PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS

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

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO_2e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H_2S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO_x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**

2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**

4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**

5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**

6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**

7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
    a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
    b) A visible emission limit specified by an applicable federal new source performance standard.
    c) A visible emission limit specified as a condition of this Permit to Install.

12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-TOHEATER-T1	A 7.65 MMBTU/hr natural gas fired non-contact heating oil heat exchanger that uses recirculated heat from Train No. 1 Energy Recovery System (ERS) Furnace to heat oil which in turn heats air that is used in the BioCon Dryer. Emissions are routed to a dedicated stack during startup, which uses natural gas combustion for heating until the temperature of heating oil in the exchanger system is self-sustained by the process.		FGTOHEATERS
EU-TOHEATER-T2	A 7.65 MMBTU/hr natural gas fired non-contact heating oil heat exchanger that uses recirculated heat from the Train No. 2 ERS Furnace to heat oil which in turn heats air that is used in the BioCon Dryer. Emissions are routed to a dedicated stack during startup, which uses natural gas combustion for heating until the temperature of heating oil in the exchanger system is self-sustained by the process.		FGTOHEATERS
EU-BIOCONERS-T1	This is the Train No. 1 process system. The system consists of a BioCon Dryer that dries the dewatered sewage sludge, which is then fed to the energy recovery system (ERS) furnace No. 1 to combust the sludge in a self-sustaining manner. Energy recovered from the sludge combustion is used to heat oil which in turn heats air that is used in the BioCon Dryer. The process and APC equipment is designed to meet NSPS Subpart LLLL emission limits, and emissions are exhausted from a dedicated stack following APC treatment. The Train No. 1 APC equipment used for emissions control consists of a particulate cyclone, SCR, wet scrubber, wet electric static precipitator (WESP), and a mercury control device.		FGBIOCONERS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-BIOCONERS-T2	This is the Train No. 2 process system. The system consists of a BioCon Dryer that dries the dewatered sewage sludge, which is then fed to the ERS furnace No. 2 to combust the sludge in a self-sustaining manner. Energy recovered from the sludge combustion is used to heat oil which in turn heats air that is used in the BioCon Dryer. The process and APC equipment is designed to meet NSPS Subpart LLLL emission limits, and emissions are exhausted from a dedicated stack following APC treatment. The Train No. 2 APC equipment used for emissions control consists of a particulate cyclone, SCR, wet scrubber, WESP, and a mercury control device.		FGBIOCONERS
EU-NEWSTB-HVAC1	A 2.0 MMBTU/hr natural gas fired makeup air unit for heating the new Sludge Treatment Building (STB), located in the dewatering section of the building.		FGHVAC
EU-NEWSTB-HVAC2	A 1.5 MMBTU/hr natural gas fired makeup air unit for heating the new STB, located in the drying section of the building.		FGHVAC
EU-NEWSTB-GENERATOR	The new STB will have a backup emergency generator with an engine that is fired on natural gas to provide power in the event of a power disruption. The generator is rated at 450 kW and 6.6 MMBtu/hour heat input. The engine is U.S. EPA certified to meet the requirements of NSPS Subpart JJJJ.		NA

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

EU-NEWSTB-GENERATOR
EMISSION UNIT CONDITIONS

DESCRIPTION

The new Sludge Treatment Building (STB) will have a backup emergency generator with a four-stroke lean burn natural gas-fired engine to provide power in the event of a power disruption. The generator is rated at 450 kW and 6.6 MMBtu/hour heat input. The engine is USEPA certified to meet the requirements of NSPS Subpart JJJJ.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	1.0 g/HP-hr or 82 ppmvd at 15% O_2	Hourly	EU-NEWSTB-GENERATOR	SC V.1, SC VI.2, SC VI.4	40 CFR 60.4233(e) 40 CFR 42.21(c) & (d)
2. CO	2.0 g/HP-hr or 270 ppmvd at 15% O_2	Hourly	EU-NEWSTB-GENERATOR	SC V.1, SC VI.2, SC VI.4	40 CFR 60.4233(e)
3. VOC	0.70 g/HP-hr or 60 ppmvd at 15% O_2	Hourly	EU-NEWSTB-GENERATOR	SC V.1, SC VI.2, SC VI.4	40 CFR 60.4233(e)

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas, in EU-NEWSTB-GENERATOR. **(40 CFR 60.4241)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee may operate EU-NEWSTB-GENERATOR for no more than 100 hours per calendar year as determined at the end of each calendar month 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. 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 year. EU-NEWSTB-GENERATOR may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per 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, except as provided in paragraph 40 CFR 60.4243(d)(3)(i). **(40 CFR 60.4243)**

2. The permittee shall operate and maintain EU-NEWSTB-GENERATOR such that it meets the emission limits in SC I.1, I.2, and I.3 over the entire life of the engine. **(R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR0.4234)**

3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for EU-NEWSTB-GENERATOR:
   a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,

   b) Keep a maintenance plan and the permittee may only change those engine settings that are permitted by the manufacturer. 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

   c) Meet the requirements as specified in 40 CFR 1068 Subparts A through D.
   (R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4243(b)(1))

4. If the permittee purchased a non-certified engine and control device or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EU-NEWSTB-GENERATOR and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4243(b)(2))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain EU-NEWSTB-GENERATOR with a non-resettable hours meters to track the operating hours. **(40 CFR 60.4237)**

