TEMPORARY PERMIT TO OPERATE- P13005
AIRS #0610113005

PERMIT ISSUED: September 30, 2022
PERMIT EXPIRES: December 31, 2023

ISSUED TO: CCFC Sutter Energy, LLC
Greenleaf 1 Project
5029 South Township Road
Yuba City, CA 95993

PLANT SITE LOCATION: Greenleaf 1 Project
5087 South Township Road
Yuba City, CA 95993

RESPONSIBLE OFFICIAL: Andrew Gundershaug
Plant Manager
(530) 821-2072

ALTERNATE RESPONSIBLE OFFICIAL and SITE CONTACT:
Betty Chu
EHS Specialist
(530) 821-2074

Nature of Business: Electrical Power Production
SIC Code: 4911
NAICS Code: 221112

Reviewed by:
Robin Demma
Air Quality Engineer
9/30/2022 Date:

Reviewed by:
Sondra Spaethe
Planning and Engineering Supervisor
9/30/2022 Date:

Issued by:
Christopher D. Brown, AICP
Air Pollution Control Officer
9/30/2022 Date:
FACILITY DESCRIPTION

The Greenleaf 1 Project facility produces electricity for commercial sale for emergency use under California Energy Commission License Approval Docket #21-TPG-02. The facility is located at 5087 South Township Road on a 16-acre site located in Sutter County. The facility operates two simple cycle electric turbines with singular annular combustors with water injection. The facility is shared with Calpine Sutter Energy operating under Title V Permit to Operate #13005, is a contiguous property under same ownership and control, and under the same NAICS code. This Temporary Permit to Operate is intended for the use by the facility until major modifications are made to the Title V Permit.

The two natural gas fired turbines are manufactured by General Electric, Model: TM2500-G4 and are simple cycle with single annular combustors with water injection. Each unit has a high heat input (HHV) of 366.1 MMBtu/hr and a nominal MW Rating of: 34.9 MW each. Each unit has a cooling tower with dry cooling technology.

A selective catalytic reduction (SCR) reactor controls NOx emissions from the turbine using an aqueous ammonia injection system. An oxidation catalyst controls CO and VOC emissions from the turbine. The gas turbine exhaust is discharged through a stack into the atmosphere.

Emissions from the stack are monitored with a Continuous Emissions Monitoring System (CEMS).

EQUIPMENT DESCRIPTION

Gas Turbines A and B (S-5 and S-6)
- Manufacturer: General Electric
- Model: TM2500-G4
- Serial Number: A – 679-341, B – 679-350
- Type: Simple Cycle with Single Annular Combustors
- Emission Control: Water Injection, SCR, and Oxidation Catalyst
- Fuel: Natural Gas
- Max. Rating: 366.1 MMBtu/hr each
- Net Output: 34.9 MW each (Nominal)

Air Pollution Control Systems for (S-5 to S-6) for NOx
- Manufacturer: Braden Stack
- Control Device: SCR (Aqueous Ammonia)
- Venting: Gas Turbine A
  Gas Turbine B
Air Pollution Control Systems for (S-5 to S-6) for VOC and CO

Manufacturer: Cormetech
Control Device: Oxidation Catalyst
Venting: Gas Turbine A
Gas Turbine B

EQUIPMENT SPECIFIC CONDITIONS

1. The maximum emission concentrations from each gas turbine shall not exceed the following BACT limits:

| Pollutant | Maximum Allowable Emission Concentrations (a):
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gas Turbine A (S-5)</td>
</tr>
<tr>
<td></td>
<td>Gas Turbine B (S-6)</td>
</tr>
<tr>
<td>VOC</td>
<td>2 ppmvd at 15% O₂ (b) (d)</td>
</tr>
<tr>
<td>NOx (as NO₂)</td>
<td>2.5 ppmvd at 15% O₂ (c)</td>
</tr>
<tr>
<td>CO</td>
<td>4 ppmvd at 15% O₂ (b)</td>
</tr>
<tr>
<td>NH₃</td>
<td>10 ppmvd at 15% O₂</td>
</tr>
</tbody>
</table>

(a) Excluding startups and shutdowns, as defined in Conditions 12 and 13.
(b) Based on a 3-hour average, clock hour basis.
(c) Based on a 4-hour average, clock hour basis.
(d) Measured as methane.

