



MAR 24 2010

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

Re: Notice of Final Action - Significant Title V Permit Modification
District Facility # N-2246/7172
Project # N-1062413/1050995

Dear Mr. Rios:

The Air Pollution Control Officer has modified the Title V permit for Turlock Irrigation District/Walnut Energy Center Authority located at 600 S Washington Road, Turlock, CA incorporating N-2246-1-4 & -2-4 and N-7172-1-0 through -4-0. This is for construction of new power plant.

Enclosed is the engineering evaluation with attached modified Title V permit. The application and proposal were sent to US EPA Region IX on December 28, 2009. All comments received have been addressed by the District. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

The notice of final decision for this project will be published approximately three days from the date of this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Enclosures
KS

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-D244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585



MAR 24 2010

Mike Tollstrup, Chief
Project Assessment Branch
Air Resources Board
P O Box 2815
Sacramento, CA 95812-2815

**Re: Notice of Final Action - Significant Title V Permit Modification
District Facility # N-2246/7172
Project # N-1062413/1050995**

Dear Mr. Tollstrup:

The Air Pollution Control Officer has modified the Title V permit for Turlock Irrigation District/Walnut Energy Center Authority located at 600 S Washington Road, Turlock, CA incorporating N-2246-1-4 & -2-4 and N-7172-1-0 through -4-0. This is for construction of new power plant.

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The notice of final decision for this project will be published approximately three days from the date of this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

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MAR 24 2010

George Davies IV
Turlock Irrigation District/Walnut Energy Center Authority
P. O. Box 949
Turlock, CA 95381-0949

Re: Notice of Final Action - Significant Title V Permit Modification
District Facility # N-2246/7172
Project # N-1062413/1050995

Dear Mr. Davies IV:

The Air Pollution Control Officer has modified the Title V permit for Turlock Irrigation District/Walnut Energy Center Authority located at 600 S Washington Road, Turlock, CA incorporating N-2246-1-4 & -2-4 and N-7172-1-0 through -4-0. This is for construction of new power plant.

Enclosed is the engineering evaluation with attached modified Title V permit. The application and proposal were sent to US EPA Region IX on December 28, 2009. All comments received have been addressed by the District. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

The notice of final decision for this project will be published approximately three days from the date of this letter

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

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Executive Director/Air Pollution Control Officer

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Modesto Bee

**NOTICE OF FINAL DECISION
FOR THE PROPOSED MODIFICATION OF
FEDERALLY MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District has made its final decision to modify the Federally Mandated Operating Permit to Turlock Irrigation District/Walnut Energy Center Authority for its power generation facility located at 600 S Washington Road, Turlock, CA, California.

The District's analysis of the legal and factual basis for this proposed action, project #N-1062413/1050995, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. For additional information regarding this matter, please Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900, or contact David Warner, Director of Permit Services, in writing at SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.

TITLE V APPLICATION REVIEW

Significant Modification

Project #: N-1062413/1050995

Engineer: Kamaljit Sran

Date: August 12, 2009

Facility Number: N-2246/7172

Facility Name: Turlock Irrigation District/ Walnut Energy Center Authority

Mailing Address: P. O. Box 949

Turlock, CA 95381-0949

Contact Name: George Davies IV

Phone: (209) 883-8232

Responsible Official: Randy Baysinger

Title: Asst. General Manager

I. PROPOSAL

Turlock Irrigation District (TID) is proposing a Title V permit modification to incorporate requirements of ATCs N-7172-1-0 through -4-0 into the Title V operating permit for construction of two 84 MW combined-cycle power generating systems, 68,500 gpm mechanical draft cooling tower, and the 300 hp diesel-fired emergency IC engine powering a fire pump. The Walnut Energy Center (WEC) ATC permits were initially issued to the Turlock Irrigation District (TID) and the construction of the equipment has commenced. However, TID formed a Joint Powers Authority with the Merced Irrigation District as an ownership group for these permits units known as the Walnut Energy Center Authority (WECA) then a new facility identification number (FID #N-7172) was issued for the ATC permits. TID will remain as the operator of the facility and the equipment under permits N-2246-1, N-2246-2, N-2246-7, and N-2246-8 will remain under the ownership of TID. Since all permit units at this location will be operated by entities which are under common control, belong to the same industrial grouping, and are located on one contiguous property, then all permit units under FID #N-2246 & N-7172 will be considered to be the same stationary source (Ref. District Rule 2201, Section 3.36).

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

On December 22, 2009, the District issued public notice of its preliminary decision to significantly modify Title V permit for this facility. In accordance with District Rule 2520, copies of proposed permit and evaluation were forwarded to the facility, US EPA, and the California Air Resources Board. Copies were also made available for public review. The notice of District's preliminary decision was published in Modesto Bee (newspaper of general circulation in Stanislaus County) on December 28, 2009. During the review period that followed the notice of preliminary decision, the District received comments from Turlock Irrigation District/Walnut Energy Center Authority. A copy of these comments and District's responses are given in attachment F of this document.

II. FACILITY LOCATION

The equipment will be operated at 325 Washington Road in Turlock, CA.

III. EQUIPMENT DESCRIPTION

N-7172-1-1: 84 MW nominally rated combined-cycle power generating system #1 consisting of a 1,047 MMBtu/hr General Electric Frame 7EA natural gas-fired combustion turbine generator with Dry Low NO_x combustor, an inlet air filtration and evaporative cooling system, a selective catalytic reduction (SCR) system, an oxidation catalyst, heat recovery steam generator #1 (HRSG) and a 100 MW nominally rated steam turbine shared with N-7172-2.

N-7172-2-1: 84 MW nominally rated combined-cycle power generating system #2 consisting of a 1,047 MMBtu/hr General Electric Frame 7EA natural gas-fired turbine generator with Dry Low NO_x combustor, an inlet air filtration and evaporative cooling system, a selective catalytic reduction (SCR) system, an oxidation catalyst, heat recovery steam generator #2 (HRSG) and a 100 MW nominally rated steam turbine shared with N-7172-1.

N-7172-3-1: 68,500 gpm mechanical draft cooling tower with 5 cells served by a high efficiency drift eliminator

N-7172-4-1: 300 hp John Deere Company Model JW6H-UF40 diesel-fired emergency IC engine powering a fire pump.

N-2246-1-7: 25.8 MW nominally rated simple cycle peak-demand power generating system #1 consisting of a 325 MMBtu/hr General Electric Model PG 5361 Frame 5 Natural Gas/Fuel Oil # 2 fired turbine generator with water injection.

N-2246-2-7: 25.8 MW nominally rated simple cycle peak-demand power generating system #2 consisting of a 325 MMBtu/hr General Electric Model PG 5361 Frame 5 Natural Gas/Fuel Oil # 2 fired turbine generator with water injection.

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a significant modification because the applicant did not originally apply for a Certificate of Conformity (COC) with the original New Source Review (NSR) Authorities to Construct (ATCs). As such, this project requires public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

All of the conditions from the original Authorities to Construct (ATC) for WECA power generation facility are included in the proposed permit to operate (see attachments A and B), with exception of commissioning requirements and offsetting requirements. Commissioning has been completed and all of the required offsets have been provided so those requirements have been removed. The fugitive dust requirements on the ATCs have been transferred to the facility wide requirements. Acid rain requirements have been added as conditions 66 through 78 for the requirements for permit units N-7172-1-1 & -2-1. The draft permits contain all appropriate permit conditions.

Also conditions 16 through 32 from ATC N-7172-3-0 were not carried over to draft PTO N-7172-3-1. These conditions were mistakenly added to the ATC N-7172-3-0 as these conditions are same as conditions 1 through 16 of the requirements for N-7172-4-0.

VII. COMPLIANCE

District Rule 2520, Section 6.0 describes the source's ability to make changes including significant permit modification. This modification does not meet the minor permit modification criteria pursuant to Section 3.20 described as follows.

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;

2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of Section 11.3 by including;

1. The identification of the source, the name and address of the permit holder, the activities and emissions change involved in the permit action;
2. The name and address of the District, the name and telephone number of District staff to contact for additional information;
3. The availability, upon request, of a statement that sets forth the legal and factual basis for the proposed permit conditions;
4. The location where the public may inspect the complete application, the District analysis, the proposed permit, and all relevant supporting materials;
5. A statement that the public may submit written comments regarding the proposed decision within at least 30 days from the date of publication and a brief description of commenting procedures, and
6. A statement that members of the public may request the APCO or his designee to preside over a public hearing for the purpose of receiving oral public comment, if a hearing has not already been scheduled. The APCO shall provide notice of any public hearing scheduled to address the proposed decision at least 30 days prior to such hearing;

VIII. ATTACHMENTS

- A. Modified Title V Operating Permit No.'s N-7172-1-1, -2-1, -3-1, & -4-1 and N-2246-1-7 & -2-7.
- B. Authorities to Construct No.'s N-7172-1-0, -2-0, -3-0, & -4-0, and N-2246-1-4 & -2-4.
- C. Previous Title V Operating Permit No.'s N-2246-1-5 & -2-5.
- D. Emissions Increases
- E. Application
- F. Facility Comments and District Responses

ATTACHMENT A

Modified Title V Operating Permit No.'s
N-7172-1-1, -2-1, -3-1, & -4-1 and N-2246-1-7 &
-2-7

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-2246-1-7

EXPIRATION DATE: 09/30/2009

EQUIPMENT DESCRIPTION:

TURBINE/GENERATOR SET #1, 25.8 MW GENERAL ELECTRIC FRAME 5, MODEL PG 5361, NATURAL GAS/FUEL OIL #2 FIRED

PERMIT UNIT REQUIREMENTS

1. This unit is subject to the requirements of 40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines. [District Rule 4001] Federally Enforceable Through Title V Permit
2. The owner shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier. [District Rule 4703] Federally Enforceable Through Title V Permit
3. This unit shall be fired on only natural gas or fuel oil #2. The primary fuel shall be natural gas; fuel oil #2 shall be used as a backup fuel only in the event of a natural gas shortage. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit shall be fired only on natural gas with a sulfur content not exceeding 1.0 grain of sulfur compounds (as S) per 100 dry standard cubic feet of natural gas. If this is fired on PUC-regulated natural gas, compliance with this sulfur content limit may be demonstrated with fuel receipts. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If this unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for eight consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until compliance is demonstrated for eight consecutive weeks. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
6. The sulfur content of fuel oil shall be less than 0.05 percent by weight. [District Rule 4703 and 4801] Federally Enforceable Through Title V Permit
7. The sulfur content of the fuel oil shall be determined each time fuel is transferred into the on-site storage tank. [40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
8. The operation of this unit shall not exceed 877 hours during any one year. [District Rule 4703] Federally Enforceable Through Title V Permit
9. When firing on natural gas, NO_x (referenced as NO₂) emissions shall not exceed 25.0 ppmvd @ 15% O₂, except during transitional operation period as defined in District Rule 4703 (as amended September 20, 2007). Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
10. When firing on fuel oil, the NO_x (referenced as NO₂) emissions shall not exceed 42.0 ppmvd @ 15% O₂ and 51 lb/hr, except during transitional operation period as defined in District Rule 4703 (as amended September 20, 2007). Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. The NOx emission concentration shall not exceed 42 ppmvd @ 15% O2 except for transitional operation period, as defined in Rule 4703 (as amended September 20, 2007), and the NOx emission rate shall not exceed 51 pounds in any one hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
12. The combined NOx emissions from permit units N-2246-1 and N-2246-2 shall not exceed 1,020 lb/day and shall not exceed 25,551 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When firing on either natural gas or fuel oil, CO emissions shall not exceed 200 ppmvd @ 15% O2, except during transitional operation period as defined in District Rule 4703 (as amended September 20, 2007). Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
14. The cumulative annual CO emissions from permit units N-2246-1 and N-2246-2 shall be less than 200,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. When firing on either natural gas or fuel oil, VOC emissions shall not exceed 15.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
17. When firing on natural gas, PM10 emissions shall not exceed 8.60 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. When firing on fuel oil, PM10 emissions shall not exceed 20.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The combined PM10 emissions from permit units N-2246-1 and N-2246-2 shall not exceed 150 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The annual PM10 emissions shall not exceed 7,016 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. When firing on natural gas, SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
22. When firing on fuel oil, SOx emissions shall not exceed 16.37 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
23. In the event of a natural gas shortage, SOx emissions from permit units N-2246-1 and N-2246-2 shall not exceed 5,950 pounds during any one month. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate ongoing compliance with the NOx and CO emission limits for natural gas fuel shall be conducted at least once per 24-month period. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. Source testing to demonstrate compliance with the NOx and CO emission limits for fuel oil shall be conducted within 30 days of operation on that fuel, unless the unit successfully demonstrated compliance with the NOx and CO emission limits for fuel oil within the previous 24 months. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

28. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. NO_x emissions (referenced as NO₂) shall be determined using EPA Method 7E or EPA Method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 4001, and 4703] Federally Enforceable Through Title V Permit
30. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
31. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
32. The owner or operator shall install, operate and maintain in calibration a system which continuously measures and records: control system operating parameters, elapsed time of operation of the turbine, and the fuel consumption and the ratio of water to fuel being fired in the turbine. The system shall be accurate to within + 5% and shall be approved by the administrator. [40 CFR 60.334(a) and (g)] Federally Enforceable Through Title V Permit
33. The steam or water to fuel ratio or other parameters that are continuously monitored, shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. [40 CFR 60.334(g) and 60.7(c)] Federally Enforceable Through Title V Permit
34. The owner or operator shall report periods of excess emissions that are defined as follows: any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the NO_x emission limit. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, and gas turbine load. [40 CFR 60.334(h) and (i)] Federally Enforceable Through Title V Permit
35. The continuous monitor of fuel, water, and water-to-fuel ratio system shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the NO_x emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [District Rule 4703, 5.1 and 6.2.5; 40 CFR 60.344(g), (h) and (i), 335(b) and (c) and 40 CFR 60.13(a)] Federally Enforceable Through Title V Permit
36. The owner shall maintain a stationary gas turbine system operating log that includes: the actual local start-up and stop time; length and reason for reduced load periods; total hours of operation on each fuel, and type and quantity of each fuel used. These records shall be updated daily. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. The owner shall maintain a log that shows the following: (a). The combined daily NO_x emissions from permit units N-2246-1 and N-2246-2; (b). The combined daily PM₁₀ emissions from permit units N-2246-1 and N-2246-2; (c). The cumulative quarterly NO_x emissions from permit units N-2246-1 and N-2246-2; (d) The cumulative annual PM₁₀ emissions from this permit unit (N-2246-1). This log shall contain each calculated emission quantity as well as each process variable used in the respective calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
38. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-2246-2-7

EXPIRATION DATE: 09/30/2009

EQUIPMENT DESCRIPTION:

MODIFICATION OF: TURBINE/GENERATOR SET #2, 25.8 MW GENERAL ELECTRIC FRAME 5, MODEL PG 5361

PERMIT UNIT REQUIREMENTS

1. This unit is subject to the requirements of 40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines. [District Rule 4001] Federally Enforceable Through Title V Permit
2. The owner shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier. [District Rule 4703] Federally Enforceable Through Title V Permit
3. This unit shall be fired on only natural gas or fuel oil #2. The primary fuel shall be natural gas; fuel oil #2 shall be used as a backup fuel only in the event of a natural gas shortage. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit shall be fired only on natural gas with a sulfur content not exceeding 1.0 grain of sulfur compounds (as S) per 100 dry standard cubic feet of natural gas. If this is fired on PUC-regulated natural gas, compliance with this sulfur content limit may be demonstrated with fuel receipts. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If this unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for eight consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until compliance is demonstrated for eight consecutive weeks. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
6. The sulfur content of fuel oil shall be less than 0.05 percent by weight. [District Rule 4703 and 4801] Federally Enforceable Through Title V Permit
7. The sulfur content of the fuel oil shall be determined each time fuel is transferred into the on-site storage tank. [40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit
8. The operation of this unit shall not exceed 877 hours during any one year. [District Rule 4703] Federally Enforceable Through Title V Permit
9. When firing on natural gas, NO_x (referenced as NO₂) emissions shall not exceed 25.0 ppmvd @ 15% O₂, except during transitional operation period as defined in District Rule 4703 (as amended September 20, 2007). Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
10. When firing on fuel oil, the NO_x (referenced as NO₂) emissions shall not exceed 42.0 ppmvd @ 15% O₂ and 51 lb/hr, except during transitional operation period as defined in District Rule 4703 (as amended September 20, 2007). Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
11. The NO_x emission concentration shall not exceed 42 ppmvd @ 15% O₂ except during transitional operation period as defined in District Rule 4703 (as amended September 20, 2007), and the NO_x emission rate shall not exceed 51 pounds in any one hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

12. The combined NOx emissions from permit units N-2246-1 and N-2246-2 shall not exceed 1,020 lb/day and shall not exceed 25,551 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When firing on either natural gas or fuel oil, CO emissions shall not exceed 200 ppmvd @ 15% O2, except during transitional operation period as defined in District Rule 4703 (as amended September 20, 2007) as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
14. The cumulative annual CO emissions from permit units N-2246-1 and N-2246-2 shall be less than 200,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. When firing on either natural gas or fuel oil, VOC emissions shall not exceed 15.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
17. When firing on natural gas, PM10 emissions shall not exceed 8.60 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
18. When firing on fuel oil, PM10 emissions shall not exceed 20.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The combined PM10 emissions from permit units N-2246-1 and N-2246-2 shall not exceed 150 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The annual PM10 emissions shall not exceed 7,016 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. When firing on natural gas, SOx emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
22. When firing on fuel oil, SOx emissions shall not exceed 16.37 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
23. In the event of a natural gas shortage, SOx emissions from permit units N-2246-1 and N-2246-2 shall not exceed 5,950 pounds during any one month. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate ongoing compliance with the NOx and CO emission limits for natural gas fuel shall be conducted at least once per 24-month period. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. Source testing to demonstrate compliance with the NOx and CO emission limits for fuel oil shall be conducted within 30 days of operation on that fuel, unless the unit successfully demonstrated compliance with the NOx and CO emission limits for fuel oil within the previous 24 months. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
28. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

29. NO_x emissions (referenced as NO₂) shall be determined using EPA Method 7E or EPA Method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 4001, and 4703] Federally Enforceable Through Title V Permit
30. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
31. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
32. The owner or operator shall install, operate and maintain in calibration a system which continuously measures and records: control system operating parameters, elapsed time of operation of the turbine, and the fuel consumption and the ratio of water to fuel being fired in the turbine. The system shall be accurate to within + 5% and shall be approved by the administrator. [40 CFR 60.334(a) and (g)] Federally Enforceable Through Title V Permit
33. The steam or water to fuel ratio or other parameters that are continuously monitored, shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. [40 CFR 60.334(g) and 60.7(c)] Federally Enforceable Through Title V Permit
34. The owner or operator shall report periods of excess emissions that are defined as follows: any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the NO_x emission limit. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, and gas turbine load. [40 CFR 60.334(h) and (i)] Federally Enforceable Through Title V Permit
35. The continuous monitor of fuel, water, and water-to-fuel ratio system shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the NO_x emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [District Rule 4703, 5.1 and 6.2.5; 40 CFR 60.344(g), (h) and (i), 335(b) and (c) and 40 CFR 60.13(a)] Federally Enforceable Through Title V Permit
36. The owner shall maintain a stationary gas turbine system operating log that includes: the actual local start-up and stop time; length and reason for reduced load periods; total hours of operation on each fuel, and type and quantity of each fuel used. These records shall be updated daily. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
37. The owner shall maintain a log that shows the following: (a). The combined daily NO_x emissions from permit units N-2246-1 and N-2246-2; (b). The combined daily PM₁₀ emissions from permit units N-2246-1 and N-2246-2; (c). The cumulative quarterly NO_x emissions from permit units N-2246-1 and N-2246-2; (d) The cumulative annual PM₁₀ emissions from this permit unit (N-2246-1). This log shall contain each calculated emission quantity as well as each process variable used in the respective calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
38. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.



Permit to Operate

FACILITY: N-7172

EXPIRATION DATE: 09/30/2014

LEGAL OWNER OR OPERATOR:
MAILING ADDRESS:

WALNUT ENERGY CENTER AUTHORITY
P O BOX 949
TURLOCK, CA 953810949

FACILITY LOCATION:

600 S WASHINGTON ROAD
TURLOCK, CA

FACILITY DESCRIPTION:

POWER GENERATION FACILITY

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

San Joaquin Valley Air Pollution Control District

FACILITY: N-7172-0-1

EXPIRATION DATE: 09/30/2014

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; Stanislaus County Rule 110] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; Stanislaus County Rule 110] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: WALNUT ENERGY CENTER AUTHORITY
Location: 600 S WASHINGTON ROAD, TURLOCK, CA
N-7172-0-1: Mar 10 2010 8:53AM - SRANK

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101; Stanislaus County Rule 401] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (10/31/01). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Stanislaus Rules 401 and 110. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (11/15/01); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (10/31/01); 8021 (11/15/01); 8031 (11/15/01); 8041 (11/15/01); 8051 (11/15/01); 8061 (11/15/01); and 8071 (11/15/01). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. On July 31, 2009, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
43. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-1-1

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH N-7172-2

PERMIT UNIT REQUIREMENTS

1. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 1080] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the fuel flow rate to the turbine, NO_x emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
11. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
12. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
13. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
14. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
15. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
16. Startup is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
17. The cumulative startup and shutdown period duration shall not exceed five hours in any one day, commencing at midnight. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The unit shall comply with the New Source Review based NO_x and CO limits of this permit within 5 hours after initial start-up. [District Rule 2201]
19. The NO_x emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The NO_x emissions concentration during steady state operation shall not exceed 2.0 ppmvd @ 15% O₂ over a 1 hour average (clock hour basis). Steady-state period refers to any periods that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The combined total NO_x emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

22. Compliance with NO_x emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NO_x concentration exceeds 2.0 ppmvd @15% O₂. The maximum 1-hour average NO_x concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The CO emissions concentration during steady state operation shall not exceed 4.0 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The combined total CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The VOC emissions concentration during steady state operation shall not exceed 1.4 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The combined total VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The PM₁₀ emissions rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The SO_x emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Ammonia (NH₃) emissions concentration shall not exceed 10 ppmvd @ 15% O₂ over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c/1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration ppmvd @ 15% O₂ across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
34. The cumulative annual emissions shall not exceed 99,991 lb/year for CO and 17,404 lb/year for VOC. [District Rule 2201] Federally Enforceable Through Title V Permit
35. The cumulative quarterly NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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36. The cumulative annual NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The cumulative quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
38. The cumulative annual CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 199,982 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
42. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
43. The results of each source test shall be received by the District no later than 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
44. Source testing to measure startup NO_x, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) at least once every seven years. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NO_x and CO startup emission limits, then source testing to measure startup NO_x and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
45. Source testing to demonstrate compliance with the NO_x (ppmvd), CO (ppmvd), VOC (ppmvd), PM₁₀ (lb/hour), and NH₃ (ppmvd) emission limits shall be conducted at least once every twelve months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
46. NO_x emissions (referenced as NO₂) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
47. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
48. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit
49. Source testing to measure concentrations of PM₁₀ shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
50. Ammonia (NH₃) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
51. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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52. If necessary, testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072, ASTM Method D4468, ASTM Method D5504 or ASTM Method D3246. [District Rules 1081 and 4001] Federally Enforceable Through Title V Permit
53. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001] Federally Enforceable Through Title V Permit
54. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative, maintenance of CEM's, and emission measurements. [District Rules 2201, 4703, 1080, 7.3] Federally Enforceable Through Title V Permit
55. A violation of NO_x and CO emission standards measured and recorded by the CEMs shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
56. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
57. The permittee shall retain records of the cumulative annual NO_x, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
58. The permittee shall maintain hourly records of NO_x, CO and ammonia concentrations (ppmv @ 15% O₂). [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
59. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
60. The permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001] Federally Enforceable Through Title V Permit
61. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
62. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100] Federally Enforceable Through Title V Permit
63. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit
64. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
65. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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66. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
67. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
68. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
69. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
70. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
71. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
72. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
73. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
74. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
75. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
76. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-2-1

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH N-7172-1

PERMIT UNIT REQUIREMENTS

1. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 1080] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the fuel flow rate to the turbine, NO_x emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
11. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
12. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
13. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
14. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
15. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
16. Startup is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
17. The cumulative startup and shutdown period duration shall not exceed five hours in any one day, commencing at midnight. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The unit shall comply with the New Source Review based NO_x and CO limits of this permit within 5 hours after initial start-up. [District Rule 2201]
19. The NO_x emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The NO_x emissions concentration during steady state operation shall not exceed 2.0 ppmvd @ 15% O₂ over a 1 hour average (clock hour basis). Steady-state period refers to any periods that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The combined total NO_x emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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22. Compliance with NOx emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NOx concentration exceeds 2.0 ppmvd @15% O2. The maximum 1-hour average NOx concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The CO emissions concentration during steady state operation shall not exceed 4.0 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The combined total CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The VOC emissions concentration during steady state operation shall not exceed 1.4 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The combined total VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The PM10 emissions rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The SOx emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Ammonia (NH3) emissions concentration shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
34. The cumulative annual emissions shall not exceed 99,991 lb/year for CO and 17,404 lb/year for VOC. [District Rule 2201] Federally Enforceable Through Title V Permit
35. The cumulative quarterly NOx emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

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36. The cumulative annual NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The cumulative quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 lb/quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
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40. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
42. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
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44. Source testing to measure startup NO_x, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) at least once every seven years. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NO_x and CO startup emission limits, then source testing to measure startup NO_x and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
45. Source testing to demonstrate compliance with the NO_x (ppmvd), CO (ppmvd), VOC (ppmvd), PM₁₀ (lb/hour), and NH₃ (ppmvd) emission limits shall be conducted at least once every twelve months. [District Rule 2201 and 4001] Federally Enforceable Through Title V Permit
46. NO_x emissions (referenced as NO₂) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703] Federally Enforceable Through Title V Permit
47. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
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50. Ammonia (NH₃) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
51. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703] Federally Enforceable Through Title V Permit

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52. If necessary, testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072, ASTM Method D4468, ASTM Method D5504 or ASTM Method D3246. [District Rules 1081 and 4001] Federally Enforceable Through Title V Permit
53. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001] Federally Enforceable Through Title V Permit
54. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative, maintenance of CEM's, and emission measurements. [District Rules 2201, 4703, 1080, 7.3] Federally Enforceable Through Title V Permit
55. A violation of NO_x and CO emission standards measured and recorded by the CEMs shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
56. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
57. The permittee shall retain records of the cumulative annual NO_x, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
58. The permittee shall maintain hourly records of NO_x, CO and ammonia concentrations (ppmv @ 15% O₂). [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
59. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
60. The permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001] Federally Enforceable Through Title V Permit
61. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
62. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100] Federally Enforceable Through Title V Permit
63. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit
64. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
65. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

66. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
67. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
68. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
69. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
70. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
71. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
72. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
73. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
74. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
75. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
76. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-3-1

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

68,500 GPM MECHANICAL DRAFT COOLING TOWER WITH 5 CELLS SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012] Federally Enforceable Through Title V Permit
4. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The PM10 emissions shall not exceed 30.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Compliance with the PM10 emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{Circulating Water Recirculation rate (gal/day)} \times 8.34 \text{ lb/gal} \times \text{Total Dissolved Solids Concentration in the blowdown water (ppm)} \times \text{Design Drift Rate (\%)}$. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory every calendar quarter. [District Rule 1081] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-7172-4-1

EXPIRATION DATE: 09/30/2014

EQUIPMENT DESCRIPTION:

300 HP JOHN DEERE COMPANY MODEL JW6H-UF40 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The exhaust stack shall not be fitted with a rain cap, or any other similar device, that impedes upward vertical exhaust flow. [District Rule 4102] Federally Enforceable Through Title V Permit
4. The emissions from the engine shall not exceed any of the following: 5.2 grams NOx/hp-hr, 0.27 grams CO/hp-hr, or 0.15 grams VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The PM10 emissions from the engine shall not exceed 0.09 grams/hp-hr based on U.S EPA certification testing using test procedure ISO 8178. [District Rules 2201, 4102, 13 CCR 2423, and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 2201, 4701, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. Only CARB certified diesel fuel is to be used. [District Rules 2201, 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), the type of fuel used, and records of operational characteristics monitoring. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

ATTACHMENT B

Authorities to Construct No.'s
N-7172-1-0, -2-0, -3-0, & -4-0, and N-2246-1-4 &
-2-4



AUTHORITY TO CONSTRUCT

PERMIT NO: N-7172-1-2

ISSUANCE DATE: 09/11/2007

LEGAL OWNER OR OPERATOR: WALNUT ENERGY CENTER AUTHORITY

MAILING ADDRESS: P O BOX 949
TURLOCK, CA 953810949

LOCATION: 600 S WASHINGTON ROAD
TURLOCK, CA

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE. THE STEAM TURBINE IS SHARED WITH UNIT N-7172-2 (FORMERLY ATC PERMIT N-2246-3-1). MODIFICATION TO ALLOW UP TO 5 HOURS TO COMPLY WITH THE NOX AND CO LIMITS OF DISTRICT RULE 4703.

CONDITIONS

1. Authority to Construct N-7172-1-0 shall be implemented prior to the implementation of this Authority to Construct. [District Rule 2201]
2. The heat recovery steam generator shall provide space for additional selective catalytic reduction catalyst and additional oxidation catalyst. The additional space shall be sufficient to house the quantity of catalyst material necessary to achieve and maintain compliance with the emission limits of this permit. [District Rule 2201]
3. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201]
4. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

COPY

DAVID WARNER, Director of Permit Services

N-7172-1-2 : Apr 16 2009 5:12PM -- KEASTMD : Joint Inspection NDT Required

7. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
8. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf. [District Rule 2201]
9. The permittee shall monitor and record the fuel flow rate to the turbine, NO_x emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703]
10. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 1080]
11. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
12. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081]
14. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
15. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
16. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]
17. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080]
18. Start-up is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201]
19. The ammonia injection system shall be in operation whenever the SCR catalyst bed temperature exceeds the minimum operating temperature specified in the manufacturers SCR O&M manual. Permittee shall maintain a copy of the manufacturers SCR O&M manual on-site and make it available for inspection by District staff upon request. [District Rule 4703]
20. The unit shall comply with the NO_x and CO limits of District Rule 4703 within 5 hours after initial start-up. [District Rule 4703]

CONDITIONS CONTINUE ON NEXT PAGE

21. The unit shall comply with the New Source Review based NO_x and CO limits of this permit within 5 hours after initial start-up. [District Rule 2201]
22. The NO_x emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201]
23. The NO_x emissions concentration during steady state operation shall not exceed 2.0 ppmvd @ 15% O₂ over a 1 hour average (clock hour basis). Steady-state period refers to any period that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rule 2201]
24. The combined NO_x emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201]
25. Compliance with NO_x emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NO_x concentration exceeds 2.0 ppmvd @15% O₂. The maximum 1-hour average NO_x concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O₂. [District Rule 2201]
26. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rule 2201]
27. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201]
28. The CO emissions concentration during steady state operation shall not exceed 4.0 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any period that is not a start-up or shut down period. [District Rule 2201]
29. The combined CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201]
30. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201]
31. The VOC emissions concentration during steady state operation shall not exceed 1.4 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any period that is not a start-up or shut down period. [District Rule 2201]
32. The combined VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201]
33. The PM₁₀ emission rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201]
34. The SO_x emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201]
35. Ammonia (NH₃) emissions concentration shall not exceed 10 ppmvd @ 15% O₂ over a 24 hour rolling average. [District Rule 2201]
36. The combined quarterly NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 pounds. [District Rule 2201]
37. The combined annual NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 pounds. [District Rule 2201]
38. The combined quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 pounds. [District Rule 2201]
39. The annual CO emissions shall not exceed 99,991 pounds. [District Rule 2201]
40. The annual VOC emissions shall not exceed 17,404 pounds. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

41. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201]
43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201]
44. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rule 2201]
45. Source testing to measure startup NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) at least once every seven years, thereafter. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NOx and CO startup emission limits, then source testing to measure startup NOx and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001]
46. Source testing to demonstrate compliance with the NOx (ppmvd), CO (ppmvd), VOC (ppmvd), PM10 (lb/hour), and NH3 (ppmvd) emission limits shall be conducted at least once every twelve months. [District Rule 2201 and 4001]
47. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
48. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081]
49. The results of each source test shall be received by the District no later than 60 days after the source test date. [District Rule 1081]
50. NOx emissions (referenced as NO2) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703]
51. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201]
52. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201, and 4703]
53. Source testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201]
54. Ammonia (NH3) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
55. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703]

CONDITIONS CONTINUE ON NEXT PAGE

56. Testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072-90, ASTM Method D4468-85, ASTM Method D5504-94 or ASTM Method D3246-81. [District Rules 1081 and 4001]
57. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001]
58. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 2201 and 4703]
59. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703]
60. The permittee shall retain records of the cumulative annual NO_x, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201]
61. The permittee shall maintain hourly records of NO_x, CO and ammonia emission concentrations (ppmvd @ 15% O₂). [District Rules 2201 and 4201]
62. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080]
63. The permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001]
64. Operator shall submit a semiannual report to the APCO listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeded 0.8% by weight. [District Rule 4001]
65. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201]
66. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]
67. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100]
68. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: N-7172-2-0

ISSUANCE DATE: 08/19/2003

LEGAL OWNER OR OPERATOR: WALNUT ENERGY CENTER AUTHORITY

MAILING ADDRESS: P O BOX 949
TURLOCK, CA 953810949

LOCATION: 600 S WASHINGTON ROAD
TURLOCK, CA

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE SHARED WITH N-7172-1 (FORMALLY ATC PERMIT N-2246-4-1).

CONDITIONS

1. The permittee shall not begin actual onsite construction of the equipment authorized by this Authority to Construct until the lead agency satisfies the requirements of the California Environmental Quality Act (CEQA). [California Environmental Quality Act]
2. To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Application for Certification. [California Environmental Quality Act and District Rule Rule 2201, Section 5.8.8]
3. The permittee shall notify the District of the date of initiation of construction no later than 30 days after such date, the date of anticipated startup not more than 60 days nor less than 30 days prior to such date, and the date of actual startup within 15 days after such date. [District Rule 4001]
4. The heat recovery steam generator shall provide space for additional selective catalytic reduction catalyst and additional oxidation catalyst. The additional space shall be sufficient to house the quantity of catalyst material necessary to achieve and maintain compliance with the emission limits of this permit. [District Rule 2201]
5. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

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DAVID WARNER, Director of Permit Services

N-7172-2-0 : Apr 17 2009 9:47AM - KEASTMD : Joint Inspection NOT Required

6. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
7. Prior to the issuance of the Permit to Operate, the permittee shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit during times that the CEMS is not functioning properly. [District Rule 4703]
8. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
10. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
11. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201]
12. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rule 2201]
13. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NOx, CO, and O2. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 1080]
14. The permittee shall monitor and record the fuel flow rate to the turbine, NOx emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703]
15. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
16. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
17. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081]
18. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
19. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
20. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]

CONDITIONS CONTINUE ON NEXT PAGE

21. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080]
22. Startup is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201]
23. The cumulative startup and shutdown period duration shall not exceed five hours in any one day, commencing at midnight. Emissions during startup and shutdown periods must be counted toward the applicable daily emission limitations. [District Rule 2201]
24. The NOx emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201]
25. The NOx emissions concentration during steady state operation shall not exceed 2.0 ppmvd @ 15% O2 over a 1 hour average (clock hour basis). Steady-state period refers to any periods that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rule 2201]
26. The combined total NOx emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201]
27. Compliance with NOx emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NOx concentration exceeds 2.0 ppmvd @15% O2. The maximum 1-hour average NOx concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O2. [District Rule 2201]
28. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rule 2201]
29. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201]
30. The CO emissions concentration during steady state operation shall not exceed 4.0 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201]
31. The combined total CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201]
32. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201]
33. The VOC emissions concentration during steady state operation shall not exceed 1.4 ppmvd @ 15% O2 over a 3 hour rolling average. Steady-state period refers to any periods that is not a start-up or shut down period. [District Rule 2201]
34. The combined total VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201]
35. The PM10 emissions rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201]
36. The SOx emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201]
37. Ammonia (NH3) emissions concentration shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

38. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
39. The cumulative annual emissions shall not exceed 99,991 lb/year for CO and 17,404 lb/year for VOC. [District Rule 2201]
40. The cumulative quarterly NOx emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 lb/quarter. [District Rule 2201]
41. The cumulative annual NOx emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 lb/year. [District Rule 2201]
42. The cumulative quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 lb/quarter. [District Rule 2201]
43. The cumulative annual CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 199,982 lb/year. [District Rule 2201]
44. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201]
45. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201]
46. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
47. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081]
48. The results of each source test shall be received by the District no later than 60 days after the source test date. [District Rule 1081]
49. Source testing to measure startup NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) prior to the end of the commissioning period and at least once every seven years, thereafter. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NOx and CO startup emission limits, then source testing to measure startup NOx and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001]
50. Source testing to demonstrate compliance with the NOx (ppmvd), CO (ppmvd), VOC (ppmvd), PM10 (lb/hour), and NH3 (ppmvd) emission limits and fuel gas sulfur content requirements shall be conducted within 120 days of initial operation. Source testing to demonstrate compliance with the NOx (ppmvd), CO (ppmvd), VOC (ppmvd), PM10 (lb/hour), and NH3 (ppmvd) emission limits shall be conducted at least once every twelve months thereafter. [District Rule 2201 and 4001]
51. Source testing to determine the percent efficiency of the turbine shall be conducted annually. [District Rule 4703]

CONDITIONS CONTINUE ON NEXT PAGE

52. NO_x emissions (referenced as NO₂) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703]
53. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201]
54. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201, and 4703]
55. Source testing to measure concentrations of PM₁₀ shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201]
56. Ammonia (NH₃) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
57. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703]
58. If necessary, testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072-90, ASTM Method D4468-85, ASTM Method D5504-94 or ASTM Method D3246-81. [District Rules 1081 and 4001]
59. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001]
60. Source testing to determine the percent efficiency of the turbine shall be conducted utilizing the procedures in District Rule 4703 (Stationary Gas Turbines). [District Rule 4703]
61. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 2201 and 4703]
62. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703]
63. The permittee shall retain records of the cumulative annual NO_x, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201]
64. The permittee shall maintain hourly records of NO_x, CO and ammonia concentrations (ppmv @ 15% O₂). [District Rules 2201 and 4201]
65. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080]
66. The permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001]
67. Operator shall submit a semiannual report to the APCO listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeded 0.8% by weight. [District Rule 4001]
68. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

69. Prior to operating equipment under this Authority to Construct, the permittee shall surrender NOx emission reduction credits for the following quantities of emissions: 1st quarter - 35,000 lb, 2nd quarter - 35,000 lb, 3rd quarter - 35,000 lb, and fourth quarter - 35,000 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/25/02). [District Rule 2201]
70. ERC Certificate Numbers C-482-2 and S-1834-2 shall be used to supply the required NOx offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct [District Rule 2201]
71. Prior to operating equipment under this Authority to Construct, the permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 8,702 lb, 2nd quarter - 8,702 lb, 3rd quarter - 8,702 lb, and fourth quarter - 8,702 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/25/02). [District Rule 2201]
72. ERC Certificate Numbers C-484-1 shall be used to supply the required VOC offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct [District Rule 2201]
73. Prior to operating equipment under this Authority to Construct, the permittee shall surrender PM10 emission reduction credits for the following quantities of emissions: 1st quarter - 28,213 lb, 2nd quarter - 28,213 lb, 3rd quarter - 28,213 lb, and fourth quarter - 28,213 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/25/02). [District Rule 2201]
74. ERC Certificate Numbers C-486-4, C-488-4, C-491-4, C-492-4, C-494-4, C-495-4, N-333-4, N-334-4, N-335-4, and N-336-4 shall be used to supply the required PM10 offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct [District Rule 2201]
75. Permittee shall submit an application to comply with Rule 2520 - Federally Mandated Operating Permits within twelve months of commencing operation. [District Rule 2520]
76. Permittee shall submit an application to comply with Rule 2540 (Acid Rain Program) at least 24 months prior to the date that the unit commences operation. [District Rule 2540]
77. Authority to Construct permits N-7172-1-0, N-7172-2-0, N-7172-3-0, N-2246-1-4, and N-2246-2-4 shall be implemented simultaneously. [District Rule 2201]
78. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]
79. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100]
80. The owner/operator shall minimize the emissions from the gas turbine and heat recovery generator to the maximum extent possible during the commissioning period. Conditions 80 through 92 shall apply only during the commissioning period as defined below. [District Rule 2201]
81. Commissioning activities are defined as, but are not limited to, all testing, adjustment, tuning and calibration activities recommended by the equipment manufacturers and the construction contractor to ensure safe and reliable steady state operation of the gas turbines, heat recovery steam generator, steam turbine and associated electrical delivery systems. [District Rule 2201]
82. Commissioning period shall commence when all mechanical, electrical and control systems are installed and individual system startup has been completed, or when the gas turbine is first fired, whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing, is available for commercial operation. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

83. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201]
84. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and the oxidation catalyst shall be installed, adjusted and operated to minimize emissions from the unit. [District Rule 2201]
85. Coincident with the steady state operation of the SCR system and the oxidation catalyst, NO_x and CO emissions from this unit shall comply with the limits specified in conditions #25 and #30, respectively. [District Rule 2201]
86. The owner/operator shall submit a plan to the District at least four weeks prior to the first firing of this unit, describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours and the purpose of the activity. The activities described shall include, but are not limited to the following: tuning of the combustors, installation and operation of the SCR systems and the oxidation catalyst, installation, calibration and testing of the NO_x and CO continuous emission monitors and any activities requiring the firing of this unit without full abatement by the SCR system or oxidation catalyst. [District Rule 2201]
87. The emission rates during the commissioning period shall not exceed any of the following: NO_x (as NO₂) - 108.8 lb/hr, CO - 180.0 lb/hr, VOC (as methane) - 17.0 lb/hr, SO_x - 0.94 lb/hr, and PM₁₀ - 7.0 lb/hr. [District Rule 2201]
88. Only one of the turbines under permits N-7172-1 and N-7172-2 shall be operated at any one time without abatement and only during commissioning. Combined emission rates from permit units N-7172-1 and N-7172-2, during the commissioning period, shall not exceed any of the following limits: NO_x (as NO₂) - 227.8 lb/hr or 3,055.4 lb/day; CO - 309.0 lb/hr or 4,878.8 lb/day; VOC (as methane) - 33.0 lb/hr or 491 lb/day; SO_x - 47.8 lb/day; PM₁₀ - 336.0 lb/day. [District Rule 2201]
89. During the commissioning period, the permittee shall demonstrate compliance with conditions #87 and #88 through the use of properly operated and maintained continuous emissions monitors and recorders as specified in these permit conditions. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the source is not in operation). [District Rule 2201]
90. The continuous emissions monitors specified in these permit conditions shall be installed, calibrated and operational prior to the first firing of the unit. After first firing, the detection range of the CEMS shall be adjusted as necessary to accurately measure the resulting range of NO_x and CO emissions concentrations. [District Rule 2201]
91. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 288 hours during the commissioning period. Such operation of this unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and the oxidation catalyst in place. Upon completion of these activities, the permittee shall provide written notice to the District and unused balance of the 288 firing hours without abatement shall expire. [District Rule 2201]
92. The total mass emissions of NO_x, CO and VOC that are emitted during the commissioning period shall accrue towards the annual emission limits specified in conditions #39, #41, and #43. [District Rule 2201]
93. Disturbances of soil related to any construction, demolition, excavation, extraction, and other earthmoving activities shall comply with the requirements for fugitive dust control in SJVAPCD District Rule 8021 (11/05/01) unless specifically exempted under section 4.0 of Rule 8021. [District Rule 8021]
94. Outdoor handling, storage, and transport of any bulk material shall comply with the requirements of SJVAPCD District Rule 8031 (11/15/01), unless specifically exempted under section 4.0 of Rule 8031. [District Rule 8031]
95. All sites that are subject to SJVAPCD District Rule 8021, SJVAPCD District Rule 8031, and SJVAPCD District Rule 8071 shall comply with the requirements of SJVAPCD District Rule 8041 (11/15/01), unless specifically exempted under section 4.0 of Rule 8041. [District Rule 8041]
96. Any open area having 3.0 acres or more of disturbed surface area, that has remained undeveloped, unoccupied, unused or vacant for more than seven days shall comply with the requirements of SJVAPCD District Rule 8051 (11/15/01), unless specifically exempted under section 4.0 of Rule 8051. [District Rule 8051]

CONDITIONS CONTINUE ON NEXT PAGE

97. Any new or existing public or private paved or unpaved road, road construction project, or road modification project shall implement the control measures and design criteria of, and comply with the requirements of SJVAPCD District Rule 8061 (11/15/01) unless specifically exempted under section 4.0 of Rule 8061. [District Rule 8061]
98. Any unpaved vehicle/equipment traffic area of 1.0 acre or larger shall comply with the requirements of SJVAPCD District Rule 8071 (11/15/01), unless specifically exempted under section 4.0 of Rule 8071. [District Rule 8071]
99. Any off-field agricultural sources shall comply with the requirements of SJVAPCD District Rule 8081 (11/15/01), unless specifically exempted under section 4.0 of Rule 8081. [District Rule 8081]
100. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: N-7172-2-2

ISSUANCE DATE: 09/11/2007

LEGAL OWNER OR OPERATOR: WALNUT ENERGY CENTER AUTHORITY

MAILING ADDRESS: P O BOX 949
TURLOCK, CA 953810949

LOCATION: 600 S WASHINGTON ROAD
TURLOCK, CA

EQUIPMENT DESCRIPTION:

84 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A 1,047 MMBTU/HR GENERAL ELECTRIC FRAME 7EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A DRY LOW NOX COMBUSTOR, AN INLET AIR FILTRATION AND EVAPORATIVE COOLING SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) AND A 100 MW NOMINALLY RATED STEAM TURBINE. THE STEAM TURBINE IS SHARED WITH UNIT N-7172-1 (FORMERLY ATC PERMIT N-2246-4-1). MODIFICATION TO ALLOW UP TO 5 HOURS TO COMPLY WITH THE NOX AND CO LIMITS OF DISTRICT RULE 4703.

CONDITIONS

1. Authority to Construct N-7172-2-0 shall be implemented prior to the implementation of this Authority to Construct. [District Rule 2201]
2. The heat recovery steam generator shall provide space for additional selective catalytic reduction catalyst and additional oxidation catalyst. The additional space shall be sufficient to house the quantity of catalyst material necessary to achieve and maintain compliance with the emission limits of this permit. [District Rule 2201]
3. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201]
4. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

CONDITIONS CONTINUE ON NEXT PAGE

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DAVID WARNER, Director of Permit Services

N-7172-2-2: Apr 16 2009 5:12PM - KEASTMD : Joint Inspection NOT Required

7. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
8. The gas turbine engine shall be fired exclusively on natural gas with a sulfur content of no greater than 0.36 grain of sulfur compounds (as S) per 100 dry scf. [District Rule 2201]
9. The permittee shall monitor and record the fuel flow rate to the turbine, NO_x emission rate, the CO emission rate, the ammonia injection rate, the exhaust temperature both prior to and after the SCR unit, the exhaust oxygen content, and the exhaust flow rate. [District Rules 2201, 4001, and 4703]
10. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 1080]
11. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
12. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
13. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081]
14. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
15. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
16. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]
17. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080]
18. Start-up is defined as the period beginning with turbine initial firing until the unit meets the ppmvd emission limits for steady state operation. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown events shall not exceed 296 hours per calendar year. Startup emissions must be counted toward each applicable emission limit (lb/day and lb/yr). [District Rule 2201]
19. The ammonia injection system shall be in operation whenever the SCR catalyst bed temperature exceeds the minimum operating temperature specified in the manufacturers SCR O&M manual. Permittee shall maintain a copy of the manufacturers SCR O&M manual on-site and make it available for inspection by District staff upon request. [District Rule 4703]
20. The unit shall comply with the NO_x and CO limits of District Rule 4703 within 5 hours after initial start-up. [District Rule 4703]

CONDITIONS CONTINUE ON NEXT PAGE

21. The unit shall comply with the New Source Review based NO_x and CO limits of this permit within 5 hours after initial start-up. [District Rule 2201]
22. The NO_x emissions during start-up and shutdown periods shall not exceed 119.0 lb/hour. [District Rule 2201]
23. The NO_x emissions concentration during steady state operation shall not exceed 2.0 ppmvd @ 15% O₂ over a 1 hour average (clock hour basis). Steady-state period refers to any period that is not a start-up or shut down period. A clock hour in a one hour average will commence at the top of the hour. [District Rule 2201]
24. The combined NO_x emissions from start-up, shut down, and steady state operation shall not exceed 444.2 lb/day. [District Rule 2201]
25. Compliance with NO_x emission limitations during steady state operation shall not be required during short-term excursions limited to a cumulative total of 10 hours per rolling 12-month period. Short-term excursions are defined as 15 minute periods designated by the owner/operator (and approved by the APCO) that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NO_x concentration exceeds 2.0 ppmvd @ 15% O₂. The maximum 1-hour average NO_x concentration for periods that include short-term excursions shall not exceed 30 ppmvd @ 15% O₂. [District Rule 2201]
26. Examples of transient load conditions include, but are not limited to the following: (1) Initiation/shutdown of combustion turbine inlet air cooling and (2) Rapid combustion turbine load changes. All emissions during short-term excursions shall accrue towards the hourly, daily, and annual emissions limitations of this permit and shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit. [District Rule 2201]
27. The CO emissions during start-up and shutdown periods shall not exceed 129.0 lb/hour. [District Rule 2201]
28. The CO emissions concentration during steady state operation shall not exceed 4.0 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any period that is not a start-up or shut down period. [District Rule 2201]
29. The combined CO emissions from start-up, shut down, and steady state operation shall not exceed 558.8 lb/day. [District Rule 2201]
30. The VOC emissions during start-up and shutdown periods shall not exceed 16.0 lb/hour. [District Rule 2201]
31. The VOC emissions concentration during steady state operation shall not exceed 1.4 ppmvd @ 15% O₂ over a 3 hour rolling average. Steady-state period refers to any period that is not a start-up or shut down period. [District Rule 2201]
32. The combined VOC emissions from start-up, shut down, and steady state operation shall not exceed 83.0 lb/day. [District Rule 2201]
33. The PM₁₀ emission rate shall not exceed 7.0 lb/hour and 168.0 lb/day. [District Rule 2201]
34. The SO_x emission rate shall not exceed 1.05 lb/hour and 25.2 lb/day. [District Rule 2201]
35. Ammonia (NH₃) emissions concentration shall not exceed 10 ppmvd @ 15% O₂ over a 24 hour rolling average. [District Rule 2201]
36. The combined quarterly NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 35,000 pounds. [District Rule 2201]
37. The combined annual NO_x emissions from permit units N-7172-1 and N-7172-2 shall not exceed 140,000 pounds. [District Rule 2201]
38. The combined quarterly CO emissions from permit units N-7172-1 and N-7172-2 shall not exceed 49,996 pounds. [District Rule 2201]
39. The annual CO emissions shall not exceed 99,991 pounds. [District Rule 2201]
40. The annual VOC emissions shall not exceed 17,404 pounds. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

41. Compliance with ammonia emission limit shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. The twenty-four hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201]
43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limit will be compiled from the twelve most recent calendar months. [District Rule 2201]
44. Testing to demonstrate compliance with the fuel sulfur content limit of this permit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit of this permit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [District Rule 2201]
45. Source testing to measure startup NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-7172-1 or N-7172-2) at least once every seven years, thereafter. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR Part 60, Appendix B. If CEM data is not certified to determine compliance with NOx and CO startup emission limits, then source testing to measure startup NOx and CO mass emission rates shall be conducted at least once every 12 months. [District Rule 2201 and 4001]
46. Source testing to demonstrate compliance with the NOx (ppmvd), CO (ppmvd), VOC (ppmvd), PM10 (lb/hour), and NH3 (ppmvd) emission limits shall be conducted at least once every twelve months. [District Rule 2201 and 4001]
47. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
48. Source testing shall be witnessed or authorized by District personnel. [District Rule 1081]
49. The results of each source test shall be received by the District no later than 60 days after the source test date. [District Rule 1081]
50. NOx emissions (referenced as NO2) shall be determined using EPA Method 7E, EPA Method 20, or CARB method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 2201, 4001, and 4703]
51. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201]
52. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201, and 4703]
53. Source testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201]
54. Ammonia (NH3) emissions shall be determined using BAAQMD Method ST-1B. [District Rules 1081 and 4102]
55. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081, 2201, and 4703]

CONDITIONS CONTINUE ON NEXT PAGE

56. Testing for fuel sulfur content shall be conducted utilizing ASTM Method D 3246, ASTM Method D1072-90, ASTM Method D4468-85, ASTM Method D5504-94 or ASTM Method D3246-81. [District Rules 1081 and 4001]
57. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rule 1081 and 4001]
58. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 2201 and 4703]
59. The permittee shall maintain a daily record that includes the actual turbine start-up and stop times (local time), total hours of operation, and the quantity and type of fuel used. [District Rule 4703]
60. The permittee shall retain records of the cumulative annual NO_x, CO, and VOC emissions. The record shall be updated monthly. [District Rule 2201]
61. The permittee shall maintain hourly records of NO_x, CO and ammonia emission concentrations (ppmvd @ 15% O₂). [District Rules 2201 and 4201]
62. The permittee shall submit a written report for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include: time intervals and the magnitude of excess emissions, the nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question; time and date of each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [District Rule 1080]
63. The permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001]
64. Operator shall submit a semiannual report to the APCO listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeded 0.8% by weight. [District Rule 4001]
65. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201]
66. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]
67. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100]
68. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: N-7172-3-0

ISSUANCE DATE: 08/19/2003

LEGAL OWNER OR OPERATOR: WALNUT ENERGY CENTER AUTHORITY

MAILING ADDRESS: P O BOX 949
TURLOCK, CA 953810949

LOCATION: 600 S WASHINGTON ROAD
TURLOCK, CA

EQUIPMENT DESCRIPTION:

68,500 GPM MECHANICAL DRAFT COOLING TOWER WITH 5 CELLS SERVED BY A HIGH EFFICIENCY DRIFT ELIMINATOR (FORMALLY ATC PERMIT N-2246-5-1).

