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

October 30, 2024

PERMIT TO INSTALL
125-24

ISSUED TO
Holland Board of Public Works

LOCATED AT
491 East 48th Street
Holland, Michigan

IN THE COUNTY OF
Allegan

STATE REGISTRATION NUMBER
N2586

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: **October 24, 2024**	
DATE PERMIT TO INSTALL APPROVED: **October 30, 2024**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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COMMON ACRONYMS

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

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO_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 conditions 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
EUTURBINE7	Unit #7 - A gas/oil fired 40 MW turbine with water injection used for generating electricity.	1991	FGTURBINES
EUTURBINE8	Unit #8 - A gas/oil fired 40 MW turbine with water injection used for generating electricity.	1991	FGTURBINES
EUTURBINE9	Unit #9 - A gas fired 80 MW turbine with dry low NO_x control used for generating electricity.	1999	FGTURBINES
EUENGINE7	A diesel fired 670 hp black start reciprocating internal combustion engine (as defined in 40 CFR 63.6675).	1992	FGCIENGINES
EUENGINE8	A diesel fired 670 hp black start reciprocating internal combustion engine (as defined in 40 CFR 63.6675).	1992	FGCIENGINES

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

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGTURBINES	Three turbines used to generate electricity.	EUTURBINE7 EUTURBINE8 EUTURBINE9
FGCIENGINES	Two diesel fired, stationary compression ignition reciprocating internal combustion engines, each with a site rating of 670 brake horsepower. These black start engines are associated with turbines 7 & 8.	EUENGINE7 EUENGINE8

FGTURBINES
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Three turbines used to generate electricity.

Emission Unit: EUTURBINE7, EUTURBINE8, EUTURBINE9

POLLUTION CONTROL EQUIPMENT

Water injection for EUTURBINE7 and EUTURBINE8 and a dry low NO_x burner for EUTURBINE9

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Nitrogen Oxides	95 ppmv corrected to 15% O_2 on a dry gas basis	Daily average, except for startup and shut down*	EUTURBINE7 and EUTURBINE8 combined	SC VI.1	40 CFR 60.332(a)(1)
2. Nitrogen Oxides	22 ppmv on a dry gas basis at 15% O_2	Hourly average, except during periods of startup and shut down*	EUTURBINE9	SC VI.2	40 CFR 60.332(a)(1)
3. Nitrogen Oxides	85.9 tons per year	12-month rolling time period as determined at the end of each calendar month	EUTURBINE7, EUTURBINE8, and EUTURBINE9 combined	SC VI.1 SC VI.2 SC VI.6	R 336.1205(1)(a) & (3)
4. Carbon Monoxide	125 pounds per hour	Hourly, except during periods of startup and shut down*	EUTURBINE9	SC V.1	R 336.1201(3)
5. Carbon Monoxide	161 tons per year	12-month rolling time period as determined at the end of each calendar month	EUTURBINE7, EUTURBINE8, and EUTURBINE9 combined	SC VI.7	R 336.1205(3)
6. Carbon Monoxide	0.03 lb/MMBtu	Hourly	EUTURBINE7, EUTURBINE8 (each)	SC V.1	R 336.1205(1)(a) & (3)
7. Carbon Monoxide	0.056 lb/MMBtu	Hourly	EUTURBINE9	SC V.1	R 336.1205(1)(a) & (3)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
8. Sulfur Dioxide	0.33 ppm BTUs heat input. This is equivalent to burning fuel with a 0.3%, by weight, sulfur content, and an available heat release of 18,000 BTUs per pound	Based upon a 24-hour period	EUTURBINE7 EUTURBINE8	SC VI.3	R 336.1401(1) Table 42; 40 CFR 60.333(b)
9. Sulfur Dioxide	344 pounds per hour	Hourly average as a cumulative total for both turbines	EUTURBINE7 and EUTURBINE8 combined	SC VI.4	R 336.1201(3)
10. Sulfur Dioxide	160 tons per year	12-month rolling time period as determined at the end of each calendar month	EUTURBINE7, EUTURBINE8, and EUTURBINE9 combined	SC VI.4, SC VI.5	R 336.1205(3)
* Startup is defined as the period prior to reaching stable load conditions, not to exceed one hour. Shutdown is defined as the period of decreasing load conditions until operation of the turbine has ceased, not to exceed one hour.					

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	20 gr/100 scf	At all times	FGTURBINES	SC VI.12	R 336.1205(1)(a) & (3), 40 CFR 60 Subpart GG

2. The permittee shall fire only pipeline quality natural gas or no. 2 fuel oil in EUTURBINE7 and EUTURBINE8. **(R 336.1205)**

3. The permittee shall fire only pipeline quality natural gas in EUTURBINE9. **(R 336.1205, 40 CFR 60.333(b))**

4. The permittee shall only burn diesel fuel, in EUTURBINE7 and EUTURBINE8 with a maximum sulfur content of 0.3% by weight. **(R 336.1205)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate EUTURBINE7 and EUTURBINE8 within the manufacturer's recommended water to fuel ratios. **(R 336.1201(3))**