2. The maximum hourly mass emissions from each gas turbine shall not exceed the following limits:

| Pollutant | Maximum Allowable Mass Emissions from each of:
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gas Turbine A (S-5)</td>
</tr>
<tr>
<td></td>
<td>Gas Turbine B (S-6)</td>
</tr>
<tr>
<td>In all modes of operation, except startup and shutdown (lbs/hour)</td>
<td>Startup (lbs/startup)</td>
</tr>
<tr>
<td>VOC</td>
<td>0.952 (a)</td>
</tr>
<tr>
<td>NOx (as NO₂)</td>
<td>2.71 (b)</td>
</tr>
<tr>
<td>SOx (as SO₂)</td>
<td>0.2 (a)</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>4.0 (a)</td>
</tr>
<tr>
<td>CO</td>
<td>2.64 (a)</td>
</tr>
<tr>
<td>NH₃</td>
<td>18.67 (a)</td>
</tr>
</tbody>
</table>

(a) Based on 3-hour rolling average, clock hour basis.
(b) Based on 4-hour average, clock hour basis.
3. The maximum emissions from S-5 and S-6 combined shall not exceed the following limits:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Gas Turbine A (S-5)</th>
<th>Gas Turbine B (S-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>59.296 lbs/day</td>
<td></td>
</tr>
<tr>
<td>NOx (as NO₂)</td>
<td>182.08 lbs/day</td>
<td></td>
</tr>
<tr>
<td>SOx (as SO₂)</td>
<td>12.8 lbs/day</td>
<td></td>
</tr>
<tr>
<td>PM₁₀</td>
<td>200.80 lbs/day</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>454.72 lbs/day</td>
<td></td>
</tr>
</tbody>
</table>

(a) Including startups and shutdowns, as defined in Conditions 12 and 13.

4. The maximum emissions from S-5 and S-6 combined equipment shall not exceed the following limits:

[FRAQMD Rule 10.1]

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Gas Turbine A (S-5)</th>
<th>Gas Turbine B (S-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>516.8 lbs/quarter</td>
<td>516.8 lbs/quarter</td>
</tr>
<tr>
<td>NOx (as NO₂)</td>
<td>1,604 lbs/quarter</td>
<td>1,604 lbs/quarter</td>
</tr>
<tr>
<td>SOx (as SO₂)</td>
<td>112 lbs/quarter</td>
<td>112 lbs/quarter</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>1,688 lbs/quarter</td>
<td>1,688 lbs/quarter</td>
</tr>
<tr>
<td>CO</td>
<td>4,336 lbs/quarter</td>
<td>4,336 lbs/quarter</td>
</tr>
</tbody>
</table>

(a) Including startups and shutdowns, as defined in Conditions 12 and 13.

5. HAP emissions from the facility shall not equal or exceed the following limits

[FRAQMD Rule 4.5]

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Maximum Allowable HAP emissions: (a) (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single HAP</td>
</tr>
<tr>
<td>Gas Turbine A</td>
<td>10</td>
</tr>
<tr>
<td>Gas Turbine B</td>
<td></td>
</tr>
</tbody>
</table>

(a) Including startups and shutdowns, as defined in Conditions 12 and 13.
(b) The purpose of this limitation is to qualify the gas turbines for the non-applicability of 40 CFR 63 Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Gas Turbines.

6. The source shall fire the CTGs exclusively on CPUC-quality natural gas with a maximum sulfur content of 5 grains per 100 standard cubic feet. To demonstrate compliance with this limit, the operator of the CTGs shall possess a current, valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying the total sulfur content. PG&E monthly sulfur data may be used provided that such data can be demonstrated to be representative of the gas delivered to Greenleaf 1 Project. Alternatively, the operator may choose to sample and analyze the gas from each supply source at least monthly to determine the sulfur content of the gas.

