

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

September 15, 2017

**PERMIT TO INSTALL**  
112-12A

**ISSUED TO**  
Lowell Light & Power

**LOCATED AT**  
625 Chatham Street  
Lowell, Michigan

**IN THE COUNTY OF**  
Kent

**STATE REGISTRATION NUMBER**  
P0375

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:

**June 14, 2017**

DATE PERMIT TO INSTALL APPROVED:

**September 15, 2017**

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

**PERMIT TO INSTALL**

**Table of Contents**

<b>Section</b>	<b>Page</b>
Alphabetical Listing of Common Abbreviations / Acronyms .....	2
General Conditions .....	3
Special Conditions .....	5
Emission Unit Summary Table.....	5
Special Conditions for EUTURBINE1 .....	6
Special Conditions for EUTURBINE2 .....	10

**Common Abbreviations / Acronyms**

<b>Common Acronyms</b>		<b>Pollutant / Measurement Abbreviations</b>	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO <sub>2</sub> e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM less than 10 microns diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM less than 2.5 microns diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO <sub>2</sub>	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

\* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (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)	Installation Date / Modification Date	Flexible Group ID
EUTURBINE1	Natural gas/diesel fuel fired simple cycle turbine generator. The turbine generator is a Solar Centaur 50 Model 5501. The turbine generator has a net output power rating of 3,766 kiloWatts which is equivalent to a maximum fuel heat release of 46.67 MMBtu/hr (natural gas). The turbine is also capable of burning distillate oil and has a maximum fuel heat release of 45.10 MMBTU/hr when burning distillate oil. The turbine is only allowed to burn natural gas, but is allowed to burn distillate oil under emergency situations.	9/20/2013	
EUTURBINE2	Natural gas fired simple cycle turbine generator. The turbine generator is a Rolls Royce Model 501-KB5. The turbine generator has a net output power rating of 3,814 kiloWatts which is equivalent to a maximum fuel heat release of 49.32 MM Btu/hr. The turbine generator is equipped with water injection for NOx control	12/2/2016	
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: EUTURBINE1**

**DESCRIPTION:** Natural gas/diesel fuel fired simple cycle turbine generator. The turbine generator is a Solar Centaur 50 Model 5501. The turbine generator has a net output power rating of 3,766 kiloWatts which is equivalent to a maximum fuel heat release of 46.67 MMBtu/hr (natural gas). The turbine is also capable of burning distillate oil and has a maximum fuel heat release of 45.10 MMBTU/hr when burning distillate oil. The turbine is only allowed to burn natural gas under normal operating conditions, but is allowed to burn distillate oil under emergency situations.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	144 ppmv on a dry basis at 15% O <sub>2</sub>	40 CFR 60, Subpart GG	EUTURBINE1	SC V.1	40 CFR Part 60 Subpart GG, 60.332(a)(2)
2. NO <sub>x</sub>	27.0 lb/hr	Hourly*	EUTURBINE1	SC V.1	R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d)
3. CO	125 ppmv on a dry basis at 15% O <sub>2</sub>	40 CFR 60, Subpart A	EUTURBINE1	SC V.1	R 336.1205(1)(a) & (3)
4. CO	14.3 lb/hr	Hourly*	EUTURBINE1	SC V.1	R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d)

ppmv = parts per million by volume at 15 percent oxygen and on a dry gas basis  
 \* = The Time Period/Operating Scenario is an hourly average based on the average of three test runs.

**II. MATERIAL LIMITS**

- The permittee shall only burn pipeline quality natural gas in EUTURBINE1 under non-emergency conditions. The permittee may burn distillate oil in EUTURBINE1 under emergency conditions where an emergency is defined as conditions where natural gas supply is curtailed or when there is a breakdown or malfunction of natural gas delivery systems. **(R 336.1225, R 336.1702(a), 40 CFR 60.333(b))**
- The natural gas usage for EUTURBINE1 shall not exceed 102,674,000 standard cubic feet per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**

3. The sulfur content of the natural gas combusted in EUTURBINE1 shall not exceed 20 grains/100 scf. Compliance with this limit shall be demonstrated by a current, valid purchase contract or transportation contract specifying the maximum sulfur content of the natural gas. **(40 CFR 60.334(h)(3))**
4. The sulfur content of the emergency diesel fuel used in EUTURBINE1, shall not exceed 0.8 percent by weight. **(40 CFR 60.333(b), R 336.1402)**