CONDITIONS

1. The permittee shall not begin actual onsite construction of the equipment authorized by this Authority to Construct until the lead agency satisfies the requirements of the California Environmental Quality Act (CEQA). [California Environmental Quality Act]
2. To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Application for Certification. [California Environmental Quality Act and District Rule Rule 2201, Section 5.8.8]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
6. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
7. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
8. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201]
9. The PM10 emissions shall not exceed 30.8 lb/day. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

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DAVID WARNER, Director of Permit Services

N-7172-3-0 : Apr 17 2009 9:47AM - KEASTMD : Joint Inspection NOT Required

10. Compliance with the PM10 emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{Circulating Water Recirculation rate (gal/day)} \times 8.34 \text{ lb/gal} \times \text{Total Dissolved Solids Concentration in the blowdown water (ppm)} \times \text{Design Drift Rate (\%)}$. [District Rule 2201]
11. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory within 120 days of initial operation of the water cooling towers and quarterly, thereafter. [District Rule 1081]
12. Prior to operating equipment under this Authority to Construct, the permittee shall surrender PM10 emission reduction credits for the following quantities of emissions: 1st quarter - 28,213 lb, 2nd quarter - 28,213 lb, 3rd quarter - 28,213 lb; and fourth quarter - 28,213 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/25/02). [District Rule 2201]
13. ERC Certificate Numbers C-486-4, C-488-4, C-491-4, C-492-4, C-494-4, C-495-4, N-333-4, N-334-4, N-335-4, and N-336-4 shall be used to supply the required PM10 offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct [District Rule 2201]
14. Authority to Construct permits N-7172-1-0, N-7172-2-0, N-7172-3-0, N-2246-1-4, and N-2246-2-4 shall be implemented simultaneously. [District Rule 2201]
15. Permittee shall submit an application to comply with Rule 2520 - Federally Mandated Operating Permits within twelve months of commencing operation. [District Rule 2520]
16. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]
17. The permittee shall not begin actual onsite construction of the equipment authorized by this Authority to Construct until the lead agency satisfies the requirements of the California Environmental Quality Act (CEQA). [California Environmental Quality Act]
18. To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Application for Certification. [California Environmental Quality Act and District Rule Rule 2201, Section 5.8.8]
19. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
20. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
21. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
22. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
23. The exhaust stack shall not be fitted with a rain cap, or any other similar device, that impedes upward vertical exhaust flow. [District Rule 4102]
24. The NOx emissions from the engine shall not exceed 5.2 grams/hp-hr. [District Rule 2201]
25. The CO emissions from the engine shall not exceed 0.27 grams/hp-hr. [District Rule 2201]
26. The VOC emissions from the engine shall not exceed 0.15 grams/hp-hr. [District Rule 2201]
27. The PM10 emissions from the engine shall not exceed 0.09 grams/hp-hr based on U.S EPA certification testing using test procedure ISO 8178. [District Rules 2201 & 4102]
28. Only CARB certified fuel containing not more than 0.05% sulfur by weight is to be used in this engine. [District Rules 2201 & 4102]
29. The engine shall be operated only for maintenance, testing, required regulatory purposes and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per year. [District Rules 2201 & 4102]

CONDITIONS CONTINUE ON NEXT PAGE

30. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), and the sulfur content of the diesel fuel used. Such records shall be made available for District inspection upon request for a period of five years. [District Rule 1070]
31. Permittee shall submit an application to comply with Rule 2520 - Federally Mandated Operating Permits within twelve months of commencing operation. [District Rule 2520]
32. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: N-7172-4-0

ISSUANCE DATE: 09/01/2003

LEGAL OWNER OR OPERATOR: WALNUT ENERGY CENTER AUTHORITY

MAILING ADDRESS: P O BOX 949
TURLOCK, CA 953810949

LOCATION: 600 S WASHINGTON ROAD
TURLOCK, CA

EQUIPMENT DESCRIPTION:

300 HP JOHN DEERE COMPANY MODEL JW6H-UF40 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP (FORMALLY ATC PERMIT N-2246-6-0).

CONDITIONS

1. The permittee shall not begin actual onsite construction of the equipment authorized by this Authority to Construct until the lead agency satisfies the requirements of the California Environmental Quality Act (CEQA). [California Environmental Quality Act]
2. To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Application for Certification. [California Environmental Quality Act and District Rule Rule 2201, Section 5.8.8]
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
4. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
7. The exhaust stack shall not be fitted with a rain cap, or any other similar device, that impedes upward vertical exhaust flow. [District Rule 4102]
8. The NOx emissions from the engine shall not exceed 5.2 grams/hp-hr. [District Rule 2201]
9. The CO emissions from the engine shall not exceed 0.27 grams/hp-hr. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

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DAVID WARNER, Director of Permit Services

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10. The VOC emissions from the engine shall not exceed 0.15 grams/hp-hr. [District Rule 2201]
11. The PM10 emissions from the engine shall not exceed 0.09 grams/hp-hr based on U.S EPA certification testing using test procedure ISO 8178. [District Rules 2201 & 4102]
12. Only CARB certified fuel containing not more than 0.05% sulfur by weight is to be used in this engine. [District Rules 2201 & 4102]
13. The engine shall be operated only for maintenance, testing, required regulatory purposes and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per year. [District Rules 2201 & 4102]
14. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), and the sulfur content of the diesel fuel used. Such records shall be made available for District inspection upon request for a period of five years. [District Rule 1070]
15. Permittee shall submit an application to comply with Rule 2520 - Federally Mandated Operating Permits within twelve months of commencing operation. [District Rule 2520]
16. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: N-2246-1-4

ISSUANCE DATE: 09/01/2003

LEGAL OWNER OR OPERATOR: TURLOCK IRRIGATION DISTRICT

MAILING ADDRESS: 333 CANAL DR
TURLOCK, CA 95380

LOCATION: 325 WASHINGTON ROAD
TURLOCK, CA 95380

EQUIPMENT DESCRIPTION:

MODIFICATION OF THE 25.8 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A 325 MMBTU/HR GENERAL ELECTRIC MODEL PG 5361 FRAME 5 NATURAL GAS/FUEL OIL #2 FIRED TURBINE GENERATOR WITH WATER INJECTION TO LIMIT THE ANNUAL PM10 EMISSIONS TO 7,016 POUNDS. (REVISED ON 5/23/05)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. This unit is subject to the requirements of 40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines. [District Rule 4001]
4. A continuous monitoring system shall be installed and operated to measure and record the fuel consumption and the mass ratio of water-to-fuel injected into the combustors. [40 CFR 60.334(a)]
5. The owner shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier. Prior to the issuance of a Permit to Operate, the owner shall submit to the District information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703]
6. This unit shall be fired on only natural gas or fuel oil #2. The primary fuel shall be natural gas; fuel oil #2 shall be used as a backup fuel only in the event of a natural gas shortage. [District Rule 2201]
7. This unit shall be fired only on natural gas with a sulfur content not exceeding 1.0 grain of sulfur compounds (as S) per 100 dry standard cubic feet of natural gas. If this is fired on PUC-regulated natural gas, compliance with this sulfur content limit may be demonstrated with fuel receipts. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

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DAVID WARNER, Director of Permit Services
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8. If this unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for eight consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until compliance is demonstrated for eight consecutive weeks. [40 CFR 60.334(b)(2)]
9. The sulfur content of fuel oil shall be less than 0.05 percent by weight. [District Rule 4703]
10. The sulfur content of the fuel oil shall be determined each time fuel is transferred into the on-site storage tank. [40 CFR 60.334(b)(1)]
11. The operation of this unit shall not exceed 877 hours during any one year. [District Rule 4703]
12. When firing on natural gas, NO_x (referenced as NO₂) emissions shall not exceed 25.0 ppmvd @ 15% O₂, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703]
13. When firing on fuel oil, the NO_x (referenced as NO₂) emissions shall not exceed 42.0 ppmvd @ 15% O₂ and 51 lb/hr, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703]
14. The NO_x emission concentration shall not exceed 42 ppmvd @ 15% O₂ except for thermal stabilization or reduced load period, as defined in Rule 4703, and the NO_x emission rate shall not exceed 51 pounds in any one hour. [District Rules 2201 and 4703]
15. The combined NO_x emissions from permit units N-2246-1 and N-2246-2 shall not exceed 1,020 lb/day and shall not exceed 25,551 lb/quarter. [District Rule 2201]
16. When firing on either natural gas or fuel oil, CO emissions shall not exceed 200 ppmvd @ 15% O₂, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703]
17. The cumulative annual CO emissions from permit units N-2246-1 and N-2246-2 shall be less than 200,000 lb/year. [District Rule 2201]
18. When firing on either natural gas or fuel oil, VOC emissions shall not exceed 15.00 lb/hr. [District Rule 2201]
19. When firing on natural gas, PM₁₀ emissions shall not exceed 8.60 lb/hr. [District Rule 2201]
20. When firing on fuel oil, PM₁₀ emissions shall not exceed 20.00 lb/hr. [District Rule 2201]
21. The combined PM₁₀ emissions from permit units N-2246-1 and N-2246-2 shall not exceed 150 pounds during any one day. [District Rule 2201]
22. The annual PM₁₀ emissions shall not exceed 7,016 lb/year. [District Rule 2201]
23. When firing on natural gas, SO_x emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
24. When firing on fuel oil, SO_x emissions shall not exceed 16.37 lb/hr. [District Rule 2201]
25. In the event of a natural gas shortage, SO_x emissions from permit units N-2246-1 and N-2246-2 shall not exceed 5,950 pounds during any one month. [District Rule 2201]
26. Source testing to demonstrate initial compliance with the NO_x and CO emission limits for natural gas shall be conducted within 60 days of initial operation on that fuel. Source testing to demonstrate ongoing compliance with the NO_x and CO emission limits for natural gas fuel shall be conducted at least once per 24-month period. [District Rules 2201 and 4703]
27. Source testing to demonstrate compliance with the NO_x and CO emission limits for fuel oil shall be conducted within 30 days of operation on that fuel, unless the unit successfully demonstrated compliance with the NO_x and CO emission limits for fuel oil within the previous 24 months. [District Rules 2201 and 4703]

CONDITIONS CONTINUE ON NEXT PAGE

28. The fuel consumption and the water-to-fuel ratio necessary to demonstrate compliance with the permitted NO_x emission limits shall be determined and recorded at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and the peak load. The owner shall correct all loads to ISO standard conditions using appropriate equations supplied by the turbine manufacturer. [District Rule 4703 and 40 CFR 60.335(c)(2)]
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081]
32. NO_x emissions (referenced as NO₂) shall be determined using EPA Method 7E or EPA Method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 4001, and 4703]
33. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081 and 4703]
34. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081 and 4703]
35. The owner shall maintain a stationary gas turbine system operating log that includes: the actual local start-up and stop time; length and reason for reduced load periods; total hours of operation on each fuel, and type and quantity of each fuel used. These records shall be updated daily. [District Rules 2201 and 4703]
36. The owner shall maintain a log that shows the following: (a). The combined daily NO_x emissions from permit units N-2246-1 and N-2246-2; (b). The combined daily PM₁₀ emissions from permit units N-2246-1 and N-2246-2; (c). The cumulative quarterly NO_x emissions from permit units N-2246-1 and N-2246-2; (d) The cumulative annual PM₁₀ emissions from this permit unit (N-2246-1). This log shall contain each calculated emission quantity as well as each process variable used in the respective calculations. [District Rule 2201]
37. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 2201 and 4703]
38. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]
39. Authority to Construct permits N-7172-1-0, N-7172-2-0, N-7172-3-0, N-2246-1-4, and N-2246-2-4 shall be implemented simultaneously. [District Rule 2201]



AUTHORITY TO CONSTRUCT

PERMIT NO: N-2246-2-4

ISSUANCE DATE: 09/01/2003

LEGAL OWNER OR OPERATOR: TURLOCK IRRIGATION DISTRICT

MAILING ADDRESS: 333 CANAL DR
TURLOCK, CA 95380

LOCATION: 325 WASHINGTON ROAD
TURLOCK, CA 95380

EQUIPMENT DESCRIPTION:

MODIFICATION OF THE 25.8 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A 325 MMBTU/HR GENERAL ELECTRIC MODEL PG 5361 FRAME 5 NATURAL GAS/FUEL OIL #2 FIRED TURBINE GENERATOR WITH WATER INJECTION TO LIMIT THE ANNUAL PM10 EMISSIONS TO 7,016 POUNDS. (REVISED ON 5/23/05)