7. The maximum heat input for each gas turbine shall not exceed the following limits:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Maximum Allowable Heat Input (High Heating Value [HHV] basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hourly (MMBTU/hr)</td>
</tr>
<tr>
<td>Gas Turbine A</td>
<td>366.1</td>
</tr>
<tr>
<td>Gas Turbine B</td>
<td>366.1</td>
</tr>
</tbody>
</table>

8. The source shall install, continuously operate, and maintain the following air pollution controls to minimize emissions. These controls shall be fully operational upon startup of each Gas Turbine.
   a. Selective Catalytic Reduction
   b. Oxidation Catalyst System

9. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.

10. The source shall ensure that each CTG is abated by the properly operated and properly maintained SCR system and oxidation catalyst system whenever fuel is combusted at the source and that the corresponding SCR catalyst bed has reached its minimum operating temperature.

11. Gas Turbines A and B exhaust stacks shall exhaust at a height of 72 feet or higher. The maximum diameter of each exhaust stack shall not exceed 9 feet.

12. Startups are defined as the lesser of the following:
   a. The first 30 minutes of continuous fuel flow to the Gas Turbine after fuel flow is initiated, or
b. The period of time from Gas Turbine fuel flow initiation until the Gas Turbine achieves ten consecutive CEMS data points in compliance with the emissions concentration limits for NOx and CO.

13. Shutdowns are defined as the lesser of the following:
   a. The first 15 minute period immediately prior to termination of fuel flow to the Gas Turbine, or
   b. The period of time from non-compliance with any NOx or CO emissions limit until termination of fuel flow to the Gas Turbine.

14. The source shall ensure that it complies with the requirements to hold SO$_2$ allowances in 40 CFR 72.9(c)(1).

15. The source shall install, maintain, and operate the following continuous emissions monitoring (CEM) systems in the exhaust stack:
   a. A CEM system to measure stack gas NOx concentrations. The system shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR Part 60 Appendix B, Performance Specification 2);
   b. A CEM system to measure stack gas O$_2$ concentrations. The system shall meet EPA monitoring performance specifications (40 CFR Part 60 Appendix B, Performance Specification 3); and

16. The NOx, CO, and O$_2$ CEM systems shall have the capability of recording NOx, CO and O$_2$ concentrations during all operating conditions, including gas turbine startups and shutdowns.

17. The source shall maintain and operate continuous plant monitors and a continuous emissions monitoring system (CEMS). The following parameters shall be recorded at least every 15 minutes (excluding normal quality assurance and maintenance periods) and shall summarize all these parameters for each clock hour:
   a. Firing hours, turbine water injection rates, and fuel flow rates for the CTGs
   b. Oxygen concentration, nitrogen oxides concentration, and carbon monoxide concentration at the exhaust point of the CTGs
   c. Ammonia (NH$_3$) injection at the SCR system
   d. Heat input using the parameters measured above and District approved calculation methods.
   e. The concentration of NOx and CO, corrected to 15% O$_2$, and the mass emission rates of NOx and CO for the CTG using use the parameters measured above and District approved calculation methods.

18. A quality assurance/quality control (QA/QC) program for the CEM system shall be developed and maintained. At a minimum, the plan shall conform to 40 CFR Part
19. The source shall conduct a Relative Accuracy Test Audit (RATA).
   a. The RATA for the NOx and O2 monitors shall be conducted every year accordance with 40 CFR Part 75 Appendix B Section 2.3.
   i. The RATA may be required semiannually if specified conditions in 40 CFR 75 Appendix B Section 2.3 are not met.
   b. The RATA for the CO monitors shall be conducted every 4 calendar quarters in accordance with 40 CFR Part 60 Appendix B, Performance Specification 4, Section 3.
   c. At least 30 days prior to conducting a RATA, the source shall submit to the FRAQMD for their review a RATA test protocol.
   d. The permittee shall notify FRAQMD at least 7 days prior to any scheduled RATA test.
   e. The source shall submit the results of RATA to the FRAQMD within 60 days following testing.

20. The source shall conduct a Cylinder Gas Audit (CGA) for the CO monitor in three of four calendar quarters but the CGA need not be performed in the same quarter as a RATA. The CGA shall be conducted in accordance with 40 CFR 60 Appendix F.

21. The source shall conduct a Linearity Check for the NOx and O2 monitors in each QA operating quarter. The Linearity Check shall be conducted in accordance with 40 CFR 75 Appendix B.
   a. A QA operating quarter is defined as a calendar quarter with greater than or equal to 168 hours of operation.
   b. The Linearity Check must be performed following the 4th successive quarter without a Linearity Check.