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUTURBINE1 unless a plan that describes how emissions will be minimized during startup(s), shutdown(s), and malfunction(s) is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Unless notified by the District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. **(R 336.1912)**
2. The permittee shall not operate EUTURBINE1 unless a malfunction abatement plan (MAP) as described in Rule 911(2) is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1911)**

### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas usage for EUTURBINE1. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**
2. EUTURBINE1 shall not exceed a nameplate capacity of 3,766 kiloWatts. **(R 336.1205(1)(a) & (3))**

### **V. TESTING/SAMPLING**

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

1. The permittee shall verify NO<sub>x</sub> and CO emission rates from EUTURBINE1, by testing at owner's expense, in accordance with Department requirements at the request of the AQD District Supervisor. Testing must be done at 75 percent and 100 percent loads. No less than 30 days prior to testing, the permittee shall submit a complete test plan 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 336.2001, 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 the natural gas usage for EUTURBINE1 on a monthly basis. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**
2. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 60.332)**

3. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NO<sub>x</sub> emission calculation records for EUTURBINE1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**
4. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month CO emission calculation records for EUTURBINE1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**
5. The permittee shall keep, in a satisfactory manner, a written log of the monthly hours of operation of EUTURBINE1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**
6. The permittee shall keep, in a satisfactory manner, a written log of the monthly hours of startup and shutdown for EUTURBINE1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**
7. The permittee shall keep, in a satisfactory manner, a current, valid purchase contract or transportation contract specifying the maximum sulfur content of the natural gas. **(40 CFR 60.334(h)(3))**
8. The permittee shall keep, in a satisfactory manner, fuel supplier certification records for each delivery of the diesel emergency fuel oil. The certification shall include the name of the oil supplier, sulfur content, and a statement that the fuel complies with the specifications under the definition of distillate oil in 40 CFR 60.41c. **(R 336.1402, 40 CFR 60.333(b))**
9. The permittee shall keep records, in a satisfactory manner, of any event requiring the use of emergency fuel in EUTURBINE1. The records shall include:
  - a. The reason for utilizing the emergency fuel.
  - b. The amount of emergency fuel used per calendar day during the emergency period.
  - c. The date(s) on which the use of emergency fuel commenced and ended.**(40 CFR 60.332(k))**
10. The permittee shall maintain records for EUTURBINE1 for information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to, the following:
  - a. Initial compliance tests and any testing required under 40 CFR Subpart GG or the conditions of this permit.
  - b. Monitoring data
  - c. Fuel analysis
  - d. Fuel usages and heating values (e.g. BTU/scf) of all fuels combusted in EUTURBINE1
  - e. 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, shall be maintained for a period of at least five years, and shall be consistent with the requirements of 40 CFR 60.7(f). **(40 CFR Subpart GG, R 336.1205(1)(a) & (3))**

## **VII. REPORTING**

1. The permittee shall provide written notification to the Air Quality Division whenever EUTURBINE1 is operating under emergency conditions. Notification shall be provided no longer than 5 business days from the initiation of the emergency fuel usage. **(R 336. R 336.1205(1)(a) & (3))**

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/ Dimensions (feet)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVTURBINE1	4.5	57.0	R 336.1225, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and GG, as they apply to EUTURBINE2. **(40 CFR Part 60 Subparts A and GG)**

**The following conditions apply to: EUTURBINE2**

**DESCRIPTION:** Natural gas fuel fired simple cycle turbine generator. The turbine generator is a Rolls Royce 501-KB5. The turbine generator has a net output power rating of 3,814 kiloWatts which is equivalent to a maximum fuel heat release of 49.32 MMBtu/hr (natural gas).

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** The turbine generator is equipped with water injection for NOx control

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	158 ppmv on a dry basis at 15% O <sub>2</sub>	40 CFR 60, Subpart GG	EUTURBINE2	SC V.2	40 CFR Part 60 Subpart GG 60.332(a)(2)
2. NO <sub>x</sub>	28.7 lb/hour	Hourly*	EUTURBINE2	SC V.1	R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d)
3. CO	5.92 lb/hour	Hourly*	EUTURBINE2	SC V.1	R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d)

ppmv = parts per million by volume at 15 percent oxygen and on a dry gas basis

\* = The Time Period/Operating Scenario is an hourly average based on the average of three test runs.