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. This unit is subject to the requirements of 40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines. [District Rule 4001]
4. A continuous monitoring system shall be installed and operated to measure and record the fuel consumption and the mass ratio of water-to-fuel injected into the combustors. [40 CFR 60.334(a)]
5. The owner shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier. Prior to the issuance of a Permit to Operate, the owner shall submit to the District information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703]
6. This unit shall be fired on only natural gas or fuel oil #2. The primary fuel shall be natural gas; fuel oil #2 shall be used as a backup fuel only in the event of a natural gas shortage. [District Rule 2201]
7. This unit shall be fired only on natural gas with a sulfur content not exceeding 1.0 grain of sulfur compounds (as S) per 100 dry standard cubic feet of natural gas. If this is fired on PUC-regulated natural gas, compliance with this sulfur content limit may be demonstrated with fuel receipts. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

COPY

DAVID WARNER, Director of Permit Services

N-2246-2-4 : Apr 16 2009 1:45PM - KEASTMD : Joint Inspection Required with CHANK

8. If this unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for eight consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until compliance is demonstrated for eight consecutive weeks. [40 CFR 60.334(b)(2)]
9. The sulfur content of fuel oil shall be less than 0.05 percent by weight. [District Rule 4703]
10. The sulfur content of the fuel oil shall be determined each time fuel is transferred into the on-site storage tank. [40 CFR 60.334(b)(1)]
11. The operation of this unit shall not exceed 877 hours during any one year. [District Rule 4703]
12. When firing on natural gas, NO_x (referenced as NO₂) emissions shall not exceed 25.0 ppmvd @ 15% O₂, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703]
13. When firing on fuel oil, the NO_x (referenced as NO₂) emissions shall not exceed 42.0 ppmvd @ 15% O₂ and 51 lb/hr, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703]
14. The NO_x emission concentration shall not exceed 42 ppmvd @ 15% O₂ except for thermal stabilization or reduced load period, as defined in Rule 4703, and the NO_x emission rate shall not exceed 51 pounds in any one hour. [District Rules 2201 and 4703]
15. The combined NO_x emissions from permit units N-2246-1 and N-2246-2 shall not exceed 1,020 lb/day and shall not exceed 25,551 lb/quarter. [District Rule 2201]
16. When firing on either natural gas or fuel oil, CO emissions shall not exceed 200 ppmvd @ 15% O₂, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703]
17. The cumulative annual CO emissions from permit units N-2246-1 and N-2246-2 shall be less than 200,000 lb/year. [District Rule 2201]
18. When firing on either natural gas or fuel oil, VOC emissions shall not exceed 15.00 lb/hr. [District Rule 2201]
19. When firing on natural gas, PM₁₀ emissions shall not exceed 8.60 lb/hr. [District Rule 2201]
20. When firing on fuel oil, PM₁₀ emissions shall not exceed 20.00 lb/hr. [District Rule 2201]
21. The combined PM₁₀ emissions from permit units N-2246-1 and N-2246-2 shall not exceed 150 pounds during any one day. [District Rule 2201]
22. The annual PM₁₀ emissions shall not exceed 7,016 lb/year. [District Rule 2201]
23. When firing on natural gas, SO_x emissions shall not exceed 0.00285 lb/MMBtu. [District Rule 2201]
24. When firing on fuel oil, SO_x emissions shall not exceed 16.37 lb/hr. [District Rule 2201]
25. In the event of a natural gas shortage, SO_x emissions from permit units N-2246-1 and N-2246-2 shall not exceed 5,950 pounds during any one month. [District Rule 2201]
26. Source testing to demonstrate initial compliance with the NO_x and CO emission limits for natural gas shall be conducted within 60 days of initial operation on that fuel. Source testing to demonstrate ongoing compliance with the NO_x and CO emission limits for natural gas fuel shall be conducted at least once per 24-month period. [District Rules 2201 and 4703]
27. Source testing to demonstrate compliance with the NO_x and CO emission limits for fuel oil shall be conducted within 30 days of operation on that fuel, unless the unit successfully demonstrated compliance with the NO_x and CO emission limits for fuel oil within the previous 24 months. [District Rules 2201 and 4703]

CONDITIONS CONTINUE ON NEXT PAGE

28. The fuel consumption and the water-to-fuel ratio necessary to demonstrate compliance with the permitted NO_x emission limits shall be determined and recorded at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and the peak load. The owner shall correct all loads to ISO standard conditions using appropriate equations supplied by the turbine manufacturer. [District Rule 4703 and 40 CFR 60.335(c)(2)]
29. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
31. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081]
32. NO_x emissions (referenced as NO₂) shall be determined using EPA Method 7E or EPA Method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [District Rules 1081, 4001, and 4703]
33. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081 and 4703]
34. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [District Rules 1081 and 4703]
35. The owner shall maintain a stationary gas turbine system operating log that includes: the actual local start-up and stop time; length and reason for reduced load periods; total hours of operation on each fuel, and type and quantity of each fuel used. These records shall be updated daily. [District Rules 2201 and 4703]
36. The owner shall maintain a log that shows the following: (a). The combined daily NO_x emissions from permit units N-2246-1 and N-2246-2; (b). The combined daily PM₁₀ emissions from permit units N-2246-1 and N-2246-2; (c). The cumulative quarterly NO_x emissions from permit units N-2246-1 and N-2246-2; (d) The cumulative annual PM₁₀ emissions from this permit unit (N-2246-2). This log shall contain each calculated emission quantity as well as each process variable used in the respective calculations. [District Rule 2201]
37. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 2201 and 4703]
38. Facilities N-2246 and N-7172 are included in the same stationary source. [District Rule 2201]
39. Authority to Construct permits N-7172-1-0, N-7172-2-0, N-7172-3-0, N-2246-1-4, and N-2246-2-4 shall be implemented simultaneously. [District Rule 2201]

Facility #N-2246/7172
Project # N-1062413/1050995

Turlock Irrigation District
Walnut Energy Center Authority

ATTACHMENT C

Previous Title V Operating Permit No.'s
N-2246-1-5 & -2-5

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-2246-1-5

EXPIRATION DATE: 09/30/2009

EQUIPMENT DESCRIPTION:

TURBINE/GENERATOR SET #1, 25.8 MW GENERAL ELECTRIC FRAME 5, MODEL PG 5361

PERMIT UNIT REQUIREMENTS

1. This unit is subject to the requirements of 40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines. [District Rule 4001] Federally Enforceable Through Title V Permit
2. The owner shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier. Prior to the issuance of a Permit to Operate, the owner shall submit to the District information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.5] Federally Enforceable Through Title V Permit
3. This unit shall be fired on only natural gas or #2 diesel fuel oil. The primary fuel shall be natural gas; #2 diesel fuel oil shall be used as a backup fuel only in the event of a shortage in the supply of Public Utility Commission (PUC) quality natural gas, due solely to supply limitations or restrictions in distribution pipelines by the utility supplying the gas, and not due to the cost of natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This unit shall be fired only on natural gas with a sulfur content not exceeding 1.0 grain of sulfur compounds (as S) per 100 dry standard cubic feet of natural gas (0.0034 % by weight). If fired on PUC-regulated natural gas, compliance with this sulfur content limit may be demonstrated with fuel receipts. [District NSR Rule, District Rules 2520, 9.3.2 and 4801, 3.1; 40 CFR 60.333(a); Stanislaus County Rule 407] Federally Enforceable Through Title V Permit
5. If this unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for eight consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until compliance is demonstrated for eight consecutive weeks. [40 CFR 60.334(h) and (i)] Federally Enforceable Through Title V Permit
6. The sulfur content of #2 diesel fuel oil shall be less than 0.05 percent by weight. [District Rules 4703, 3.12 and 4801, 3.1; 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit
7. The sulfur content of the #2 diesel fuel oil shall be determined each time fuel is transferred into the on-site storage tank. [40 CFR 60.334(h) and (i)] Federally Enforceable Through Title V Permit
8. The operation of this unit shall not exceed 877 hours during any one year. [District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
9. When firing on natural gas, NOx (referenced as NO2) emissions shall not exceed 25.0 ppmvd @ 15% O2, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District NSR Rule and District Rule 4703, 5.1; 40 CFR 60.332(a) and 40 CFR Part 60.8(f)] Federally Enforceable Through Title V Permit
10. When firing on #2 diesel fuel oil, NOx (referenced as NO2) emissions shall not exceed 42.0 ppmvd @ 15% O2, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District NSR Rule and District Rule 4703, 5.1; 40 CFR 60.332(a) and 40 CFR Part 60.8(f)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. NOx emissions from this stationary source shall not exceed 1,020 pounds during any one day and shall not exceed 25,551 pounds during any one calendar quarter. [District NSR Rule] Federally Enforceable Through Title V Permit
12. When firing on either natural gas or #2 diesel fuel oil, CO emissions shall not exceed 200 ppmvd @ 15% O2, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District NSR Rule and District Rule 4703, 5.2; 40 CFR Part 60.8(f)] Federally Enforceable Through Title V Permit
13. When firing on either natural gas or #2 diesel fuel oil, VOC emissions shall not exceed 15.00 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
14. When firing on natural gas, PM10 emissions shall not exceed 8.60 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
15. When firing on #2 diesel fuel oil, PM10 emissions shall not exceed 20.00 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
16. PM10 emissions from this stationary source shall not exceed 150 pounds during any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
17. When firing on natural gas, SOx emissions shall not exceed 0.0029 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
18. When firing on #2 diesel fuel oil, SOx emissions shall not exceed 16.37 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
19. In the event of a shortage in the supply of Public Utility Commission (PUC) quality natural gas, due solely to supply limitations or restrictions in distribution pipelines by the utility supplying the gas, and not due to the cost of natural gas, SOx emissions from this stationary source shall not exceed 5,950 pounds during any one month. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Source testing to measure NOx and CO emissions for natural gas shall be conducted at least once per 24-month period. [District NSR Rule and District Rule 4703, 6.3.2] Federally Enforceable Through Title V Permit
21. Source testing to measure NOx and CO emissions for #2 diesel fuel oil shall be conducted within 30 days of operation on that fuel, unless the unit successfully demonstrated compliance with the NOx and CO emission limits for fuel oil within the previous 24 months. [District NSR Rule and District Rule 4703, 5.1, 5.2 and 40 CFR Part 60.8(d)] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081 and 2520, 9.3.2; 40 CFR Part 60.8(d)] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rules 1081 and 2520, 9.3.2; 40 CFR Part 60.8(e)] Federally Enforceable Through Title V Permit
25. NOx emissions (referenced as NO2) shall be determined using EPA Method 7E or EPA Method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [40 CFR 60.8(b), (c); District Rules 1081, 4001, and 4703, 5.1, 6.3.2, 6.4.1] Federally Enforceable Through Title V Permit
26. CO emissions shall be determined using EPA method 10 or EPA method 10B. [40 CFR 60.8(a), (b); District Rules 1081 and 4703, 5.2, 6.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

27. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [40 CFR 60.8(a), (b); District Rules 1081 and 4703, 6.4.3] Federally Enforceable Through Title V Permit
28. The owner shall maintain a stationary gas turbine system operating log that includes: the actual local start-up and stop time; length and reason for reduced load periods; total hours of operation on each fuel, and type and quantity of each fuel used. These records shall be updated daily. [40 CFR 60.332(a) and (b); District NSR Rule and District Rule 4703, 6.2.4 and 6.2.6] Federally Enforceable Through Title V Permit
29. The owner shall maintain a log that shows the daily and cumulative quarterly NOx emissions. This log shall contain each calculated emission quantity as well as each process variable used in the respective calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
30. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District NSR Rule; District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
31. The owner or operator shall install, operate and maintain in calibration a system which continuously measures and records: control system operating parameters, elapsed time of operation of the turbine, and the fuel consumption and the ratio of water to fuel being fired in the turbine. The system shall be accurate to within + 5% and shall be approved by the administrator. [40 CFR 60.334(a) and (g)] Federally Enforceable Through Title V Permit
32. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
33. The steam or water to fuel ratio or other parameters that are continuously monitored, shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan.. [40 CFR 60.334(g) and 60.7(c)] Federally Enforceable Through Title V Permit
34. If this unit is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM Method D1072, D4084, D4468, D6667 or D3246. If this unit is not fired on ARB-certified #2 diesel fuel oil, then the sulfur content of the fuel oil being fired in the turbine shall be determined using ASTM Method D125, D2622, D4294, D1266, D5453 and D1552. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), D5504, D6228, or Gas Processors Association Standard 2377. [40 CFR 60.8(a), (b); 40 CFR 60.334(h); 335(b)(10)(i), (ii) and (c)] Federally Enforceable Through Title V Permit
35. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
36. Thermal Stabilization Period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
37. The owner or operator shall report periods of excess emissions that are defined as follows: any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the NOx emission limit. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, and gas turbine load. [40 CFR 60.334(h) and (i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

38. The continuous monitor of fuel, water, and water-to-fuel ratio system shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the NOx emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [District Rule 4703, 5.1 and 6.2.5; 40 CFR 60.344(g), (h) and (i), 335(b) and (c) and 40 CFR 60.13(a)] Federally Enforceable Through Title V Permit
39. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
40. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945 for gaseous fuel and ASTM D240 or ASTM D2382 for # 2 diesel fuel oil. [40 CFR 60.8(a), (b); 40 CFR 60.332(a) and (b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Stanislaus Rule 407 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2) and (b), 60.333 (a) and (b); 60.334(a), (g), (h), (i) and (j), and 60.335(b) and (c); District Rule 4703 (as amended 4/25/02), Sections 5.1.2, 5.2, 6.2.2, 6.2.4, 6.2.5, 6.2.6, 6.3.2, 6.3.3, 6.4.1, 6.4.2, 6.4.3, 6.4.4 and 6.4.5 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
43. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.7(c), 60.8(d), 60.13(a), and 60.13(b) and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-2246-2-5

