

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

September 29, 2017

PERMIT TO INSTALL
156-10B

ISSUED TO
State of Michigan, Department of Technology, Management & Budget

LOCATED AT
7432 Parsons Drive
Dimondale, Michigan

IN THE COUNTY OF
Eaton

STATE REGISTRATION NUMBER
P0152

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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:

July 3, 2017

DATE PERMIT TO INSTALL APPROVED:

September 29, 2017

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO _{2e}	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H ₂ S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfuction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO _x	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM ₁₀	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM _{2.5}	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

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

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 Environmental Quality, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(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 R 336.1301, 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 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 R 336.1370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

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 (Process Equipment & Control Devices)	Flexible Group ID
EUTURBINE1	A nominally rated 19.0 MMBtu/hr natural gas-fired turbine with an electrical generator.	FGTURB/HRSG1
EUTURBINE2	A nominally rated 19.0 MMBtu/hr natural gas-fired turbine with an electrical generator.	FGTURB/HRSG2
EUHRSG1	A heat recovery steam generator (HRSG) with a nominally rated 20.0 MMBtu/hr natural gas-fired duct burner.	FGTURB/HRSG1
EUHRSG2	A heat recovery steam generator (HRSG) with a nominally rated 20.0 MMBtu/hr natural gas-fired duct burner.	FGTURB/HRSG2
EUENGINE1	A compression ignition diesel fuel-fired 2,206 hp emergency backup generator, manufactured after August 2010.	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 336.1290.		

The following conditions apply to: EUENGINE1

DESCRIPTION: One 2,206 brake-horsepower diesel-fueled emergency backup generator.

Flexible Group: None

POLLUTION CONTROL EQUIPMENT: None

I. EMISSION LIMITS

Pollutant	Limit*	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO _x	3.63 tpy*	12-month rolling time period, determined at the end of each month	EUENGINE1	SC VI.5	R 336.1205(1)(a), 40 CFR 52.21 (c) & (d)
2. NO _x	9.2 g/kW-hr	Hourly	EUENGINE1	SC V.1, SC VI.2	R 336.1205, 40 CFR 60.4205(b), 60.4202(a)(2) , Table 1 of 40 CFR 89.112

Pollutant	Limit*	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
3. CO	3.5 g/kW-hr	Hourly	EUENGINE1	SC V.1, SC VI.2	R 336.1205, 40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
4. PM	0.20 g/kW-hr	Hourly	EUENGINE1	SC V.1, SC VI.2	R 336.1205, 40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
5. NMHC + NOx	6.4 g/kW-hr	Hourly	EUENGINE1	SC V.1, SC VI.2	R 336.1205, 40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
6. HC	1.3 g/kW-hr	Hourly	EUENGINE1	SC V.1, SC VI.2	R 336.1205, 40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
* The annual NO _x limit is based on an emission factor of 4.97 g/hp-hr for EUENGINE1 operating at maximum capacity for 300 hours/yr.					

II. MATERIAL LIMITS

1. The permittee shall burn only diesel fuel, in EUENGINE1 with the maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(R 336.1205(1)(a)&(3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUENGINE1 for more than 300 hours per 12-month rolling time period as determined at the end of each calendar month, including hours for maintenance checks and readiness testing. The 300 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.2. **(R 336.1205(1)(a), R 336.1225, 40 CFR 52.21(c) & (d))**
2. The permittee may operate EUENGINE1 for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. EUENGINE1 may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f))**

3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart IIII, for the same model year and maximum engine power, the permittee shall meet the following requirements for EUENGINE1:
 - a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions;
 - b) Change only those emission-related settings that are permitted by the manufacturer; and
 - c) Meet the requirements as specified in 40 CFR 89, 94, and/or 1068, as they apply.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine may be considered a non-certified engine. **(40 CFR 60.4211(a))**

4. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EUENGINE1 and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g)(3))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain EUENGINE1 with non-resettable hours meters to track operating hours during any type of operation. **(R 336.1205, R 336.1225, 40 CFR 60.4209(a))**
2. The nameplate capacity of each engine in EUENGINE1 shall not exceed 2,206 BHP, as certified by the equipment manufacturer. **(R 336.1205(1)(a) & (3), 40 CFR 60.4202, 40 CFR 89.112(a))**