2. The permittee shall not operate EUTURBINE9 at less than 50% of base load for more than one consecutive hour, during stable conditions, not to include startup and shutdown. **(R 336.1201(3))**

3. The permittee shall not operate FGTURBINES unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 180 days after permit issuance. The MAP shall, at a minimum, meet the manufacturer's written instructions for operating and maintaining the test cells and emission control equipment shall 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) A description of how emissions will be minimized during all startups, shutdowns and malfunctions.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205(1)(a) & (3), R 336.1910, R 336.1911)**

5. The heat input of EUTURBINE7, EUTURBINE8, and EUTURBINE9 combined shall not exceed a maximum of 5,726,667 MMBtu per 12 months rolling time period as determined at the end of each calendar month. **(R 336.1205)**

6. The permittee shall not operate EUTURBINE7 or EUTURBINE8 unless the water injection is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes performing the manufacturer's recommended maintenance on the control device and operating in conjunction with the PM / MAP specified in SC III.3. **(R 336.1205, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, devices to monitor and record the NO_x emissions and oxygen (O_2), or carbon dioxide (CO_2), content of the exhaust gas from each turbine in FGTURBINES 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 11. **(R 336.1205(1)(a) & (3), 40 CFR 60.334(b), 40 CFR Part 75)**

V. TESTING/SAMPLING

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

1. Within 365 days of permit issuance and at least once every five years thereafter, the permittee shall verify the CO emission factors from each turbine in FGTURBINES and the CO emission rates from EUTURBINE9, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using natural gas and an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
CO	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.2001, 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 monitor and record, in a satisfactory manner, the NO_x emission for EUTURBINE7 and EUTURBINE8, on a daily average, based on measurements obtained by the certified continuous emission monitoring system (CEMS) installed on each unit. The permittee shall install and operate the CEMS to meet the timelines, requirements and reporting detailed in Appendix 11. **(R 336.1205(3))**

2. The permittee shall monitor and record, in a satisfactory manner, the NO_x emission for EUTURBINE9, on an hourly average, based on measurements obtained by the certified continuous emission monitoring system (CEMS) installed on EUTURBINE9. The permittee shall install and operate the CEMS to meet the timelines, requirements and reporting detailed in Appendix 11. **(R 336.1205(3))**

3. The permittee shall monitor and record, in a satisfactory manner, the SO_2 pound per million BTUs emission limit based on a certified analysis of each shipment of fuel oil by the supplier or a laboratory analysis of the fuel oil. All analyses shall include the percentage of sulfur, by weight, and heating value in BTUs per pound. **(40 CFR Part 60, Subparts A and GG)**

4. The permittee shall demonstrate compliance with the SO_2 mass emission limits following the applicable requirements in 40 CFR Part 75, Appendix D. **(R 336.1201(3))**

5. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total combined SO_2 emissions for FGTURBINES, as required by SC I.10. This calculation is based on the sulfur content in each fuel and heat input for each turbine in FGTURBINES. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(3))**

6. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total combined NO_x emissions for FGTURBINES, as required by SC I.3. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(3))**

7. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total combined CO emissions from FGTURBINES, as required by SC I.5. This calculation is based on SC I.6, SC I.7, and heat input for each turbine in FGTURBINES. The permittee shall keep all records on file and make them available to the Department upon request**. (R 336.1205(3))**

8. The permittee shall monitor and record, in a satisfactory manner, the monthly hours of operation for EUTURBINE9. The hours shall be recorded as follows based on load condition: 95% to base load, 50% of base load or less, all other loads. **(R 336.1205(3))**

9. The permittee shall monitor and record, in a satisfactory manner, of the time of day that EUTURBINE9 is at 50% of base load or less. **(R 336.1201(3))**

10. The permittee shall monitor and record, in a satisfactory manner, the heat input for each turbine in FGTURBINES on a 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)**

11. The permittee shall maintain a record of all maintenance activities conducted according to the PM / MAP (pursuant to SC III.3). The permittee shall keep this record on file at a location approved by the AQD District Supervisor and make it available to the Department upon request. **(R 336.1205, R 336.1911)**

12. The permittee shall maintain records demonstrating that the natural gas combusted in FGTURBINES meets the sulfur content limit in SC II.1 by either of the following: **(40 CFR 60.334(h)(3))**
    a) Maintaining a record of the gas quality characteristics in a current valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is less than SC II.1.
    b) Conducting representative fuel sampling which shows that the sulfur content of the gaseous fuel does not exceed SC II.1. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR Part 75 is required.

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. SVTURBINE7	126 by 158.4	34.8	40 CFR 52.21(c) & (d)
2. SVTURBINE8	126 by 158.4	34.8	40 CFR 52.21(c) & (d)
3. SVTURBINE9	108 by 228	70	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all the applicable requirements under 40 CFR Part 60, Subpart A, General Provisions and Subpart GG, Standards of Performance for Stationary Gas Turbines. **(40 CFR Part 60, Subparts A and GG)**

FGCIENGINES
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two diesel fired, stationary compression ignition reciprocating internal combustion engines, each with a site rating of 670 brake horsepower. These black start engines are associated with turbines 7 & 8.

