/kW-hr	Hourly ^B	EUBLDG24&25GEN	SC VI.5	40 CFR 60.4205(b), 60.4202(a) Table 1 of 40 CFR 89.112
5. CO	5 g/kW-hr	Hourly ^B	EUBLDG24&25GEN	SC VI.5	40 CFR 60.4205(b), 60.4202(a) Table 1 of 40 CFR 89.112
6. PM	0.4 g/kW-hr	Hourly ^B	EUBLDG24&25GEN	SC VI.5	40 CFR 60.4205(b), 60.4202(a) Table 1 of 40 CFR 89.112

^A NMHC = nonmethane hydrocarbon

^B 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).

II. MATERIAL LIMIT(S)

- The permittee shall only receive and burn No. 2 fuel oil with a maximum sulfur content of 15 ppm (0.0015 percent) by weight in each generator within FGGENERATORS. **(R 336.1205(1)(a) & (3))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any of the four (4) generators in FGGENERATORS for more than the maximum operating time of 475 hours per engine per 12-month rolling time period. **(R 336.1205(1)(a) & (3))**
2. The permittee shall operate all generators in FGGENERATORS in accordance with manufacturer's recommendations for safe and proper operation to minimize emissions during periods of startup, shutdown and malfunction. **(R 336.1912)**
3. The permittee may operate EUBLDG8&9&13GEN, EUBLDG163GEN, and EUBLDG24&25GEN for no more than 100 hours per calendar year each 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. **(40 CFR 60.4211(f)(2))**
4. EUBLDG8&9&13GEN, EUBLDG163GEN, and EUBLDG24&25GEN may operate up to 50 hours per calendar year in non-emergency situations each, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in §60.4211(f)(2). Except as provided in §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency 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))**
5. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart III, for the same model year, the permittee shall meet the following requirements for EUBLDG8&9&13GEN, EUBLDG163GEN, and EUBLDG24&25GEN:
 - 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 it applies to you.If you do 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. **(40 CFR 60.4211(a))**
6. 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 each engine; EUBLDG8&9&13GEN, EUBLDG163GEN, and EUBLDG24&25GEN 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 60.4211(g)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FGGENERATORS with non-resettable hours meters to track the operating hours. **(R 336.1225, 40 CFR 60.4209)**
2. The permittee shall install, maintain, and operate EUBLDG8&9&13GEN, EUBLDG163GEN, and EUBLDG24&25GEN certified to the emission standards in §60.4205(b), as described in SC I.1-6, for the same model year and NFPA nameplate engine power for EUBLDG8&9&13GEN, EUBLDG163GEN, EUBLDG24&25GEN respectively. The engines must be installed and configured according to the manufacturer's emission-related specifications.

V. TESTING/SAMPLING

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

1. If EUBLDG8&9&13GEN, EUBLDG163GEN, and EUBLDG24&25GEN are 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 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 the permittee changes 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 thereafter, whichever comes first, to demonstrate compliance with the applicable emission standards.

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)(a) & (3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4211(g)(3), 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor, in a satisfactory manner, the hours of operation of each of the four (4) generators included in FGGENERATORS on a monthly basis. **(R 336.1205(1)(a) & (3))**
2. The permittee shall keep, in a satisfactory manner, monthly and 12 month rolling time period hours of operation records for each emergency generator in FGGENERATORS, as required by SC III.1. 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) & (3))**
3. 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 any engine of FGGENERATORS, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**
4. The permittee shall keep all required records and 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 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR Part 60 Subpart IIII)**
5. For each engine, the permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that EUBLDG8&9&13GEN, EUBLDG163GEN, EUBLDG24&25GEN meet the applicable requirements contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If EUBLDG8&9&13GEN, EUBLDG163GEN, or EUBLDG24&25GEN becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**
6. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EUBLDG8&9&13GEN, EUBLDG163GEN, EUBLDG24&25GEN, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of EUBLDG8&9&13GEN, EUBLDG163GEN, EUBLDG24&25GEN, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4211, 40 CFR 60.4214)**

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 EUBLDG8&9&13GEN. **(R 336.1201(7)(a))**
2. The permittee shall submit a notification specifying whether EUBLDG8&9&13GEN 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. **(40 CFR Part 60 Subpart IIII)**

VIII. STACK/VENT RESTRICTION(S)

NA

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 EUBLDG8&9&13GEN, EUBLDG163GEN, and EUBLDG24&25GEN. **(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 FGGENERATORS, upon startup. **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

Footnotes:

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

**FGEMERGEN
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Nine (9) emergency engines providing service to eight (8) buildings. Each diesel fuel-fired reciprocating internal combustion engine is used for emergency power generation.