V. TESTING/SAMPLING:

1. The permittee shall conduct an initial performance test for each engine in EUENGINE1 within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engine has been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. Subsequent performance testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first. **(40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205)**
2. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that each engine in EUENGINE1 meets the applicable requirements contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If an engine in EUENGINE1 becomes uncertified, then the permittee must also keep records of a maintenance plan and maintenance activities for that engine. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211(g))**

3. The permittee shall keep records of the operation of EUENGINE1 in emergency and non-emergency service that are recorded through the non-resettable hour meter, on a calendar year basis. The owner must record the time of operation of the engine and the reason the engine was in operation during each operational period. The record shall include calculations of the total number of hours used for each type of operation in the previous calendar year. **(40 CFR 60.4211, 40 CFR 60.4214(b))**
4. The permittee shall monitor and record the total hours of operation for each engine in EUENGINE1, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**
5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EUENGINE1, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(R 336.1205(1)(a)&(3), 40 CFR 80.510(b))**
6. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NO_x emission calculation records for EUENGINE1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, 40 CFR 52.21 (c) & (d))**

VII. REPORTING

1. If the permittee operates the engine in a non-certified manner, the permittee shall submit a notification to the AQD District Supervisor, in writing, within 30 days of switching the manner of operation. **(40 CFR Part 60 Subpart IIII)**

VIII. STACK/VENT RESTRICTIONS

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. SVENGINE1	12.0	12.0	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENTS:

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII, as they apply to EUENGINE1. **(40 CFR Part 60 Subparts A & IIII, 40 CFR 63.6590)**
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to EUENGINE1. **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

Footnotes:

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

FLEXIBLE GROUP 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
FGTURB/HRSG1	A nominally rated 19.0 MMBtu/hr natural gas-fired turbine, a HRSG with a nominally rated 20.0 MMBtu/hr natural gas-fired duct burner and an electrical generator operating in combined-cycle mode.	EUTURBINE1, EUHRSG1
FGTURB/HRSG2	A nominally rated 19.0 MMBtu/hr natural gas-fired turbine, a HRSG with a nominally rated 20.0 MMBtu/hr natural gas-fired duct burner and an electrical generator operating in combined-cycle mode.	EUTURBINE2, EUHRSG2

The following conditions apply to: FGTURB/HRSG1

DESCRIPTION: A nominally rated 19.0 MMBtu/hr natural gas-fired turbine, a HRSG with a nominally rated 20.0 MMBtu/hr natural gas-fired duct burner and an electrical generator operating in combined-cycle mode.

Emission Units: EUTURBINE1, EUHRSG1

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5%	6-minute average except one 6-minute average per hour of not more than 10 percent	FGTURB/HRSG1	SC VI.2	R 336.1301(1)(c)
2. NO _x	42 ppmv dry at 15% oxygen, or 290 ng/J of useful output (2.3lb/MWh)	4-hour rolling averaging period*	FGTURB/HRSG1	SC V.1, SC VI.4	R 336.1205(1)(a), 40 CFR 60.4320(a)
3. NO _x	5.0 pph	Hourly	FGTURB/HRSG1	SC V.1, SC VI.4	R 336.1205(1)(a) 40 CFR 52.21(c) and (d)
4. CO	50 ppmv dry at 15% oxygen	Hourly	FGTURB/HRSG1	SC V.1	R 336.1205(1)(a)
5. CO	3.7 pph	Hourly	FGTURB/HRSG1	SC V.1	R 336.1205(1)(a) 40 CFR 52.21(d)
6. SO ₂	0.060 lb/MMBtu	Continuous	FGTURB/HRSG2	SC VI.5	40 CFR 60.4330(a)(2)

*Also considered excess emissions for any 1-hr period where steam/water injection was not recorded or recorded as zero (40 CFR 60.4380(a))