Emission Unit: EUENGINE7, EUENGINE8

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Nitrogen Oxides	4.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUENGINE7 and EUENGINE8 combined	SC VI.6	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

Beginning January 1, 2015, the permittee may only use diesel fuel meeting the following fuel requirements, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted:

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Diesel Fuel	0.0015% Sulfur by weight	NA	EUENGINE7 EUENGINE8	SC VI.1	40 CFR 63.6604, 40 CFR 1090.305

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with the following requirements for existing stationary RICE located at area sources of HAP emissions: **(40 CFR 63.6603(a))**
   a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
   b) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary;
   c) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

2. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements of the schedule in SC III.1, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The permittee shall perform the management practice as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee shall report any failure to perform the management practice on the schedule

required and the Federal, State or local law under which the risk was deemed unacceptable. **(40 CFR 63.6603(a))**

3. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement as specified in SC III.1(a). The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1(a). The analyzing program must analyze the Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows:
   a) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
   b) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
   c) Percent water content (by volume) is greater than 0.5.

   If all of the above condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(i))**

4. The permittee shall demonstrate continuous compliance with the operating limitations according to 40 CFR 63.6640 by the following:
   a) Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, is prohibited. **(40 CFR 63.6640(f))**
   b) There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 63.6640(f)(1))**
   c) The permittee may operate up to 100 hours per calendar year for the purpose of: (1) maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, then manufacturer, the vendor, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but 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 RICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**
   d) The permittee may operate up to 50 hours per year in non-emergency situations (hours are counted towards the 100 hours per year stated above). Beginning May 3, 2014, the 50 hours cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: (1) the engine is dispatched by the local balancing authority or local transmission and distribution system operator, (2) the dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region, (3) the dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines, (4) the power is provided only to the facility itself or to support the local transmission and distribution system, and (5) the owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. **(40 CFR 63.6640(f)(4))**

5. The permittee shall not operate the engines for more than 500 hours combined per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a) & (3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related operation and maintenance instructions, or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e))**

2. The permittee shall install a non-resettable hour meter if one is not already installed to track the operating hours. **(40 CFR 63.6625(f))**

3. The permittee shall minimize each engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to 40 CFR Part 60, Subpart ZZZZ apply. **(40 CFR 63.6625(h))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in each engine in FGCIENGINES, demonstrating that the fuel meets the requirement of 40 CFR 1090.305. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(R 336.1205, 40 CFR 63.6604)**

2. The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) were operated and maintained according to the maintenance plan. **(40 CFR 63.6655(e)(2))**

3. The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner/operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used to supply power as part of a financial arrangement with another entity as described in SC III.4 above, the owner/operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. **(40 CFR 63.6655(f))**

4. The permittee shall keep the following records:
   a) A copy of each notification and report submitted to comply with Subpart ZZZZ, and the documentation supporting any notification. **(40 CFR 63.6655(a)(1))**
   b) Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(2))**
   c) Records of all maintenance performed on the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(4))**
   d) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5))**

   All records shall be kept on file for a period of at least five years (at least two years at the site) following the date of each occurrence, measurement, maintenance, corrective action, report or record, and made available to the Department upon request. **(40 CFR 63.6655, 40 CFR 63.6660)**

5. The permittee shall keep, in a satisfactory manner, records of the monthly and 12-month rolling total combined hours of operation for FGCIENGINES. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**

6. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total combined NO_x emissions for FGCIENGINES, as required by SC I.1 The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(3), 40 CFR 52.21(c) & (d))**

VII. REPORTING

1. For each engine that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in SC III.4(d) when the engines are used prior to May 3, 2014 for non-emergency purposes, the permittee must submit an annual report containing the following information:
   a) Company name and address where the engine is located.
   b) Date of the report and beginning and ending dates of the reporting period.
   c) Engine site rating and model year.
   d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
   e) Hours operated for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii).
   f) Number of hours the engine is contractually obligated to be available for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii).
   g) Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
   h) If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
   i) If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

   The first annual report must cover the calendar year 2015 and be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Subpart ZZZZ specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13. **(40 CFR 63.6650(h))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the Maximum Achievable Control Technology Standards for Stationary Reciprocating Internal Combustion Engines located at area sources promulgated in 40 CFR Part 63, Subparts A and ZZZZ. **(40 CFR Part 63, Subparts A and ZZZZ)**

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

Control equipment is included in each respective flexible group.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Nitrogen Oxides	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations 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. The permittee shall keep records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a) & (b))**

2. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NO_x emission calculation records for FGFACILITY, as required by SC I.1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

APPENDIX 11
Continuous Emission Monitoring System (CEMS) Requirements

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

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

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

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

Pollutant	Applicable PS
NO_x	2
O_2 & CO_2	3

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, listed in the table above, of Appendix B to 40 CFR Part 60.

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

8. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
   a) A report of each exceedance above the limits specified in the conditions of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
   b) A report of all periods of CEMS downtime and corrective action.
   c) A report of the total operating time of each turbine in FGTURBINES 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.