2. The nameplate capacity of EU-NEWSTB-GENERATOR shall not exceed 701 brake horsepower. **(40CFR60.4230)**

V. TESTING/SAMPLING

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

1. The permittee shall conduct an initial performance test for EU-NEWSTB-GENERATOR within one year after initial startup of the engine to demonstrate compliance with NO_x, CO, and VOC emission limits in 40CFR60.4233(e), unless the engines have been certified by the manufacturer as required by 40 CFR Part 60 Subpart JJJJ and the permittee maintains the engine as required by 40 CFR 60.4243(b)(1). If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244, and the hourly emission rates shall be determined by the average of the acceptable three test runs. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. After conducting the initial performance test, the permittee shall conduct subsequent performance testing, for non-certified engines, every 8,760 hours or 3 years, whichever comes first. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR 60.4243, 40 CFR 60.4244, 40 CFR Part 60 Subpart JJJJ)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1201(3))**

2. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification records documenting that EU-NEWSTB-GENERATOR meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart JJJJ. The permittee shall keep all records on file and make them available to the Department upon request. If EU-NEWSTB-GENERATOR is or 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 60.4245)**

3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EU-NEWSTB-GENERATOR, on a monthly, calendar year, and 12-month rolling time period basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of EU-NEWSTB-GENERATOR, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4243, 40 CFR 60.4245)**

4. The permittee shall keep records of the following information for EU-NEWSTB-GENERATOR:
   a) All notifications submitted to comply with 40 CFR Part 60 Subpart JJJJ and all documentation supporting any notification.
   b) Maintenance conducted on EU-NEWSTB-GENERATOR.
   c) If EU-NEWSTB-GENERATOR is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
   d) If EU-NEWSTB-GENERATOR is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards.

   (40 CFR 60.4245(a))

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 EU-NEWSTB-GENERATOR. **(R 336.1201(7)(a))**

2. The permittee must submit an initial notification as required in 40 CFR 60.7(a)(1) if EU-NEWSTB-GENERATOR has not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231. The notification must include the following information:
   a) Name and address of the owner or operator;
   b) The address of the affected source;
   c) The engine make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
   d) The engine emission control equipment; and
   e) Fuel used in the engine.

   (40 CFR 60.4245(c))

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-NewSTB-Generator	12.0	10.0	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 Stationary Spark Ignition Internal Combustion Engines as specified in 40 CFR Part 60 Subparts A and JJJJ, as they apply to EU-NEWSTB-GENERATOR. **(40 CFR 60.4230)**

2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63 Subparts A and ZZZZ, as they apply to EU-NEWSTB-GENERATOR. **(40 CFR 63 Subpart ZZZZ)**

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

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGTOHEATERS	Two non-contact heating oil heat exchangers for Train No. 1 and Train No. 2 ERS Furnaces.	EU-TOHEATER-T1, EU-TOHEATER-T2
FGBIOCONERS	Two BioCon Dryers and energy recovery system (ERS) with particulate cyclone, wet scrubber, WESP, SCR, and mercury control device.	EU-BIOCONERS-T1, EU-BIOCONERS-T2
FGHVAC	Two natural gas fired makeup air units for heating the new Sludge Treatment Building (STB).	EU-NEWSTB-HVAC1, EU-NEWSTB-HVAC2

FGTOHEATERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two natural gas-fired non-contact heating oil heat exchangers that use recirculated heat from their respective ERS Furnace to heat oil which in turn heats air that is used in the associated BioCon Dryer. Emissions are routed to a dedicated stack during startup, which uses natural gas combustion for heating until the temperature of heating oil in the exchanger system is self-sustained by the process.

Emission Unit: EU-TOHEATER-T1, EU-TOHEATER-T2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. There shall be no visible emissions from FGTOHEATERS. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a))**

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in FGTOHEATERS. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-TOHEATER-T1 or EU-TOHEATER-T2 unless the unit's low NOx burners are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1910, 40 CFR 52.21(c) & (d))**

2. The permittee shall not burn more than 11.25 MMscf of natural gas in FGTOHEATERS per 12-month rolling time-period, as determined at the end of each calendar month. **(R 336.1205, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The heat input capacity of each emission unit in FGTOHEATERS shall not exceed a maximum of 7.65 MMBTU/hr. **(R 336.1225, 40 CFR 52.21(c) & (d))**

2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to continuously monitor the amount of natural gas combusted in FGTOHEATERS. **(R 336.1205, 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 keep manufacturer documentation showing the maximum heat input each emission unit in FGTOHEATERS. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a))**

2. The permittee shall monitor and record, in a satisfactory manner acceptable to the AQD District Supervisor, the monthly and 12-month rolling time-period, as determined at the end of each calendar month, amount of natural gas combusted in FGTOHEATERS. **(R 336.1205, 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-Train1TOHeat	22.0	40	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-Train2TOHeat	22.0	40	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

FGBIOCONERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two BioCon Dryer process systems that dry the dewatered sewage sludge, which is then fed to two ERS Furnaces to combust the sludge in a self-sustaining manner. Each dryer has a dedicated furnace associated with it. Energy recovered from the sludge combustion is used to heat oil which in turn heats air that is used in the associated BioCon Dryer.