II. MATERIAL LIMITS

1. The permittee shall only combust pipeline quality natural gas in FGTURB/HRSG1. **(R 336.1205(1)(a), R 336.1225, R 336.1401, R 336.1702(a), 40 CFR 60.4330(a)(2))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate FGTURB/HRSG1 unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 180 days of initial start-up, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

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

2. The permittee shall not operate FGTURB/HRSG1 unless the AQD District Supervisor has approved a plan that describes how emissions will be minimized during start-up and shutdown. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Unless notified by the AQD District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. **(R 336.1911, R 336.1912, 40 CFR 60.4333(a))**
3. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and KKKK, as they apply to FGTURB/HRSG1. **(40 CFR Part 60, Subparts A and KKKK)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The maximum design heat input capacity of FGTURB/HRSG1 shall not exceed 19.0 MMBtu per hour for EUTURBINE1, and 20.0 MMBtu per hour for EUHRSG1. **(R 336.1205(1)(a))**
2. The permittee shall not operate FGTURB/HRSG1 unless a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine is installed, calibrated, and maintained in a satisfactory manner. **(40 CFR 60.4335(a))**

V. TESTING/SAMPLING

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

1. The permittee shall verify CO or NOx emission rates from FGTURB/HRSG1 at maximum load, by testing at owner's expense upon the request from the Department, in accordance with Department requirements, will be required. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c), and (d))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, 40 CFR 52.21(c) and (d))**
2. The permittee shall perform and document non-certified visible emissions observations once per month as required in Emission Limit SC I.1, when FGTURB/HRSG1 is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1301(1)(c), R 336.1303)**
3. The permittee shall keep, in a satisfactory manner, a written log of the monthly hours of operation of FGTURB/HRSG1. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 52.21(c), and (d))**
4. The permittee shall maintain records of all information necessary for all notifications and reports for FGTURB/HRSG1 as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
 - a) Compliance tests and any testing required under the special conditions of this permit;
 - b) Monitoring data including the fuel consumption and ratio of water to fuel as specified in SC IV.2
 - c) Verification of heat input capacity required to show compliance with SC IV.1;
 - d) Identification, type and the amounts of fuel combusted in FGTURB/HRSG1 on a calendar month basis;
 - e) All records required by 40 CFR 60.7;
 - f) Records of the duration of all times FGTURB/HRSG1 is operated under start-up or shutdown conditions as defined in SC III.2;
 - g) All calculations necessary to show compliance with the limits contained in this permit.

All of the above information shall be stored in a format acceptable to the Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1205(1)(a), R 336.1225, R 336.1301, R 336.1331, R 336.1401, R 336.1702(a), R 336.1912, 40 CFR 52.21(c), and (d), 40 CFR 60.7(f))**

5. The permittee shall keep, in a satisfactory manner, documentation from the utility specifying that the maximum total sulfur content for the natural gas burned in FGTURB/HRSG2 is 20 grains of sulfur or less per 100 standard cubic feet. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4365(a))**

VII. REPORTING

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

VIII. STACK/VENT RESTRICTIONS

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. SVTURB/HRSG1	30.0	60.0	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENTS:

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 60, Subpart A and Subpart KKKK, as they apply to FGTURB/HRSG1. **(40 CFR Part 60 Subparts A and KKKK)**

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

The following conditions apply to: FGTURB/HRSG2

DESCRIPTION: A nominally rated 19.0 MMBtu/hr natural gas-fired turbine, a HRSG with a nominally rated 20.0 MMBtu/hr natural gas-fired duct burner and an electrical generator operating in combined-cycle mode.