22. All audit gases shall have been certified by comparison to National Bureau of Standards (NBS) Standard Reference Materials, NBS/EPA Certified Reference Materials, or EPA Protocol Gases.
   a. Documentation shall be made available to the FRAQMD upon request containing gas calibration standard information, including an identification number corresponding to the gas cylinder number, gas mixture constituents and concentrations, and gas cylinder fill and expiration dates.
   b. If the gas vendor does not provide a gas cylinder expiration date, a two (2) year expiration date from the cylinder fill date shall apply.
   c. Gas calibration standards in use beyond the expiration date are a violation of this permit.
23. For those pollutants that are not directly monitored by a CEMS (VOC, SOx and PM$_{10}$), the hourly emissions for each turbine shall be calculated based on the most recently approved FRAQMD emission factors as detailed in Addendum 1. The source may use source test results to develop new emission factors. The source shall submit the new emission factors to the FRAQMD for written approval prior to using. Modifications to Addendum 1 have been determined not to be a permit modification.

24. The source shall conduct performance tests for VOC, NOx, SOx, PM$_{10}$, CO, and NH$_3$ on each gas turbine every other calendar year to verify compliance with Conditions 1 and 2 (excluding startup mode and shutdown mode mass emission limits).

25. The following conditions are applicable to each performance test:
   a. Except as provided in this permit, the tests shall conform to U.S. EPA or CARB methodology and procedures. Reference test methods are California Code of Regulations Title 17 Sections 94101 et. Seq., 40 CFR Part 60 Appendix A, and 40 CFR Part 51 Appendix M.
   b. At least 30 days prior to conducting a source test, the source shall submit to the FRAQMD for their review and approval, a source test plan to allow time for the development of an approvable performance test plan. The FRAQMD shall approve any deviation from the emission testing requirements prior to testing.
   c. The source shall notify FRAQMD at least 7 days prior to any scheduled source test.
   d. The source shall submit the results of the source test to the FRAQMD within 60 days following testing.
   e. The FRAQMD may waive source testing requirements upon written request and conditioned on an evaluation including, but not limited to, the maintenance of an adequate compliance margin from prior test results. 
   [40 CFR 60.8]

26. The gas turbines shall be source tested at the maximum firing capacity, defined as $\geq 90\%$ of the heat input capacity achievable at the time of the source test, based on the current ambient and process conditions, to determine the emission rates (lbs/hour) and/or concentrations of the VOC, NOx, CO, PM$_{10}$, and NH$_3$.
   a. Testing for PM$_{2.5}$ shall be optional, at the discretion of the FRAQMD.
   b. The source shall report the facility operating parameters under which the test is conducted in the test results.
   [FRAQMD Rule 4.5]

27. Each performance test shall consist of three separate runs using the applicable test method.
a. Each run shall be conducted for the time and under the conditions specified in the applicable standard.
b. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.
c. In the event that a sample is accidentally lost, or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the permittee’s control, compliance may be determined using the arithmetic mean of the results of the two other runs.

[FRAQMD Rule 4.5; 40 CFR 60.8(f)]

28. The FRAQMD may request for additional source testing outside the source testing schedule defined in Condition 24.
RECORDKEEPING AND REPORTING CONDITIONS

29. The source shall continuously maintain the following records on site for at least five years from the date the record was created and shall make such records available to the FRAQMD upon request.

[40 CFR 60.7, 40 CFR 70.6(c)(1); FRAQMD Rule 4.5]