Emission Unit: EU-BIOCONERS-T1, EU-BIOCONERS-T2

POLLUTION CONTROL EQUIPMENT

Particulate cyclone, SCR, wet scrubber, WESP, and mercury control device on each furnace

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NOx	0.38 pph	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5	40 CFR 52.21 (c) & (d)
2. NOx	30 ppmvd at 7% O_2	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
3. CO	27 ppmvd at 7% O_2[a]	24-hour block average	Each emission unit in FGBIOCONERS	SC VI.2	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
4. SO_2	5.3 ppmvd at 7% O_2	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
5. PM	9.6 mg/dscm at 7% O_2	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
6. PM10	0.26 pph	Hourly	Each emission unit in FGBIOCONERS	SC V.2	40 CFR 52.21(c) & (d)
7. PM2.5	0.26 pph	Hourly	Each emission unit in FGBIOCONERS	SC V.2	40 CFR 52.21(c) & (d)
8. VOC	0.5 pph	Hourly	FGBIOCONERS	SC V.2	R 336.1702(a)
9. Hydrogen Chloride	0.24 ppmvd at 7% O_2	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
10. Dioxins/furans	0.013 ng/dscm total mass basis OR 0.0044 ng/dscm toxic equivalency basis, at 7% O_2	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
11. Mercury	0.0010 mg/dscm at 7% O_2	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
12. Beryllium	0.000104 pph	Hourly	Each emission unit in FGBIOCONERS	SC V.2	R 335.1225, 40 CFR 61.32
13. Cadmium	0.0011 mg/dscm at 7% O_2	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
14. Lead	0.00062 mg/dscm at 7% O_2	Hourly	Each emission unit in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8	40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
15. PFOS (CAS 1763-23-1)	0.0000153 pph[1]	Hourly	Each emission unit in FGBIOCONERS	SC V.3	R 336.1225
16. PFOA (CAS 335-67-1)	0.0000038 pph[1]	Hourly	Each emission unit in FGBIOCONERS	SC V.3	R 336.1225
17. Visible emissions from ash handling	Visible emissions of combustion ash shall be no more than 5 percent for the hourly observation period	Three 1-hour observation periods	Ash handling in FGBIOCONERS	SC V.1, V.5, V.6, V.7, V.8, V.11	R 336.1301 40 CFR 60.4845, Table 1 of 40 CFR 60 Subpart LLLL
[a] Per 40 CFR 60.4865(b)(1), the 7% O2 does not apply during periods of startup or shutdown.					

17. The emission limits and standards of 40 CFR Part 60, Subparts A and LLLL (FGBIOCONERS SC I.2-I.5, SC I.9-I.11, SC I.13-I.14, and SC I.17) apply at all times the emission unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). **(40 CFR 60.4860)**

18. Visible emissions from each FGBIOCONERS exhaust stack shall not exceed a six-minute average of 5 percent opacity. **(R 336.1301)**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Sludge Feed	7930 Dry tons/year	12-month rolling time period as determined at the end of each calendar month	FGBIOCONERS	SC VI.9	R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d)

2. The permittee shall only use sludge feed that is generated at the Warren Waste Water Treatment Plant facility. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any unit in FGBIOCONERS unless an interim MAP, as described in Rule 911(2), has been submitted within 60 days prior to commencement of trial operation and the MAP is implemented and maintained.

   After commencement of trial operation, the permittee shall not operate any unit in FGBIOCONERS unless an updated MAP, as described in Rule 911(2), has been submitted within 180 days after commencement of trial operation and the MAP 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 60 days after such an event occurs. The permittee shall also amend the MAP within 60 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 60 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 336.1910, R 336.1911)**

2. The permittee shall not operate FGBIOCONERS unless a fully trained and qualified SSI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The operator shall complete training by the date specified in 40 CFR 60.4815 and maintain and renew qualification according to 40 CFR 60.4825 and 40 CFR 60.4830 respectively. Operator training and qualification must be obtained through a state-approved program or by completing the requirements included in 40 CFR 60.4810(c). The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified SSI unit operators are temporarily not accessible, the permittee shall follow the procedures in 40 CFR 60.4835. **(40 CFR 60.4810, 40 CFR 60.4815, 40 CFR 60.4820, 40 CFR 60.4825, 40 CFR 60.4830, 40 CFR 60.4835)**

3. The permittee shall submit and maintain a monitoring plan specifying the ash handling system operating procedures that will be followed to ensure that the facility meets the fugitive emissions limit specified in SC I.17. **(40 CFR 60.4880(d))**

4. The permittee shall not operate an emission unit in FGBIOCONERS unless the operating limits and requirements specified below for the emission unit are met within 60 days after the emission unit reaches the feed rate at which it will operate, or within 180 days after its initial startup, whichever comes first. The permittee shall comply with any new operating limits and requirements specified below that are re-established as specified in 40 CFR 60.4890(d). These operating limits apply at all times that sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time).
   a) The minimum operating temperature of the combustion chamber established in accordance with 40 CFR 60.4890(a)(2)(i), but not less than the minimum temperature specified in SC IV.1. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4850(a), 40 CFR 60.4850(e))**
   b) The pressure drop requirement and the requirement for the solids level in the dust box for the cyclone. **(R 336.1224, R 336.1225, R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4855, 40 CFR 60.4850(h))**

c) The minimum pressure drop, minimum liquid flow rate, and minimum liquid pH for the wet scrubber. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4850(e))**
d) The minimum secondary voltage and secondary amperage of the electrostatic precipitator collection plates and the minimum effluent water flow rate out of the WESP. **(R 336.1224, R 336.1225, R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4850(e))**
e) The outlet NOx concentration requirement to control urea and urea consumption of the SCR. **(R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4855, 40 CFR 60.4850(h))**
f) The requirements for inlet gas temperature to the mercury control device and the differential pressure of the mercury control device. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 60.4855, 40 CFR 60.4850(h))**
g) The operating requirements in a site-specific fugitive emission monitoring plan, submitted as specified in 40 CFR 60.4880(d) to ensure that the ash handling system will meet the emission standard for fugitive emissions. **(R 336.1224, R 336.1225, R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4850(d), 40 CFR 60.4850(e))**

5. Within 180 days after trial operation, the permittee shall submit a plan to the AQD District Supervisor for approval, that describes how emissions will be minimized during startups, shutdowns, and malfunctions. The plan shall incorporate procedures recommended by the equipment manufacturer. Unless notified by the District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. **(R 336.1911)**