EXPIRATION DATE: 09/30/2009

EQUIPMENT DESCRIPTION:

TURBINE/GENERATOR SET #2, 25.8 MW GENERAL ELECTRIC FRAME 5, MODEL PG 5361

PERMIT UNIT REQUIREMENTS

1. This unit is subject to the requirements of 40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines. [District Rule 4001] Federally Enforceable Through Title V Permit
2. The owner shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier. Prior to the issuance of a Permit to Operate, the owner shall submit to the District information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.5] Federally Enforceable Through Title V Permit
3. This unit shall be fired on only natural gas or #2 diesel fuel oil. The primary fuel shall be natural gas; #2 diesel fuel oil shall be used as a backup fuel only in the event of a shortage in the supply of Public Utility Commission (PUC) quality natural gas, due solely to supply limitations or restrictions in distribution pipelines by the utility supplying the gas, and not due to the cost of natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This unit shall be fired only on natural gas with a sulfur content not exceeding 1.0 grain of sulfur compounds (as S) per 100 dry standard cubic feet of natural gas (0.0034 % by weight). If fired on PUC-regulated natural gas, compliance with this sulfur content limit may be demonstrated with fuel receipts. [District NSR Rule, District Rules 2520, 9.3.2 and 4801, 3.1; 40 CFR 60.333(a); Stanislaus County Rule 407] Federally Enforceable Through Title V Permit
5. If this unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for eight consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until compliance is demonstrated for eight consecutive weeks. [40 CFR 60.334(h) and (i)] Federally Enforceable Through Title V Permit
6. The sulfur content of #2 diesel fuel oil shall be less than 0.05 percent by weight. [District Rules 4703, 3.12 and 4801, 3.1; 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit
7. The sulfur content of the #2 diesel fuel oil shall be determined each time fuel is transferred into the on-site storage tank. [40 CFR 60.334(h) and (i)] Federally Enforceable Through Title V Permit
8. The operation of this unit shall not exceed 877 hours during any one year. [District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
9. When firing on natural gas, NOx (referenced as NO2) emissions shall not exceed 25.0 ppmvd @ 15% O2, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District NSR Rule and District Rule 4703, 5.1; 40 CFR 60.332(a) and 40 CFR Part 60.8(f)] Federally Enforceable Through Title V Permit
10. When firing on #2 diesel fuel oil, NOx (referenced as NO2) emissions shall not exceed 42.0 ppmvd @ 15% O2, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District NSR Rule and District Rule 4703, 5.1; 40 CFR 60.332(a) and 40 CFR Part 60.8(f)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. NOx emissions from this stationary source shall not exceed 1,020 pounds during any one day and shall not exceed 25,551 pounds during any one calendar quarter. [District NSR Rule] Federally Enforceable Through Title V Permit
12. When firing on either natural gas or #2 diesel fuel oil, CO emissions shall not exceed 200 ppmvd @ 15% O2, except during thermal stabilization or reduced load period as defined in District Rule 4703. Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District NSR Rule and District Rule 4703, 5.2; 40 CFR Part 60.8(f)] Federally Enforceable Through Title V Permit
13. When firing on either natural gas or #2 diesel fuel oil, VOC emissions shall not exceed 15.00 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
14. When firing on natural gas, PM10 emissions shall not exceed 8.60 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
15. When firing on #2 diesel fuel oil, PM10 emissions shall not exceed 20.00 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
16. PM10 emissions from this stationary source shall not exceed 150 pounds during any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
17. When firing on natural gas, SOx emissions shall not exceed 0.0029 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
18. When firing on #2 diesel fuel oil, SOx emissions shall not exceed 16.37 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
19. In the event of a shortage in the supply of Public Utility Commission (PUC) quality natural gas, due solely to supply limitations or restrictions in distribution pipelines by the utility supplying the gas, and not due to the cost of natural gas, SOx emissions from this stationary source shall not exceed 5,950 pounds during any one month. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Source testing to measure NOx and CO emissions for natural gas shall be conducted at least once per 24-month period. [District NSR Rule and District Rule 4703, 6.3.2] Federally Enforceable Through Title V Permit
21. Source testing to measure NOx and CO emissions for #2 diesel fuel oil shall be conducted within 30 days of operation on that fuel, unless the unit successfully demonstrated compliance with the NOx and CO emission limits for fuel oil within the previous 24 months. [District NSR Rule and District Rule 4703, 5.1, 5.2 and 40 CFR Part 60.8(d)] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081 and 2520, 9.3.2; 40 CFR Part 60.8(d)] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rules 1081 and 2520, 9.3.2; 40 CFR Part 60.8(e)] Federally Enforceable Through Title V Permit
25. NOx emissions (referenced as NO2) shall be determined using EPA Method 7E or EPA Method 20. The test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. [40 CFR 60.8(b), (c); District Rules 1081, 4001, and 4703, 5.1, 6.3.2, 6.4.1] Federally Enforceable Through Title V Permit
26. CO emissions shall be determined using EPA method 10 or EPA method 10B. [40 CFR 60.8(a), (b); District Rules 1081 and 4703, 5.2, 6.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

27. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A, or EPA method 20. [40 CFR 60.8(a), (b); District Rules 1081 and 4703, 6.4.3] Federally Enforceable Through Title V Permit
28. The owner shall maintain a stationary gas turbine system operating log that includes: the actual local start-up and stop time; length and reason for reduced load periods; total hours of operation on each fuel, and type and quantity of each fuel used. These records shall be updated daily. [40 CFR 60.332(a) and (b); District NSR Rule and District Rule 4703, 6.2.4 and 6.2.6] Federally Enforceable Through Title V Permit
29. The owner shall maintain a log that shows the daily and cumulative quarterly NOx emissions. This log shall contain each calculated emission quantity as well as each process variable used in the respective calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
30. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District NSR Rule; District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
31. The owner or operator shall install, operate and maintain in calibration a system which continuously measures and records: control system operating parameters, elapsed time of operation of the turbine, and the fuel consumption and the ratio of water to fuel being fired in the turbine. The system shall be accurate to within + 5% and shall be approved by the administrator. [40 CFR 60.334(a) and (g)] Federally Enforceable Through Title V Permit
32. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
33. The steam or water to fuel ratio or other parameters that are continuously monitored, shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan.. [40 CFR 60.334(g) and 60.7(c)] Federally Enforceable Through Title V Permit
34. If this unit is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM Method D1072, D4084, D4468, D6667 or D3246. If this unit is not fired on ARB-certified #2 diesel fuel oil, then the sulfur content of the fuel oil being fired in the turbine shall be determined using ASTM Method D125, D2622, D4294, D1266, D5453 and D1552. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), D5504, D6228, or Gas Processors Association Standard 2377. [40 CFR 60.8(a), (b); 40 CFR 60.334(h); 335(b)(10)(i), (ii) and (c)] Federally Enforceable Through Title V Permit
35. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
36. Thermal Stabilization Period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
37. The owner or operator shall report periods of excess emissions that are defined as follows: any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the NOx emission limit. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, and gas turbine load. [40 CFR 60.334(h) and (i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

38. The continuous monitor of fuel, water, and water-to-fuel ratio system shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the NOx emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [District Rule 4703, 5.1 and 6.2.5; 40 CFR 60.344(g), (h) and (i), 335(b) and (c) and 40 CFR 60.13(a)] Federally Enforceable Through Title V Permit
39. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
40. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945 for gaseous fuel and ASTM D240 or ASTM D2382 for # 2 diesel fuel oil. [40 CFR 60.8(a), (b); 40 CFR 60.332(a) and (b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Stanislaus Rule 407 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2) and (b), 60.333 (a) and (b); 60.334(a), (g), (h), (i) and (j), and 60.335(b) and (c); District Rule 4703 (as amended 4/25/02), Sections 5.1.2, 5.2, 6.2.2, 6.2.4, 6.2.5, 6.2.6, 6.3.2, 6.3.3, 6.4.1, 6.4.2, 6.4.3, 6.4.4 and 6.4.5 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
43. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.7(c), 60.8(d), 60.13(a), and 60.13(b) and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

ATTACHMENT D

Emission Increases

Net Emissions Increase

Permit	NOX	CO	VOC	PM10	SOX	NH3
N-7172-1-1	70,000	99,991	17,404	61,320	8,672	116,332
N-7172-2-1	70,000	99,991	17,404	61,320	8,672	116,332
N-7172-3-1	0	0	0	11,260	0	0
N-7172-4-1	344	18	10	6	11	0
Total PTE	140,344	200,000	34,818	133,906	17,355	232,664
Offset	-140,000	0	-34,808	-112,852	0	0
NEI	344	200,000	10	1,054	17,355	232,664

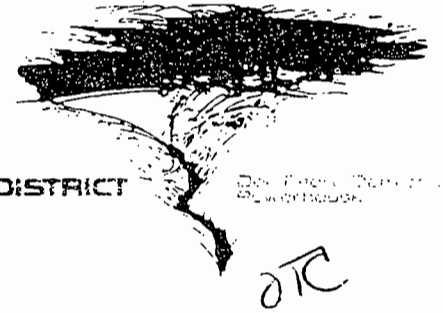
Facility #N-2246/7172
Project # N-1062413/1050995

Turlock Irrigation District
Walnut Energy Center Authority

ATTACHMENT E

Application

TURLOCK IRRIGATION DISTRICT
308 EAST CANAL DRIVE
POST OFFICE BOX 949
TURLOCK, CALIFORNIA 95381
(209) 853-8300



September 24, 2007

Mr. Jim Swaney
San Joaquin Valley Unified Air Pollution Control District
Northern Region Office
4800 Enterprise Way
Modesto, CA 95356-8718

Subject: Application to Implement ATC
Numbers: N-7172-1-2 and 2-2, located in the
Walnut Energy Center (Facility ID N-7172)

Dear Mr. Swaney:

Please find attached a Title V application to implement Authority to Construct (ATC) Numbers N-7172-1-2, and 2-2 for Units 1 and 2 at the Walnut Energy Center (WEC). Although the District has not yet issued the initial Title V permit for WEC, the Walnut Energy Center Authority (WECA) is submitting this application for a Title V modification pursuant to a request from Martin Keast with the District's Title V permitting group.

In September 2003 the District issued ATC Numbers N-7172-1-0 and N-7172-2-0 for two 1,047 MMbtu/hr General Electric Frame 7EA natural gas-fired combustion turbines. In March 2005, WECA submitted to the District the Title V application for Units 1 and 2 at WEC. WECA also submitted a request for a change of ownership for the equipemnt at WEC. The District has not yet issued the initial Title V permit for WEC.

On December 29, 2006 the Turlock Irrigation Distirct submitted an Application to modify Units 1 and 2 at WEC to comply with the recently adopted startup provisions of Rule 4703 that allow for turbine startups in excess of two hours. The District recently issued ATC numbers N-7172-1-2 and N-7172-2-2 to modify the permit conditions governing startups for Units 1 and 2 at WEC. Please note that WECA had not previously applied for any other modifications to Units 1 or 2 prior to this Rule 4703 startup modification. The the District has not issued ATC numbers N-7172-1-1 and N-7172-2-1 but apparently has skipped the numeric sequence to ATC numbers N-7172-1-2 and N-7172-2-2.



Mr. Swaney

2

September 24, 2007

On September 17, 2007 the District issued new ATC Numbers N-7172-1-2 and 2-2.

This Title V application seeks to implement ATC Numbers N-7172-1-2, and 2-2.

Per District Rule 3010 PERMIT FEE, enclosed please find a check in the amount of \$30.00 (2 @ \$15.00) for the filing fee.

Please call me at (209) 883-3451 if you have any questions regarding this submittal.