Emission Unit: EUBLDG165GEN, EUBLDG135AGEN, EUBLDG135BGEN, EUBLDG170GEN, EUBLDG169GEN, EUBLDG161GEN, EUBLDG159GEN, EUBLDG136GEN, EUBLDG157GEN

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NMHC + NO _x	4.0 g/kW-hr (each engine)	Test Protocol*	EUBLDG159GEN, EUBLDG136GEN, EUBLDG157GEN	SC V.1-SC V.2 SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a)
2. NMHC + NO _x	6.4 g/kW-hr (each engine)	Test Protocol*	EUBLDG165GEN, EUBLDG135AGEN, EUBLDG135BGEN, EUBLDG170GEN, EUBLDG169GEN, EUBLDG161GEN	SC V.1 SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a)
3. CO	3.5 g/kW-hr (each engine)	Test Protocol*	Each engine of FGEMERGEN	SC V.1-SC V.2 SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a)
4. PM	0.20 g/kW-hr (each engine)	Test Protocol*	Each engine of FGEMERGEN	SC V.1-SC V.2 SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a)

*Test Protocol shall specify averaging time.

II. MATERIAL LIMIT(S)

- The permittee shall burn only diesel fuel, in each engine of FGEMERGEN with the maximum sulfur content of 15 ppm (0.0015 percent) by weight, and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate each engine of FGEMERGEN for more than 475 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 475 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) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**

2. The permittee may operate each engine of FGEMERGEN 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, or the insurance company associated with the engine. 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. Each engine of FGEMERGEN 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. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or to generate income for a facility 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, the permittee shall meet the following requirements for each engine of FGEMERGEN:
 - 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, as it applies to the engine.

If you do 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 must demonstrate compliance as specified in SC III.4. **(40 CFR 60.4211(a))**

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 each engine of FGEMERGEN 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 60.4211(g))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine of FGEMERGEN with a non-resettable hours meter to track the operating hours. **(R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4209(a))**
2. As certified by the equipment manufacturer, the nameplate capacity shall not exceed:
 - a. 890 kW for EUBLDG165GEN, EUBLDG135AGEN, and EUBLDG135BGEN,
 - b. 668 kW for EUBLDG170GEN and EUBLDG169GEN,
 - c. 561 kW for EUBLDG161GEN,
 - d. 448 kW for EUBLDG159GEN,
 - e. 343 kW for EUBLDG136GEN, and
 - f. 287 kW for EUBLDG157GEN.**(R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.112(a))**

V. TESTING/SAMPLING

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

1. Unless the engines have been certified by the manufacturer and the permittee maintains the engines as required by 40 CFR Part 60 Subpart IIII, the permittee shall conduct an initial performance test for EUBLDG165GEN, EUBLDG135AGEN, EUBLDG135BGEN, EUBLDG170GEN, EUBLDG169GEN, EUBLDG161GEN, and EUBLDG159GEN within one year after startup of the engine, or within one year of a certified engine becoming non-certified, to demonstrate compliance with the emission limits in 40 CFR 60.4205. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. 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. Subsequent performance testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first. **(40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

2. Unless the engines have been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII, the permittee shall conduct an initial performance test for EUBLDG136GEN and EUBLDG157GEN within one year after startup of the engine, or within one year of a certified engine becoming non-certified, to demonstrate compliance with the emission limits in 40 CFR 60.4205. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. 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. **(40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