6. The permittee shall operate and maintain FGBIOCONERS, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including startup, shutdown, and malfunction. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**

7. The permittee shall establish the site-specific operating limits specified in 40 CFR 60.4870 (b) through (g) and 40 CFR 60.4855 during the initial performance test and the permittee shall meet the requirements in 40 CFR 60.4890(d) to confirm these operating limits or re-establish new operating limits using operating data recorded during any performance tests or performance evaluations required in 40 CFR 60.4885. The permittee shall follow the data measurement and recording frequencies and data averaging times specified in Table 3 of 40 CFR 60 Subpart LLLL or as established in 40 CFR 60.4855, and the permittee shall follow the testing, monitoring, and calibration requirements specified in 40 CFR 60.4900 and 40 CFR 60.4905 or established in 40 CFR 60.4855. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4870)**

8. The permittee shall conduct an air pollution control device inspection according to 40 CFR 60.4900(c) within 60 days of installing an air pollution control device or within 180 days of startup of the emission unit using the air pollution control device, whichever comes first. Within 10 operating days following the air pollution control device inspection under 40 CFR 60.4875(a), the permittee shall complete all necessary repairs unless written approval from the AQD District Supervisor has been obtained establishing a date whereby all necessary repairs of the emission unit must be completed. **(40 CFR 60.4875)**

9. The permittee shall conduct an annual inspection of each air pollution control device used to comply with the emission limits, according to 40 CFR 60.4900(c), no later than 12 months following the previous annual air pollution control device inspection. Within 10 operating days following the air pollution control device inspection, the permittee shall complete all necessary repairs must be completed unless written approval from the AQD District Supervisor has been obtained establishing a date whereby all necessary repairs of the emission unit must be completed. **(40 CFR 60.4895)**

10. The permittee shall develop and submit to the AQD District Supervisor a site-specific monitoring plan that addresses the applicable elements and requirements in 40 CFR 60.4880. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4880, 40 CFR 60.4900(c)(3))**

11. Use of a bypass stack associated with either emission unit in FGBIOCONERS at any time that sewage sludge is being charged to that emission unit is an emissions standards deviation for all of the pollutants listed in SC I.2-I.5, SC I.9-I.11, SC I.13-I.14, and SC I.17. **(40 CFR 60.4900(d))**

12. The permittee shall develop and submit to the AQD District Supervisor a site-specific monitoring plan for operation and maintenance of each particulate cyclone, SCR system, and mercury control device. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60.4855)**

13. The permittee shall conduct air pollution control device inspections that include, at a minimum, inspection of the air pollution control device(s) for proper operation, general observation that the equipment is maintained in good operating condition, and the equipment is operating in accordance with the monitoring outlined in the site-specific monitoring plan developed according to the requirements in 40 CFR 60.4880. **(40 CFR 60.4900(c))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-BIOCONERS-T1 or EUBIOCONERS-T2 of FGBIOCONERS unless a minimum temperature of 1,994°F is maintained in the respective ERS Furnace. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d), R 336.1910)**

2. The permittee shall not operate EU-BIOCONERS-T1 or EUBIOCONERS-T2 of FGBIOCONERS unless a minimum PFAS destruction efficiency of 90% by weight, as determined in accordance with SC V.14, is maintained in the respective ERS Furnace. **(R 336.1224, R 336.1225, R 336.1910)**

3. The permittee shall not operate EUBIOCONERS-T1 or EUBIOCONERS-T2 of FGBIOCONERS unless each respective air pollution control system consisting of a particulate cyclone, selective catalytic reduction (SCR), wet scrubber, WESP, and mercury control device is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with the MAP for FGBIOCONERS as required in SC III.1. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 60 Subpart LLLL)**

4. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the CO content of the exhaust gas from EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS on a continuous basis. The permittee shall install and operate the Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix A. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4885(b)(1))**

5. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the amount of sludge feed to EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS on a continuous basis. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(f)(1)**

6. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the combustion chamber temperature of EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS on a continuous basis. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(a), 40 CFR 60.4905)**

7. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the following parameters on a continuous basis:
   a) The pressure drop of each cyclone associated with EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4855)**
   b) Whether the solids level in the dust box of each cyclone associated with EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS reaches a high level indicative of poor removal of solids from the dust box. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4855)**
   c) The pressure drop of each wet scrubber associated with EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4905)**
   d) The liquid flowrate of each wet scrubber associated with EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4905)**
   e) The pH of the liquid of each wet scrubber associated with EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4905)**
   f) The secondary voltage and secondary amperage input to the collection plates of each WESP. **(R 336.1224, R 336.122540 CFR 52.21(c) & (d), 40 CFR 60.4905)**

g) The minimum effluent water flow rate from each WESP. **(R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d), 40 CFR 60.4905)**
h) The outlet NOx concentration of each SCR system. **(40 CFR 52.21(c) & (d), 40 CFR 60.4855)**
i) The urea consumption of each SCR system. **(40 CFR 52.21(c) & (d), 40 CFR 60.4855)**
j) The inlet gas temperature to each mercury control device. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 60.4855, 40 CFR 60.4905)**
k) The differential pressure of each mercury control device. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 60.4855, 40 CFR 60.4905)**

8. The permittee shall maintain the inlet gas temperature to each mercury control device in FGBIOCONERS at 180°F or less. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 60.4855, 40 CFR 60.4905)**