**II. MATERIAL LIMITS**

1. The permittee shall only burn pipeline quality natural gas in EUTURBINE2. **(R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.333(b))**
2. The natural gas usage for EUTURBINE2 shall not exceed 98,640,000 standard cubic feet per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a) & (3), R 336.1205(2), R 336.1225, R 336.1702(a))**
3. The sulfur content of the natural gas combusted in EUTURBINE2 shall not exceed 20 grains/100 scf. Compliance with this limit shall be demonstrated by a current, valid purchase contract or transportation contract specifying the maximum sulfur content of the natural gas. **(40 CFR 60.334(h)(3))**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EU-TURBINE2 unless a water injection system is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining the water injection system with an approved malfunction abatement plan (MAP) for EUTURBINE2 as required in Process/Operational Restriction SC III.3. **(40 CFR Part 60 Subparts A and GG)**

2. The permittee shall not operate EUTURBINE2 unless a plan that describes how emissions will be minimized during startup(s), shutdown(s), and malfunctions(s) is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Unless notified by the District Supervisor, within 30 business days after plan submittal, the plan shall be deemed approved. **(R 336.1912)**
3. The permittee shall not operate EUTURBINE2 unless a malfunction abatement plan (MAP) as described in Rule 911(2) is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1911)**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas usage for EUTURBINE2. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the water injection rate to the turbine for EUTURBINE2 on an hourly basis. **(40 CFR 60 Subpart GG)**
3. EUTURBINE2 shall not exceed a nameplate capacity of 3,814 kiloWatts. **(R 336.1205(1)(a) & (3))**

#### **V. TESTING/SAMPLING**

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

1. The permittee shall verify NO<sub>x</sub> and CO emission rates from EUTURBINE2, no later than October 28, 2017, by testing at owner's expense, in accordance with Department requirements. Testing must be done at 75 percent and 100 percent loads. No less than 30 days prior to testing, the permittee shall submit a complete test plan 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 336.2001, R 336.2003, R 336.2004)**
2. The permittee shall verify NO<sub>x</sub> emission rates from EUTURBINE2, no later than October 28, 2017, by testing at owner's expense, as required by federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subparts A and GG. 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. 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. **(40 CFR 60.8 and 60.335)**

#### **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 the natural gas usage for EUTURBINE2 on a monthly basis. **(R 336.1205(1)(a) & (3), R 336.1205(2), R 336.1225, R 336.1702(a))**

2. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 60.332)**
3. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NO<sub>x</sub> emission calculation records for EUTURBINE2. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**
4. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month CO emission calculation records for EUTURBINE2. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**
5. The permittee shall keep, in a satisfactory manner, a written log of the monthly hours of operation of EUTURBINE2. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**
6. The permittee shall keep, in a satisfactory manner, a written log of the monthly hours of startup and shutdown for EUTURBINE2. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.2810, 40 CFR 52.21(j))**
7. The permittee shall keep, in a satisfactory manner, a current, valid purchase contract or transportation contract specifying the maximum sulfur content of the natural gas. **(40 CFR 60.334(h)(3))**
8. The permittee shall continuously monitor and record the water usage to fuel usage ratio for EUTURBINE2. **(R 336.1205(1)(a) & (3), 40 CFR 60.334(j))**
9. The permittee shall maintain records for EUTURBINE2 for information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to, the following:
  - a. Initial compliance tests and any testing required under 40 CFR Subpart GG or the conditions of this permit.
  - b. Monitoring data.
  - c. Fuel analysis.
  - d. Fuel usages and heating values (e.g. BTU/scf) of all fuels combusted in EUTURBINE2.
  - e. 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, shall be maintained for a period of at least five years, and shall be consistent with the requirements of 40 CFR 60.7(f). **(40 CFR Subpart GG, R 336.1203(5))**

## **VII. REPORTING**

1. The permittee shall report all excess emissions of NO<sub>x</sub> in accordance with the requirements of 40 CFR 60.334(j).

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/ Dimensions (feet)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVTURBINE2	3.3	57.0	R 336.1225, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and GG, as they apply to EUTURBINE2. **(40 CFR Part 60 Subparts A and GG)**