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Information to be Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upon occurrence</td>
<td>a. Occurrence and duration of any:</td>
</tr>
<tr>
<td></td>
<td>i. Startup, shutdown or malfunction of a gas turbine and the duration of the occurrence.</td>
</tr>
<tr>
<td></td>
<td>ii. Malfunction of the air pollution control equipment.</td>
</tr>
<tr>
<td></td>
<td>iii. Periods during which a continuous monitoring system or monitoring device is inoperative.</td>
</tr>
<tr>
<td></td>
<td>iv. Corrective actions taken.</td>
</tr>
<tr>
<td></td>
<td>[40 CFR 60.7(b)]</td>
</tr>
<tr>
<td></td>
<td>b. Measurements of each CEMS, recorded in a permanent form, including:</td>
</tr>
<tr>
<td></td>
<td>i. CEMS performance evaluations.</td>
</tr>
<tr>
<td></td>
<td>ii. CEMS or monitoring device calibration checks.</td>
</tr>
<tr>
<td></td>
<td>iii. CEMS adjustments and maintenance; and</td>
</tr>
<tr>
<td></td>
<td>iv. All other information required by 40 CFR 60.</td>
</tr>
<tr>
<td></td>
<td>c. In the event of a breakdown, malfunction, or other emergency, the permittee shall retain properly signed, contemporaneous operating logs, or other relevant evidence that:</td>
</tr>
<tr>
<td></td>
<td>i. An emergency occurred.</td>
</tr>
<tr>
<td></td>
<td>ii. The source identified the cause(s) of the emergency.</td>
</tr>
<tr>
<td></td>
<td>iii. The facility was being properly operated at the time of the emergency.</td>
</tr>
<tr>
<td></td>
<td>iv. The source took all reasonable steps to minimize the emissions resulting from the emergency event.</td>
</tr>
<tr>
<td></td>
<td>[40 CFR 70.6(g)(2)]</td>
</tr>
<tr>
<td>Frequency</td>
<td>Information to be Recorded</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| When a source test is performed | d. Records shall be maintained of all monitoring and support information required by any applicable federal requirement, including:  
  i. Date, place, and time of sampling.  
  ii. The date(s) analyses were performed.  
  iii. The company or entity that performed the analyses.  
  iv. The analytical techniques or methods used.  
  v. Operating conditions at the time of sampling.  
  vi. Results of the analysis.  
  [40 CFR 70.6(a)(3)(ii)]                                                                                                                                 |
| Hourly        | e. Natural gas fuel consumption of each gas turbine. (MMBTU/hour)  
  f. NOx and CO emission concentration from each gas turbine. (NOx ppmvd at 15% O₂, 4-hour average, clock hour basis) (CO ppmvd at 15% O₂, 3-hour average, clock hour basis)  
  g. VOC, NOx, SOx, PM₁₀ and CO hourly mass emissions from each Gas Turbine. (NOx lbs/hour based on 4-hour average, clock hour basis) (VOC, SOx, PM₁₀, and CO lbs/hour based on 3-hour rolling average, clock hour basis)  
  i. For those pollutants directly monitored (NOx and CO), the hourly emissions will be recorded from the required CEM system.  
  ii. For those pollutants that are not directly monitored (VOC, SOx, and PM₁₀), the hourly emissions shall be calculated based on the most recently approved FRAQMD emission factors for the emission unit as specified in Addendum 1.  
  h. Hourly electrical production for each turbine. (MW)  
  i. Ammonia injection rate to each of the SCR systems. (lbs/hour)  
  j. Water injection to each gas turbine. (gal water/hour)                                                                                                                                 |
| Daily         | k. VOC, NOx, SOx, PM₁₀, and CO daily mass emissions from Gas Turbines A and B combined. (lbs/day)  
  l. Operating hours for each of the gas turbines.                                                                                                                                                                      |
| Quarterly     | m. VOC, NOx, SOx, PM₁₀, and CO quarterly mass emissions from Gas Turbines A and B combined. (lbs/quarter)  
  n. The hours of operation for each of the gas turbines. (hours of operation/calendar quarter)                                                                                                                                 |

Feather River Air Quality Management District
30. For each calendar quarter, the facility shall submit to the FRAQMD a written report within 30 days of the end of the reporting period. Each report shall contain the following information, as specified in the table below:

**[40 CFR 60.7]**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Information to be Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yearly</td>
<td>o. VOC, NOx, SOx, PM(_{10}), and CO annual mass emissions from Gas Turbines A and B combined. (tons/year)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Information to be Reported</th>
</tr>
</thead>
</table>
| Quarterly  | a. Whenever a CEMS is inoperative, except for zero and span checks:  
  i. Date and time of non-operation of the CEMS.  
  ii. Nature of the CEMS repairs or adjustments.  |
|            | b. Whenever an emission occurs as measured by the required CEMS that is in excess of any emission limitation:  
  i. All excess emissions shall be computed in accordance with 40 CFR 60.13(h)(3).  
  ii. Date and time of the commencement and completion of each period of excess emissions.  
  iii. Periods of excess emissions due to startup, shutdown, and malfunction shall be specifically identified.  
  iv. The nature and cause of any malfunction, if known, or the best possible cause of any malfunction if not specifically known.  
  v. The corrective action taken, or preventive measures adopted.  |
|            | c. If there were no excess emissions or the CEM system has not been inoperative, repaired, or adjusted for a calendar quarter such information shall be stated in the report.  |
|            | d. CGA report for the CO monitor except in a quarter where a RATA is conducted.  |
|            | e. Linearity Check report for the NOx and O\(_2\) monitors.  |
|            | f. VOC, NOx, SOx, PM\(_{10}\) and CO hourly mass emissions from Gas Turbine A and Gas Turbine B.  
  (NOx lbs/hour based on 4-hour average, clock hour basis)  
  (VOC, SOx, PM\(_{10}\), and CO lbs/hour based on 3-hour rolling average, clock hour basis)  |
|            | g. VOC, NOx, SOx, PM\(_{10}\) and CO daily mass emissions from Gas Turbines A and B. (lbs/day)  |
|            | h. Hourly electrical production. (MW)  |
i. Ammonia injection rate to each of the SCR systems. (lbs/hour)

j. Water injection rate from Gas Turbines A and B. (gal water/hour)

k. Quarterly hours of operation from Gas Turbines A and B.

**Report in 4th quarter report only**

l. VOC, NOx, SOx, PM$_{10}$ and CO quarterly and annual mass emissions from Gas Turbines A and B. (lbs/quarter, tons/year)

m. For each gas turbine, the hourly, daily, and yearly fuel use. (MMBTU/time period [HHV])
GENERAL FACILITY WIDE CONDITIONS

35. The source shall notify the District of any violations of these permit conditions. Notification shall be submitted in a timely manner, in accordance with all applicable District Rules and Regulations. Notwithstanding the notification and reporting requirements given in any District Rule or Regulation Greenleaf 1 Project shall submit written notification (email or facsimile is acceptable) to the District within 96 hours of the violation of any permit condition.

36. The source shall notify the District of any breakdown condition as soon as reasonably possible, but no later than 48 hours after its detection.

37. The District shall be notified in writing within 15 calendar days following the correction of any breakdown condition.

39. **Severability**
   If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged unconstitutional or invalid, such judgment shall not affect or invalidate the remainder of these conditions.

   [FRAQMD Rules 1.2 and 4.5]

40. **Facility-Wide General Operating Requirements**
   At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate all equipment, including the associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

   [FRAQMD Rule 4.5; 40 CFR 60.11(d)]

41. **Sampling Facilities**
   The permittee shall provide source-testing ports, platforms, and access ladders that conform to the California Air Resources Board and federal Occupational Health and Safety administration standards.
   a. Safe sampling platform(s),
   b. Safe access to sampling platform(s),
   c. Utilities for sampling and testing equipment,
   d. Sampling ports adequate for test methods applicable to such facility. This includes constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

   [40 CFR 60.8(e)]
42. Visible Emissions
Unless otherwise specified in this permit, the permittee shall not discharge into the atmosphere from any source whatsoever any contaminant, other than uncombined water vapor, for a period or periods aggregating more than three (3) minutes in any one (1) hour that is:

a. As dark or darker in shade as that designated as No. 2 (or 40% opacity) on the Ringelmann Chart, as published by the United States Bureau of Mines and as determined by U.S. EPA Method 9; or

b. Of such opacity as to obscure an observer’s view to a degree equal to or greater than does smoke described in subsection (a).

[FRAQMD Rule 3.0]

43. Particulate Concentration
The facility shall not emit into the atmosphere, from any source, particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions. When the source involves a combustion process, the permittee must calculate the concentration to 12 percent carbon dioxide (CO₂).

[FRAQMD Rule 3.2]

44. Sulfur Oxides
The facility shall not emit into the atmosphere from any single source of emissions whatsoever any sulfur oxides in excess of 0.2 percent by volume (2,000 ppm) collectively calculated as sulfur dioxide (SO₂).