V. TESTING/SAMPLING

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

1. Within 60 days after achieving the maximum feed rate, but no later than after 180 days after commencement of initial startup, the permittee must demonstrate initial compliance that EUBIOCONERS-T1 and EUBIOCONERS-T2 meet the emission limits and standards specified in Table 1 of Subpart LLLL for particulate matter, hydrogen chloride, dioxins/furans (total mass basis or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, lead, and fugitive emissions from ash handling, by testing, at owner's expense. The initial performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table 1 of Subpart LLLL according to the testing, monitoring, and calibration requirements specified in 40 CFR 60.4900(a). After the initial performance test, the permittee shall complete the testing at the frequencies specified in 40 CFR 60.4885. 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 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60.4865(a))**

2. No later than after 180 days after commencement of trial operation, the permittee shall verify the VOC, PM10, PM2.5, and beryllium emission rates from EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS, by testing at owner's expense, as required by federal Standards of Performance for New Stationary Sources, in accordance with Department requirements. The permittee shall complete the testing once every five years thereafter unless an alternate testing schedule is approved by the AQD District Supervisor. 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 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40CFR 52.21(c) & (d))**

3. Within 180 days after commencement of initial start-up, the permittee shall verify PFOS and PFOA emission rates from EUBIOCONERS-T1 and EUBIOCONERS-T2 by testing at the owner's expense, in accordance with Department requirements. At the time of testing, the permitee shall also sample the sludge being processed and analyze the sludge to determine the PFAS content of the sludge using EPA Method 1633 or an alternate a method approved by the AQD. The permittee shall repeat the testing after one year and then every five years thereafter unless an alternate testing schedule is approved by the AQD District Supervisor. Testing shall be performed using USEPA Method OTM-45. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test

results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004)**

4. Within 180 days before initial start-up of EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS, the permittee shall determine the PFAS concentration in the sewage sludge feed going to the existing incinerator (EU-Incinerator) monthly for three months, by material sampling using USEPA Method 1633. An alternate method, or a modification to the approved method may be used upon approval of the AQD.

   After the initial start-up of EUBIOCONERS-T1 and EUBIOCONERS-T2, the permittee shall perform monthly sampling of the sewage sludge feed to EUBIOCONERS-T1 and EUBIOCONERS-T2 for a period of six months and shall determine the PFAS content of the sludge using USEPA Method 1633. An alternate method, or a modification to the approved EPA Method, may be used upon approval of the AQD. After the initial six consecutive months of monthly material sampling is complete, the permittee may decrease sampling to quarterly, if the monthly samples are below 169 ppb PFOS and 42 ppb PFOA. Thereafter, if the quarterly PFOS concentration of the sludge feed exceeds 169 ppb, the quarterly PFOA concentration of the sludge feed exceeds 42 ppb, or if the sources of wastewater change in a way that could increase the PFAS concentration, the permittee shall start monthly sampling until the monthly sludge feed material sampling shows the PFOS concentration is below 169 ppb and the PFOA concentration is below 42 ppb and on five consecutive material samples. Once the PFOS concentration of the sludge feed, determined from at least five consecutive samples, is maintained below 169 ppb and the PFOA concentration of the sludge feed, determined from at least five consecutive samples, is maintained below 42 ppb, the permittee may resume quarterly material sampling.

   No less than 30 days prior to the initial test for material sampling, 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 material sampling. Thereafter, the permittee shall submit a test plan upon the request of the AQD District Supervisor or if any changes are made to the approved testing protocol. The permittee may petition the AQD District Supervisor to reduce the frequency of material sampling of the sludge feed PFAS content if the PFOS concentration remains below 169 ppb and the PFOA concentration remains below 42 ppb. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004)**

5. The permittee shall demonstrate continuous compliance with the emission limits and standards for particulate matter, hydrogen chloride, dioxins/furans (total mass or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, lead, and fugitive emissions from ash handling using a performance test. Performance tests shall be conducted on an annual basis for each pollutant (between 11 and 13 calendar months following the previous performance test), except as provide in 40 CFR 60.4885(a)(3) and (e). The performance tests shall be conducted using the test methods, averaging methods and minimum sampling volumes or durations specified in Table 1 or 2 of 40 CFR Part 60 Subpart LLLL and according to the testing, monitoring and calibration requirements specified in 40 CFR 60.4900(a). 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. Not less than 30 days prior to the anticipated test date, the permittee shall submit a complete stack testing plan to the AQD Technical Programs Unit and District Office for approval. The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60.4885)**

6. The permittee may conduct a repeat of the performance test required in SC V.5 at any time to establish new values for the operating limits to apply from that point forward. The AQD District Supervisor may request a repeat performance test at any time. **(R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60.4885(a)(1)**

7. The permittee shall repeat the performance test required in SC V.5 within 60 days of a process change, as defined in 40 CFR 60.4885. **(R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60.4885(a)(2))**

8. Except as specified in 40 CFR 60.4885(a)(1) and (2) (SC V.6 and SC V.7), the permittee may conduct performance tests less often for a given pollutant, as specified below: **(40 CFR 60.4885(a)(3))**
   a) The permittee may conduct performance tests less often if the performance tests for the pollutant for at least two consecutive years show that the emissions for that pollutant are at or below 75 percent of the emission limit specified in Table 2 or 3 of 40 CFR Part 60 Subpart LLLL, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the permittee does not have to conduct a performance test for that pollutant for the next two years. The permittee shall conduct a performance test during the third year and no more than 37 months after the previous performance test.
   b) If an emission unit in FGBIOCONERS continues to meet the emission limit for the pollutant, the permittee may choose to conduct performance tests for the pollutant every third year if emissions of that pollutant are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test.
   c) If a performance test shows emissions exceeded 75 percent of the emission limit for a pollutant, the permittee shall conduct annual performance tests for that pollutant until all performance tests over two consecutive years show compliance.