Emission Units: EUTURBINE2, EUHRSG2

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5%	6-minute average except one 6-minute average per hour of not more than 10 percent	FGTURB/HRSG2	SC VI.2	R 336.1301(1)(c)
2. NO _x	42 ppmv dry at 15% oxygen or 290 ng/J of useful output (2.3lb/MWh)	4-hour rolling averaging period*	FGTURB/HRSG2	SC V.2, SC VI.4	R 336.1205(1)(a) , 40 CFR 60.4320(a)
3. NO _x	5.0 pph	Hourly	FGTURB/HRSG2	SC V.1, SC VI.4	R 336.1205(1)(a), 40 CFR 52.21(c) and (d)
4. CO	50 ppmv dry at 15% oxygen	Hourly	FGTURB/HRSG2	SC V.1	R 336.1205(1)(a)
5. CO	3.7 pph	Hourly	FGTURB/HRSG2	SC V.1	R 336.1205(1)(a), R 336.2804, 40 CFR 52.21(d)
6. SO ₂	0.060 lb/MMBtu	Continuous	FGTURB/HRSG2	SC VI.5	40 CFR 60.4330(a)(2)

*Also considered excess emissions for any 1-hr period where steam/water injection was not recorded or recorded as zero (40 CFR 60.4380(a))

II. MATERIAL LIMITS

1. The permittee shall only combust pipeline quality natural gas in FGTURB/HRSG2. **(R 336.1205(1)(a), R 336.1225, R 336.1401, R 336.1702(a), 40 CFR 60.4330(a)(2))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate FGTURB/HRSG2 unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 180 days of initial start-up, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

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

2. The permittee shall not operate FGTURB/HRSG2 unless the AQD District Supervisor has approved a plan that describes how emissions will be minimized during start-up and shutdown. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Unless notified by the AQD District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. **(R 336.1911, R 336.1912, 40 CFR 60.4333(a))**
3. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and KKKK, as they apply to FGTURB/HRSG2. **(40 CFR Part 60, Subparts A and KKKK)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The maximum design heat input capacity of FGTURB/HRSG2 shall not exceed 19.0 MMBtu per hour for EUTURBINE2, and 20.0 MMBtu per hour for EUHRSG2. **(R 336.1205(1)(a))**
2. The permittee shall not operate FGTURB/HRSG1 unless a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine is installed, calibrated, and maintained in a satisfactory manner. **(40 CFR 60.4335(a))**

V. TESTING/SAMPLING

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

1. The permittee shall verify CO or NOx emission rates from FGTURB/HRSG2 at maximum load, by testing at owner's expense upon the request from the Department, in accordance with Department requirements, will be required. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c), and (d))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, 40 CFR 52.21(c) and (d))**
2. The permittee shall perform and document non-certified visible emissions observations once per month as required in Emission Limit SC I.1, when FGTURB/HRSG2 is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1301(1)(c))**
3. The permittee shall keep, in a satisfactory manner, a written log of the monthly hours of operation of FGTURB/HRSG2. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 52.21(c), and (d))**
4. The permittee shall maintain records of all information necessary for all notifications and reports for FGTURB/HRSG2 as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
 - a) Compliance tests and any testing required under the special conditions of this permit;
 - b) Monitoring data including the fuel consumption and ratio of water to fuel as specified in SC IV.2;
 - c) Verification of heat input capacity required to show compliance with SC IV.1;
 - d) Identification, type and the amounts of fuel combusted in FGTURB/HRSG2 on a calendar month basis;
 - e) All records required by 40 CFR 60.7;
 - f) Records of the duration of all times FGTURB/HRSG2 is operated under start-up or shutdown conditions as defined in SC III.2;
 - g) All calculations necessary to show compliance with the limits contained in this permit.

All of the above information shall be stored in a format acceptable to the Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1205(1)(a), R 336.1225, R 336.1301, R 336.1331, R 336.1401, R 336.1702(a), R 336.1912, 40 CFR 52.21(c), and (d), 40 CFR 60.7(f))**

5. The permittee shall keep, in a satisfactory manner, documentation from the utility specifying that the maximum total sulfur content for the natural gas burned in FGTURB/HRSG2 is 20 grains of sulfur or less per 100 standard cubic feet. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4365(a))**

VII. REPORTING

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

VIII. STACK/VENT RESTRICTIONS

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. SVTURB/HRSG2	30.0	60.0	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENTS:

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 60, Subpart A and Subpart KKKK, as they apply to FGTURB/HRSG2. **(40 CFR Part 60 Subparts A and KKKK)**

Footnotes:

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