[FRAQMD Rule 3.10]

45. Circumvention
The permittee shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of the State of California Health and Safety Code or the FRAQMD Rules and Regulations. This requirement shall not apply to cases in which the only violation involved is State of California Health and Safety Code Section 41700.

[FRAQMD Rule 3.13]

46. Architectural Coating
The permittee shall meet the requirements of FRAQMD Rule 3.15 when applying or contracting the application of any coating to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.

[FRAQMD Rule 3.15]

47. Acceptance of Conditions
The FRAQMD deems acceptance of this Permit to Operate as acceptance of all conditions as specified. Failure to comply with any condition of this permit or the FRAQMD Rules and Regulations shall be grounds for revocation of this permit.
48. Right to Amend Permit
The FRAQMD reserves the right to amend this permit, if the need arises, in order to ensure the compliance of this facility, and/or to abate any public nuisance.

49. Permit Not Transferrable
This permit is not transferable from either one location to another, from one piece of equipment to another or from one person to another without prior FRAQMD approval. In the event a new owner assumes the control of this facility, the permittee and new owner shall notify the FRAQMD in writing within ten (10) days of the change of ownership.

50. Operation in Accordance with Permit Submittal
The permittee shall operate the equipment in compliance with all data and specifications submitted with the application under which this permit was issued. If any provision of this permit is found to be invalid, such finding shall not affect the remaining provisions of this permit.

51. Payment of Fees
The permittee shall be responsible for the payment of annual fees. In the event of facility closure or change in ownership or responsibility, the new owner shall be responsible for any outstanding and/or current fees.

52. Right of Entry
The "Right of Entry", as delineated by the California Health and Safety Code Section 41510 of Division 26, shall apply at all times. The permittee shall allow FRAQMD staff access to the plant site and pertinent records at all reasonable times for the purposes of inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission records, training, and otherwise conducting all necessary functions related to this permit.

53. Permit Condition Familiarity
The operating staff of this facility shall be advised of and be familiar with all the conditions contained in this permit.

54. Maintain Equipment
The permittee shall maintain the physical integrity of all processes and air pollution control equipment at regular intervals to insure minimal discharge of emissions. The permittee shall not operate the basic equipment without the control equipment
attached and operating as designed. The permittee shall follow the equipment manufacturers' recommendations diligently.

[FRAQMD Rule 4.5]

55. Emission Source Tests
The FRAQMD may conduct or require emission source tests on any source at the discretion of the FRAQMD. The permittee shall conduct all tests and calculate all results in accordance with test procedures approved by the FRAQMD.

[FRAQMD Rule 9.3]

56. Permit Required for Additions and Alterations
The permittee shall report any additions, deletions, or alterations of the subject equipment, including a change in the method of operation or a change in the location, to the FRAQMD. Such alterations may require a new Authority to Construct permit.

[FRAQMD Rule 4.1]

57. Copy of Permit Maintained at Facility
The permittee shall maintain this permit or a legible copy at the site. The permit shall be made available on demand to any authorized person.

[FRAQMD Rule 4.14]

58. Nuisance
The facility shall not emit into the atmosphere from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

[CA Health and Safety Code Section 41700]

59. Fugitive Dust
The permittee shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

a. The use, where possible, of water or chemicals for controlling dust during the demolition of existing buildings or structures, construction operations, construction of roadways, or the clearing of land.

b. The application of asphalt, California approved oils and emulsion substances, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dusts; or

c. Any other means submitted in writing and approved by the FRAQMD.

[FRAQMD Rule 3.16]
60. **Surface Preparation and Clean-up**
   a. This facility is subject to all applicable requirements under District Rule 3.14 – Surface Preparation and Clean-up.
   b. Net surface preparation and clean-up solvent usage at this facility shall not exceed 20 gallons per calendar year.
   c. The permittee shall keep current Safety Data Sheets for all VOC-containing materials (solvents, coatings, inks, resins) used at this facility and make them available to District personnel upon request.
   d. The permittee shall store all VOC-containing materials, whether in their form for intended use or as a waste or used product, including items such as cloth or paper laden with VOC-containing materials, in non-absorbent, non-leaking containers which shall be kept closed at all times, except when in-use, and disposed of in a manner to prevent the evaporation of VOCs into the atmosphere.