9. The permittee shall establish the following parameters during the performance tests specified in SC V.1, SC V.5, and SC V.6:
   a) A minimum combustion chamber operating temperature for each emission unit.
   b) A minimum pressure drop across each wet scrubber.
   c) A minimum scrubber liquid flow rate for each scrubber.
   d) A minimum scrubber liquid pH for each wet scrubber.
   e) The secondary voltage and secondary amperage input to the collection plates of each WESP.
   f) The minimum effluent water flow rate from each WESP.

   Each established parameter shall be equal to the lowest four-hour average or one-hour average, as applicable, of the parameter measured during the most recent performance test demonstrating compliance with all applicable emission limits. The permittee shall keep records on file at the facility for a period of five years. **(R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60.4850, 40 CFR 60.4870)**

10. The permittee shall monitor the following parameters during the performance tests specified in SC V.1, SC V.5, and SC V.6 and confirm that the proper operating range is being met:
    a) The pressure drop across each cyclone.
    b) The solids level in the dust box of each cyclone.
    c) The outlet NOx concentration of each SCR system.
    d) The urea consumption of each SCR System.
    e) The inlet gas temperature to each mercury control device.
    f) The differential pressure of each mercury control device.

    The permittee shall keep records on file at the facility for a period of five years. **(R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60.4850)**

11. The permittee shall perform and record, at the frequencies specified in 40 CFR 60.4885, a visible emissions observation to determine the presence or absence of visible emissions of combustion ash from an ash conveying system (including conveyer transfer points). The permittee shall perform and record the visible emission observation utilizing Method 22 of Appendix A-7 of 40 CFR Part 60 to determine the presence or absence of visible emissions. The visible emissions observations shall consist of three one-hour observation periods. If visible emissions are observed, it should be recorded along with the corrective action. **(R 336.1301, 40 CFR 60.4865(a), 40 CFR 60.4885)**

12. The use of a bypass stack during a performance test invalidates the performance test. **(40 CFR 60.4900(d))**

13. The permittee must document that the dry sludge burned during the performance test is representative of the sludge burned under normal operating conditions by:

a) Maintaining a log of the quantity of sewage sludge burned during the performance test by continuously monitoring and recording the average hourly rate that sewage sludge is fed to the incinerator. **(40 CFR 60.4900(a)(2)(i))**
b) Maintaining a log of the moisture content of the sewage sludge burned during the performance test by taking grab samples of the sewage sludge fed to the incinerator for each 8 hour period that testing is conducted. **(40 CFR 60.4900(a)(2)(ii))**

14. Within 180 days after commencement of initial start-up, the permittee shall determine the PFAS destruction efficiency of EUBIOCONERS-T1 and EUBIOCONERS-T2 by testing at the owner's expense, in accordance with Department requirements, by spiking a Principal Organic Constituent, such as hexafluoroethane. The permittee shall complete the testing every five years thereafter unless an alternate testing schedule is approved by the AQD District Supervisor. Testing shall be performed using EPA Method OTM-50. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d), 40 CFR 60 Subpart LLLL)**

2. The permittee shall monitor and record the CO concentration of the exhaust gases from EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS, on a continuous basis with a CEM system. The permittee shall maintain a QA/QC program as specified in Appendix F of 40 CFR Part 60 and to comply with the requirements as specified in Appendix A of this PTI. **(40 CFR 52.21(c) & (d) 40 CFR 60.13, 40 CFR 60.4885(b)(1))**

3. The permittee shall continuously measure pressure drop of each scrubber and record every 15 minutes for 12-hour block average as an indicator of proper operation of the scrubber. The indicator range is established during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4905(a)(1))**

4. The permittee shall continuously measure liquid flow of each scrubber and record every 15 minutes for 12-hour block average as an indicator of proper operation of the scrubber. The indicator range is established during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4905(a)(1))**

5. The permittee shall calculate and record the hourly arithmetic average pressure drop of each scrubber. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4910(f)(3)(i)(B))**

6. The permittee shall calculate and record the hourly arithmetic average liquid flow rate of each scrubber. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4910(f)(3)(i)(B))**

7. The permittee shall monitor and record the combustion chamber temperature for each emission unit on a continuous basis. Measurements of the combustion chamber temperature shall be recorded every 15 minutes for 12-hour block average. The permittee shall keep all records of the 1-hour average combustion chamber temperature on file at the facility and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(a), 40 CFR 60.4910(f)(3)(i)(A))**

8. The permittee shall monitor and record, on a continuous basis, the liquid pH of each scrubber. Measurements of the scrubber liquid pH for each scrubber shall be recorded every 15 minutes for 3-hour block average. The permittee shall keep records of the 1-hour average pH values on file at the facility and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 60.4850(b), 40 CFR 60.4905(a)(1), 40 CFR 60.4910(f)(3)(i)(B))**

9. The permittee shall monitor and record, in a satisfactory manner, the sludge feed rate and sludge moisture content (as weight percent) for EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS as follows:
   a) Continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. The permittee shall keep a record of the daily average feed rate, as specified in 40 CFR 60.4910(f)(3)(ii)
   b) Take at least one grab sample per day of the sewage sludge fed to EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS to determine the moisture content. If the permittee takes more than one grab sample in a day, the permittee shall calculate the daily average moisture content for the grab samples. The permittee shall keep a record of the daily average moisture content, as specified in 40 CFR 60.4910(f)(3)(ii).