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) & (3), 40 CFR 52.21 (c) & (d))**
2. For each engine, the permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or SC V.2, or manufacturer certification documentation indicating that each engine of FGEMERGEN meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If any engine of FGEMERGEN becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. 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 records of the operation of each engine in emergency and non-emergency service that are recorded through the non-resettable hour meter, on a calendar year basis. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. **(40 CFR 60.4211, 40 CFR 60.4214)**
4. The permittee shall monitor and record the total hours of operation for each engine of FGEMERGEN, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
5. 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 any engine of FGEMERGEN, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

VII. REPORTING

1. The permittee shall submit a notification specifying whether each engine of FGEMERGENS 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. **(40 CFR Part 60 Subpart IIII)**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks for each engine of FGEMERGENS shall be discharged unobstructed vertically upwards to the ambient air.

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

Footnotes:

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

FGFACILITY CONDITIONS

DESCRIPTION

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

POLLUTION CONTROL EQUIPMENT

Any control equipment is within the specific emission unit.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO _x	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.4	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate more than three boilers at any one time from EU-Boiler-2, EU-Boiler-3, EU-Boiler-4, and EUBIO/NGSYSTEM. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations 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) & (3), 40 CFR 52.21(c) & (d))**
2. The permittee shall monitor, record, and keep, in a satisfactory manner, the monthly diesel fuel usage for all engines in FGFACILITY on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**
3. The permittee shall keep, in a satisfactory manner, records of the hours of operation of each boiler (EU-Boiler-2, EU-Boiler-3, EU-Boiler-4, and EUBIO/NGSYSTEM) as listed in SC III.1. The records shall include the time and duration of operation of each boiler. 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) & (3), 40 CFR 52.21(c) & (d))**

4. The permittee shall calculate the NO_x emission rates from FGFACILITY monthly, for the preceding 12-month rolling time period, using the following method or a method acceptable to the AQD District Supervisor.
 - a. Calculate NO_x emissions for all boilers in FGFACILITY based on fuel usage data per special condition II.1 from FG-Boilers, and the worst-case emission factor from testing per GC 13 if required by the Department, or the following emission factors:
NO_x Emission Factor for Natural Gas in FG-Boilers = 0.05 lb/MMBtu
NO_x Emission Factor for Fuel Oil in FG-Boilers = 0.138 lb/MMBtu
 - b. Calculate NO_x emissions for all emergency generators in FGGENERATORS based on operating data per special condition III.1 of FGGENERATORS and the worst-case emission factor from testing per GC 13 if required by the Department, or an emission factor of 604 lb NO_x per 1,000 gallons of fuel oil.
Note: The maximum fuel oil consumption rate for the above emergency generators is 12 gallons per hour per unit.
 - c. Calculate NO_x emissions for all other emergency generators based upon the hours of operation and the permit, NSPS, or vendor, NO_x emission factors.
 - d. Sum the emissions from every source of NO_x at the facility.

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) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

APPENDIX A
Continuous Opacity Monitoring System (COMS) Requirements

1. 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 COMS.
2. The permittee shall submit two copies of a complete test plan for the COMS to the AQD for approval.
3. Within 30 calendar days after test plan approval, the permittee shall complete the installation and testing of the COMS.
4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the COMS complies with the requirements of Performance Specification (PS) 1.
5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
6. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1 of Appendix B, 40 CFR Part 60.
7. Until such time as the US EPA promulgates quality assurance requirements for COMS under Appendix F to 40 CFR Part 60, the permittee shall perform an annual audit of the COMS using the procedures set forth in EPA Publication 450/4-92-010, "Performance Audits Procedures for Opacity Monitors," or a procedure acceptable to the AQD. The results of the annual audit shall be submitted to the AQD within the quarterly EER for the quarter in which the annual audit is conducted. Upon promulgation of COMS quality assurance requirements under Appendix F of Part 60, the permittee shall follow such procedures.
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 Air Quality Division, 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 10 percent. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
 - b. A report of all periods of COMS downtime and corrective action.
 - c. A report of the total operating time of boilers during the reporting period.
 - d. If no exceedances or COMS downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data is shall be kept on file for a period of at least five years and made available to the AQD upon request.