   [FRAQMD Rule 3.14]

61. **Natural Gas-Fired Water Heaters, Small Boilers, and Process Heaters**
   The permittee shall not install at this facility any natural gas-fired boiler, steam generator, process heater, or water heater with a rated heat input capacity of greater than or equal to 75,000 British Thermal Units per hour (Btu/hr) and less than 1 million Btu/hr unless the unit is certified to meet the emissions requirements established in FRAQMD Rule 3.23.

   [FRAQMD Rule 3.23]

62. **Air Toxic Hot Spots**
   a. This facility is subject to Division 26, Part 6, Chapter 1 Section 44300 et. seq. of the California Health and Safety Code (Air Toxics “Hot Spots” Information and Assessment Act of 1987). The owner or operator is responsible for complying with all requirements and deadlines set forth in the regulation.
   b. The FRAQMD reserves the right to require the facility to evaluate the health risk, in accordance with the AB2588 Air Toxics “Hot Spots” Emission Inventory Criteria and Guidelines Regulation, if there is a significant change in population, emissions, or emission unit(s) site location, or if new health data becomes available.

   [CA Health and Safety Code Section 44300 et. seq.]

63. **Portable Engines and Portable Equipment Units**
   a. The operation of portable engines and portable equipment units at the facility shall not require modification of this permit provided the permittee verify that each source is registered with the California Air Resources Board or permitted by the FRAQMD.
i. This provision shall not apply if the engine or equipment unit is operated in such a way that it supplements the stationary source operation.

ii. For the purpose of this permit, “Equipment Unit” means equipment that emits PM$_{10}$ over and above that emitted from an associated engine.

b. Portable engines and portable equipment units registered by the California Air Resources Board shall operate pursuant to the conditions of the registration. This permit does not allow operation of the source, such that the operation invalidates the registration.

c. Portable engines and portable equipment units permitted by the FRAQMD shall operate pursuant to the conditions of the permit.

d. If a portable equipment unit will be at the facility for more than five days, the permittee shall notify the district in writing within two working days of commencing operations. The notification shall include:

i. The registration number of the equipment unit;

ii. The name and phone number of the responsible official; and

iii. The estimated time that the equipment unit will be located at the facility.

e. If the permittee utilizes a portable equipment unit, the permittee shall comply with the following recordkeeping and reporting provisions within 30 days after the end of each calendar quarter:

i. The dates in which the equipment unit was operated at the facility;

ii. The type and quantity of materials processed by the equipment unit; and

iii. The emissions for the project, calculated in accordance with the equipment unit’s registration.

[Basis: FRAQMD Rule 4.5]
EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS:

64. The permittee shall surrender ERCs no later than November 11, 2022, to offset the following amount of emissions:

<table>
<thead>
<tr>
<th>Equipment: Gas Turbines A and B</th>
<th>Amount of Emission Offsets for which ERCs are to be obtained (lbs/quarter)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quarter 1</td>
</tr>
<tr>
<td>VOC</td>
<td>516.8</td>
</tr>
<tr>
<td>NOx</td>
<td>1,604</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>1,688</td>
</tr>
</tbody>
</table>

65. The permittee shall not operate each Gas Turbine more than the 200 annual hours provided under ATC#13005L until the ERCs have been surrendered and a new Authority to Construct application has been submitted to the District.

The following VOC ERCs have been provided to the FRAQMD to comply with the requirements of Condition 64:

TBD

The following NOx ERCs have been provided to the FRAQMD to comply with the requirements of Condition 64:

TBD

The following PM₁₀ ERCs have been provided to the FRAQMD to comply with the requirements of Condition 64:

TBD
Emissions Addendum can be updated annually. The source may use source test results to develop new emission factors. The source shall submit the new emission factors to the FRAQMD for written approval prior to using.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor (lbs/MMBTU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>0.00260</td>
</tr>
<tr>
<td>SOx</td>
<td>0.000546</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.0109</td>
</tr>
</tbody>
</table>

Feather River Air Quality Management District