   The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 60.4850(f), 40 CFR 60.4910(f)(3)(ii))**

10. The permittee shall continuously measure pressure drop of each cyclone and record every 15 minutes for 12-hour block average as an indicator of proper operation of the cyclone. The operating requirements will be verified during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4880, 40 CFR 60.4905(a)(2))**

11. The permittee shall calculate and record the hourly arithmetic average pressure drop of each cyclone. The permittee shall keep all records on file and make them available to the Department upon request. **(R336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4910(f)(3)(iv))**

12. The permittee shall continuously monitor the solids level in the dust box of each cyclone and record all alarms indicating the solids level is too high, which may cause improper operation of the cyclone. The solids level in the dust box of each cyclone that ensures proper operation of the cyclone shall be identified in the MAP. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4880, 40 CFR 60.4905(a)(2), 40 CFR 60.4910(f)(3)(iv))**

13. The permittee shall continuously measure the secondary voltage and secondary amperage input to the collection plates of each WESP and record every 15 minutes for 12-hour block average as an indicator of proper operation of the WESP. The indicator range is established during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4905(a)(2))**

14. The permittee shall calculate and record the hourly arithmetic average the secondary voltage and secondary amperage input to the collection plates of each WESP. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4910(f)(3)(i)(C))**

15. The permittee shall continuously measure the effluent water flow rate each WESP and record every 15 minutes for 12-hour block average as an indicator of proper operation of the WESP. The indicator range is established during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4905(a)(2))**

16. The permittee shall calculate and record the hourly arithmetic average effluent water flow rate of each WESP. The permittee shall keep all records on file and make them available to the Department upon request. **(R336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(b), 40 CFR 60.4910(f)(3)(i)(C))**

17. The permittee shall continuously measure the outlet NOx concentration of each SCR and record every 15 minutes for 12-hour block average as an indicator of proper operation of the SCR. The operating requirements shall be verified during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4880, 40 CFR 60.4905(a)(2))**

18. The permittee shall calculate and record the hourly arithmetic average outlet NOx concentration of each SCR. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4910(f)(3)(iv))**

19. The permittee shall continuously measure urea consumption of each SCR and record every 15 minutes for 12-hour block average as an indicator of proper operation of the SCR. The operating requirements shall be verified during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4880, 40 CFR 60.4905(a)(2))**

20. The permittee shall calculate and record the hourly arithmetic average urea consumption of each SCR. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4910(f)(3)(iv))**

21. The permittee shall continuously measure influent gas temperature of each mercury control device and record every 15 minutes for 12-hour block average as an indicator of proper operation of the mercury control device. The operating requirements shall be verified during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4880, 40 CFR 60.4905(a)(2))**

22. The permittee shall calculate and record the hourly arithmetic average influent gas temperature of each mercury control device. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4910(f)(3)(iv))**

23. The permittee shall continuously measure differential pressure of each mercury control device and record every 15 minutes for 12-hour block average as an indicator of proper operation of the mercury control device. The operating requirements will be verified during each performance test to verify compliance with emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4880, 40 CFR 60.4905(a)(2))**

24. The permittee shall calculate and record the hourly arithmetic average differential pressure of each mercury control device. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4850(h), 40 CFR 60.4910(f)(3)(iv))**

25. The permittee shall monitor emissions and operating information for EUBIOCONERS-T1 and EUBIOCONERS-T2 of FGBIOCONERS in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and LLLL. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available to the Department upon request. **(40 CFR Part 60 Subparts A and LLLL)**

26. The permittee shall keep records of any notifications to the AQD District Supervisor required by SC VII.4 and VII.5. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(40 CFR 60.4910(c)(4), 40 CFR 60.4910(g)(1))**

27. The permittee shall keep documentation of the operator training procedures and records specified in 40 CFR 60.4840 and 40 CFR 60.4910(c). The permittee shall make available and readily accessible at the facility at all times for all SSI unit operators the documentation specified in 40 CFR 60.4910(c)(1). **(40 CFR 60.4910(c))**

28. The permittee shall keep records of the results of initial and annual air pollution control device inspections conducted as specified in 40 CFR 60.4875 and 40 CFR 60.4900(c), including any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the AQD District Supervisor. **(40 CFR 60.4910(d))**

29. The permittee shall keep records of the performance test data specified in 40 CFR 60.4910(e). **(40 CFR 60.4910(e)**

30. The permittee shall keep records of the following: **(40 CFR 60.4910(i), 40 CFR 60.4910(j), 40 CFR 60.4910(m), 40 CFR 60.4910(n))**
    a) Equipment specifications and related operation and maintenance requirements received from vendors for the incinerator, emission controls, and monitoring equipment
    b) Inspections, calibration, and validation checks of any monitoring devices as required under 40 CFR 60.4900 and 40 CFR 60.4905
    c) The use of the bypass stack, including dates, times, and durations as required under 40 CFR 60.4905(d)
    d) If a malfunction occurs, the information submitted in the annual report in 40 CFR 60.4915(c)(16)

31. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit for each unit in FGBIOCONERS. This information shall include, but shall not be limited to the following:
    a) Compliance tests and any testing required under the special conditions of this permit.
    b) Monitoring data.
    c) Verification of the PFOS and PFOA content in the sludge feed.
    d) Temperature of the furnace.
    e) Cyclone pressure drop and dust box solids level alarms.
    f) Scrubber pressure drop, liquid flow rate and pH.
    g) WESP secondary voltage, secondary amperage, and effluent water flow rate.
    h) SCR outlet NOx concentration and urea consumption.
    i) Mercury control device influent gas temperature and differential pressure.
    j) All calculations necessary to show compliance with the limits contained in this permit.
    k) All records related to, or as required by, the MAP and the startup, shutdown, and malfunction plan.

    The permittee shall keep all of the above information in a format acceptable to the AQD District Supervisor, which shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702, R 336.1912, 40 CFR 52.21(c) & (d))**

32. The permittee shall keep a description of the mercury control device(s), including the number of modules in each unit and how the modules are arranged (or equivalent), and how much mercury can be captured in each unit. In addition, the permittee shall provide a procedure, including frequency, by which the control device will be periodically checked (e.g., sampled and analyzed using an instrument or laboratory method) to avoid mercury breakthrough. This procedure shall be included in the MAP, as required by SC III.1, that is approved by the AQD District Supervisor. **(R 336.1224, R 336.1225)**

33. The permittee shall keep, in a satisfactory manner, records of any visible emissions observed from any FGBIOCONERS exhaust stack and any actions taken to reduce visible emissions. **(R 336.1301)**

34. The permittee shall calculate and keep records of the PFOS and PFOA emission rates from each emission unit in FGBIOCONERS in pounds per hour based on the emission testing and sludge testing results. This calculation is not required for PFOS if the most recent PFOS emission test results are below the method detection level. This calculation is not required for PFOA if the most recent PFOA emission test results are below the method detection level. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225)[1]**

35. The permittee shall install, calibrate (to manufacturers' specifications), maintain, and operate a device or method for measuring the use of the bypass stack including date, time, and duration. **(40 CFR 60.4905(d))**

36. The permittee shall keep records of any deviation reports submitted to the AQD District Supervisor required by SC VII.3. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(40 CFR 60.4910(h))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of each unit in FGBIOCONERS. **(R 336.1201(7)(a))**

2. The permittee shall submit an annual compliance report that includes the items in 40 CFR 60.4915(d)(1) through (d)(16). The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(40 CFR 60.4915(d), 40 CFR 60.4915(j))**

3. The permittee shall submit a deviation report containing the information in 40 CFR 60.4915(e)(3) and (e)(4) if:
   a) Any recorded operating parameter level, based on the averaging time specified in Table 4 to 40 CFR Part 60, Subpart LLLL, is above the maximum operating limit or below the minimum operating limit established under 40 CFR Part 60, Subpart LLLL
   b) There are visible emissions of combustion ash from an ash conveying system for more than 5 percent of the hourly observation period.
   c) A performance test was conducted that deviated from any emission limit in SC I.2-I.5, SC I.9-I.11, SC I.13-I.14, and SC I.17.
   d) A continuous monitoring system was out of control.
   e) There was a malfunction (e.g., continuous monitoring system malfunction) that caused or may have caused any applicable emission limit to be exceeded.

   The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(40 CFR 60.4915(e), 40 CFR 60.4915(j))**

4. If all qualified operators are not accessible for 2 weeks or more, the permittee shall take the two actions in 40 CFR 60.4915(f)(1)(i) and (f)(1)(ii). **(40 CFR 60.4915(f))**

5. The permittee shall notify the AQD District Supervisor, in writing, one month before starting or stopping use of a continuous emissions monitoring system to demonstrate continuous compliance with an emission limit in SC I.2, SC I.4-I.5, SC I.9-I.11, SC I.13-I.14, and SC I.17. **(40 CFR 60.4900(b), 40 CFR 60.4915(h)(1))**

6. If a force majeure is about to occur, occurs, or has occurred for which the permittee intends to assert a claim of force majeure, the permittee shall submit a notification of a force majeure specified in 40 CFR 60.4915(g) to the appropriate AQD District Office. **(40 CFR 60.4915(g))**

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. SVBIOCONERS-T1	12.0	65.0	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBIOCONERS-T2	12.0	65.0	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 Sewage Sludge Incineration Units specified in 40 CFR Part 60 Subparts A and LLLL, as they apply to each emission unit in FGBIOCONERS. **(40 CFR 60.4760)**

2. The permittee shall not operate any emission unit in FGBIOCONERS at the same time that EU-Incinerator is operating. **(R 336.1225)**

3. No later than 24 months after the commencement of trial operation of any emission unit in FGBIOCONERS, the permittee shall permanently cease operation of EU-Incinerator. **(R 335.1205)**

FGHVAC
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two natural gas fired makeup air units for heating the new Sludge Treatment Building (STB).

Emission Unit: EU-NEWSTB-HVAC1, EU-NEWSTB-HVAC2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in FGHVAC.

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The heat input capacity of EU-NEWSTB-HVAC1 and EU-NEWSTB-HVAC2 shall not exceed a maximum of 2.0 MMBTU/hr and 1.5 MMBTU/hr, respectively. **(R 336.1225, 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 keep manufacturer documentation showing the maximum heat input for each emission unit in FGHVAC. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

Particulate cyclone, selective catalytic reduction (SCR), wet scrubber, WESP, and mercury control device

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Naphthalene, (CAS 91-20-3)[a]	1,510 lb/yr[1]	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1225(2)
2. 1,4-dichlorobenzene (CAS 106-46-7)[a]	3,810 lb/yr[1]	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1225(2)
[a] This limit applies on and after startup of EU-BIOCONERS-T1 and/or EU-BIOCONERS-T2					

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.[1] **(R 336.1225(2))**

2. The permittee shall calculate the cumulative naphthalene and 1,4-dichlorobenzene emission rates from the facility during the first 12-months after startup of EU-BIOCONERS-T1 and/or EU-BIOCONERS-T2 and the annual emission rate of each thereafter, in pounds per 12-month rolling time period as determined at the end of each calendar month, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.[1] **(R 336.1225(2))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

APPENDIX A
Carbon Monoxide Monitoring (CEMS)

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

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

3. Within 180 calendar days after commencement of trial operation, the permittee shall complete the installation and testing of the CEMS.

4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS complies with the requirements of Performance Specification (PS) 4B.

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

6. The CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 4 of Appendix B to 40 CFR Part 60.

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

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

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