Sincerely,



George A. Davies IV
Combustion Turbine Department Manager
Turlock Irrigation District


cc: Jeff Adkins, Sierra Research
US EPA Region IX c/o SJVAPCD
Randy Baysinger, Turlock Irrigation District
Lance Shaw, California Energy Commission AQ-C5
File

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

ADMINISTRATIVE AMENDMENT MINOR MODIFICATION SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: WALNUT ENERGY CENTER AUTHORITY	
2. MAILING ADDRESS: STREET/P.O. BOX: P.O. BOX 949 CITY: TURLOCK STATE: CA 9-DIGIT ZIP CODE: 95381-949	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: 600 South Washington Road CITY: Turlock ¼ SECTION _____ TOWNSHIP _____ RANGE _____	INSTALLATION DATE: February 28, 2006
4. GENERAL NATURE OF BUSINESS: Water Supply, Power Generation, and Electric Distribution	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) To implement Walnut Energy Center ATC Numbers N-7172-1-2, and 2-2.	
6. TYPE OR PRINT NAME OF APPLICANT: George A. Davies, IV	TITLE OF APPLICANT: Combustion Turbine Department Manager
7. SIGNATURE OF APPLICANT: 	DATE: September 24, 2007 PHONE: (209) 883-3451 FAX: (209) 656-2188 EMAIL: gad@tid.org

For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$30.⁰⁰	CHECK#: Cash
	DATE PAID: 9/24/07	
	PROJECT NO: 71073852	FACILITY ID: 7172

San Joaquin Valley Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

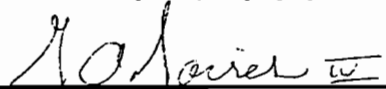
- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE AMENDMENT
 MINOR PERMIT MODIFICATION

COMPANY NAME: WALNUT ENERGY CENTER AUTHORITY	FACILITY ID: N-7172
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Utility	
2. Owner's Name: WALNUT ENERGY CENTER AUTHORITY	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:



Signature of Responsible Official

September 24, 2007

Date

George A. Davies, IV

Name of Responsible Official (please print)

Combustion Turbine Department Manager

Title of Responsible Official (please print)

Mailing Address: Central Regional Office * 1990 E. Gettysburg Avenue * Fresno, California 93726-0244 * (559) 230-5900 * FAX (559) 230-6061

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

[] ADMINISTRATIVE AMENDMENT [] MINOR MODIFICATION [X] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: WALNUT ENERGY CENTER AUTHORITY	
2. MAILING ADDRESS:	
STREET/P.O. BOX: P.O. BOX 949	
CITY: TURLOCK	STATE: CA 9-DIGIT ZIP CODE: 95381-0949
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:	INSTALLATION DATE:
STREET: 600 South Washington Road CITY: Turlock	
_____ 1/4 SECTION _____ TOWNSHIP _____ RANGE _____	
4. GENERAL NATURE OF BUSINESS: Water supply and power production.	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)	
Modify facility Title V permit to include the following sources: N-2246-3-1, 84 MW Gas Turbine #1 N-2246-4-1, 84 MW Gas Turbine #2 N-2246-5-1, Cooling Tower N-2246-6-0, Diesel Fire Pump	
6. TYPE OR PRINT NAME OF APPLICANT: Randy C. Baysinger	TITLE OF APPLICANT: Assistant General Manager
7. SIGNATURE OF APPLICANT: <i>Randy C Bay</i>	DATE: 3/22/05
	PHONE: (209) 883-8232 FAX: (209) 656-2146 EMAIL: recbaysinger@tid.org

For APCD Use Only: 3-23-05

<p>RECEIVED</p> <p>MAR 24 2005</p> <p>SJVAPCD NORTHERN REGION</p>	<p>FILING FEE RECEIVED: \$ <u>6000</u> CHECK#: <u>18404</u></p> <p>DATE PAID: <u>3-23-05</u></p> <p>PROJECT NO: <u>N1050995</u> FACILITY ID: <u>N7172</u></p>
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**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE AMENDMENT
 MINOR PERMIT MODIFICATION

COMPANY NAME: WALNUT ENERGY CENTER AUTHORITY	FACILITY ID: N — 2246
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Utility	
2. Owner's Name: WEC AUTHORITY	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Randy C Baysinger
Signature of Responsible Official

3/22/05
Date

RANDY C. BAYSINGER
Name of Responsible Official (please print)
ASSISTANT GENERAL MANAGER
Title of Responsible Official (please print)

March 23, 2005



**sierra
research**

1801 J Street
Sacramento, CA 95814
(916) 444-6666
Fax: (916) 444-8373

COPY

Mr. Jim Swaney
San Joaquin Valley Unified APCD
Northern Region Office
4230 Kiernan Avenue, Suite 130
Modesto, CA 95356-9321

Subject: Title V Permit Modifications and Change of Ownership for WEC

Dear Mr. Swaney:

On behalf of the Turlock Irrigation District (TID), we are pleased to submit this permit application for a modification of the Title V Permit for TID's Walnut Energy Center (WEC) and Walnut Power Plant (WPP) facilities on South Washington Road in Turlock, California. (The WEC and WPP facilities are part of the same stationary source under District regulations.) This modification is necessary to update the stationary source Title V permit to reflect the addition of the new WEC turbines, cooling tower, and Diesel fire pump, and the WPP emergency propane generator. Additionally, TID is filing a request for change of ownership for the equipment at the WEC site to indicate that this equipment is owned by the Walnut Energy Center Authority, a Joint Powers Authority formed as an ownership group for the WEC project. Finally, TID is proposing a simplified calculation method for ammonia slip from the WEC turbines that is based on the District's standard ammonia slip formula.

TID has formed a Joint Powers Authority with the Merced Irrigation District as an ownership group for the WEC facility. This ownership group, known as the Walnut Energy Center Authority, is now the legal owner of the following permit units at the WEC site:

N-2246-3	84 MW Gas Turbine #1
N-2246-4	84 MW Gas Turbine #2
N-2246-5	Cooling Tower
N-2246-6	Diesel Fire Pump

TID will continue to be the operator of these permit units, and Randy Baysinger will continue to be the Responsible Official for this facility. Attachment 1 includes the Change of Ownership forms for these units. We understand that these permit units will remain part of stationary source N-2246.

TID will remain as the owner and operator of the WPP facility, which includes the following permit units:

N-2246-1	25.8 MW Peaking Turbine #1
N-2246-2	25.8 MW Peaking Turbine #2

- N-2246-7 Emergency Diesel Engine/Generator (out of service and removed from site)
 N-2246-8 Emergency Propane Engine/Generator

The permit applications for the WEC permit units and the WPP emergency propane generator were filed before the Title V permit was issued for this stationary source but were not included in the Title V permit. Therefore, TID is filing Title V permit modification forms for both the WPP and WEC permit units to incorporate these permit units into the Title V permit (see Attachment 2).

Finally, TID, as the operator of the WEC turbines, will be utilizing the District's ammonia slip equation in Condition 38 of Authorities to Construct N-2246-3-1 and N-2246-4-1. However, this equation has been simplified for clarity and easier implementation. The following describes the District's current formula in Condition 38:

Calculate the daily ammonia emissions using the following equation:

$$(ppmvd @ 15\% O_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$$

where:

- a = ammonia injection rate (lb/hr) / (17 lb/lb mol),*
- b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol),*
- c = change in measured NOx concentration ppmvd @ 15% O₂ across the catalyst, and*
- d = correction factor.*

The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip;

TID is proposing to simplify and clarify this Condition 38 equation when it is programmed into its data acquisition and handling system as follows:

Calculate the daily (24-hour rolling average) ammonia emissions using the following equation for each data point:

$$NH_3 \text{ Slip (ppmvd @ 15\% O}_2) = (1,000,000 \times a/b - c) \times d$$

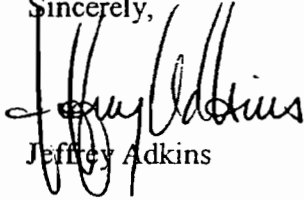
Where:

- a = ammonia injection rate (lb/hr) / (17 lb/lb mol),*
- b = dry exhaust flow rate adjusted to 15% O₂ (lb/hr) / (29 lb/lb mol),*
- c = change in measured NOx concentration across the catalyst (ppmvd adjusted to 15% O₂), and*
- d = correction factor derived annually during compliance testing by comparing the measured and calculated ammonia slip.*

The two equations above can easily be shown to be equivalent by substituting various values for a, b, c, and d.

We have included a check for \$155 to cover the Title V Permit Modification fees for five sources (\$15 each) and the Transfer of Ownership fees for four sources (\$20 each). Please contact me if you have any questions regarding this matter.

Sincerely,



Jeffrey Adkins

Attachments

cc: Randy Baysinger, TID
George Davies, TID
Susan Strachan

7/11/06

San Joaquin Valley Air Pollution Control District

www.valleyair.org

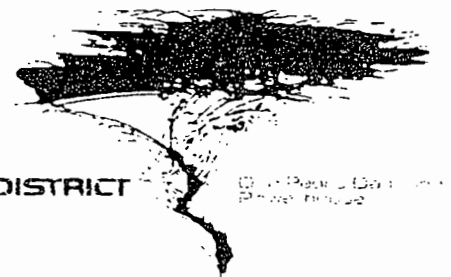
Permit Application For:

ADMINISTRATIVE AMENDMENT MINOR MODIFICATION SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: TURLOCK IRRIGATION DISTRICT	
2. MAILING ADDRESS: STREET/P.O. BOX: P.O. BOX 949 CITY: TURLOCK STATE: CA 9-DIGIT ZIP CODE: 95381-0949	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: 325 South Washington Road CITY: Turlock _____% SECTION _____ TOWNSHIP _____ RANGE _____	INSTALLATION DATE:
4. GENERAL NATURE OF BUSINESS: Water supply and power production.	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) Modify facility Title V permit to implement the following Authorities to Construct: ATC #N-2246-1-4 (25.8 MW Gas Turbine #1) ATC #N-2246-2-4, (25.8 MW Gas Turbine #2)	
6. TYPE OR PRINT NAME OF APPLICANT: Randy C. Baysinger	TITLE OF APPLICANT: Assistant General Manager, Power Generation
7. SIGNATURE OF APPLICANT: <i>Randy C Bysinger</i>	DATE: August 9, 2006 PHONE: (209) 883-8232 FAX: (209) 656-2146 EMAIL: rcbaysinger@tid.org

For APCD Use Only:

DATE STAMP: RECEIVED AUG 17 2006 DISTRICT: _____ COUNTY: _____	FILING FEE RECEIVED: \$ 30⁰⁰ CHECK#: 245230
	DATE PAID: 8-16-06
	PROJECT NO: N1062413 FACILITY ID: N2246



TURLOCK IRRIGATION DISTRICT
733 EAST CANAL DRIVE
POST OFFICE BOX 640
TURLOCK, CALIFORNIA 95371
(209) 883-8300

Office of Public Information
Power House

August 9, 2006

Mr. Martin Keast
San Joaquin Valley Unified Air Pollution Control District
Central Regional Office
1990 East Gettysburg Avenue
Fresno, CA 93726-0244

Subject: Application to Modify the Title V Permit to Operate for the
TID Walnut Power Plant (Facility ID #N-2246)

Dear Mr. Keast:

Please find attached an application to modify Title V Permit to Operate to implement the Authorities to Construct (ATCs) for two gas turbines at the Turlock Irrigation District's (TID's) Walnut Power Plant (Facility ID #N-2246) located in Turlock, California. On July 8, 2003, the San Joaquin Valley Unified Air Pollution Control District (District) issued to TID ATCs for the Walnut Energy Center (WEC) project. The District, which considered the WEC project to be a modification to the Walnut Power Plant, also issued ATCs for the two existing gas turbines at the Walnut Power Plant that were affected by the WEC project.

TID subsequently formed a Joint Powers Authority with the Merced Irrigation District as an ownership group for the WEC facility. This ownership group, known as the Walnut Energy Center Authority (WECA), is the legal owner of all permit units at the WEC facility. On March 23, 2005, WECA submitted to the District an application for a change of ownership for the WEC facility. On May 19, 2005, the District issued a new set of ATCs for the WEC facility (Facility ID #N-7172) under the new ownership of WECA. However, the District concluded that WEC and the Walnut Power Plant nonetheless still constituted a single stationary source under its rules and regulations. Therefore, the District also issued a new set of ATCs for the existing turbines at the Walnut Power Plant, adding permit conditions linking the Walnut Power Plant and WEC as a single stationary source and also requiring simultaneous conversion into Title V Permits to Operate of the ATCs from both the WEC facility and Walnut Power Plant. WECA submitted a Title V application to implement the WEC ATCs on March 23, 2005. This Title V application implements the Walnut Power Plant ATCs.

RECEIVED

AUG 17 2006

SJOVAPUD
CENTRAL REGION



We have included a check for \$30 to cover the Title V Permit Modification fees for two sources (\$15 each). Please call me or Dan Welch of Sierra Research at (916) 444-6666 if you have any questions regarding this submittal.

Sincerely,

A handwritten signature in cursive script, appearing to read "G. Davies".

George A. Davies IV
Combustion Turbine Department Manager

Enclosures

cc: Dan Welch, Sierra Research

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: TURLOCK IRRIGATION DISTRICT	FACILITY ID: N - 2246
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Utility	
2. Owner's Name: TURLOCK IRRIGATION DISTRICT	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Randy C Baysinger
Signature of Responsible Official

August 9, 2006
Date

Randy C. Baysinger

Name of Responsible Official (please print)

Assistant General Manager, Power Generation

Title of Responsible Official (please print)

ATTACHMENT F

Facility Comments and District Responses

**TURLOCK IRRIGATION DISTRICT
WALNUT POWER PLANT (N-2246)
TITLE V PERMIT - W C MODIFICATION
COMMENTS ON DRAFT PERMIT**

Gas Turbine Unit 1 (N-2246- 1-7) and Unit 2 (N-2246-2-7)

Condition #1 - References Subpart GG. Such a broad condition defeats the purpose of a Title V permit, which is supposed to list the applicable requirements. Only those applicable requirements of Subpart GG should be listed. Subsumed requirements (or inapplicable ones) should not be listed. The District should delete this condition.

District Response: The District uses this language for federal NSPS or NESHAP requirements and can not be removed.

Conditions #9, #10, #11, and #13 - Reference "thermal stabilization" as an exemption criteria, pursuant to an earlier version of Rule 4703 (Stationary Gas Turbines). Rule 4703, as presently constituted, does not define "thermal stabilization," nor does it provide any exemptions for "thermal stabilization." The District should remove references to "thermal stabilization."

District Response: The District removed the term Thermal Stabilization Period in September 20, 2007 amendment, replacing it with "Transitional Operation Period" and defining it as: any of the following periods: bypass transition period, primary re-ignition period, reduced load period, start-up or shutdown. The District has made changes as following.

9. *When firing on natural gas, NO_x (referenced as NO₂) emissions shall not exceed 25.0 ppmvd @ 15% O₂, except during ~~thermal stabilization or reduced load period~~ transitional operation period as defined in District Rule 4703 (as amended September 20, 2007). Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit*

10. *When firing on fuel oil, the NO_x (referenced as NO₂) emissions shall not exceed 42.0 ppmvd @ 15% O₂ and 51 lb/hr, except ~~thermal stabilization or reduced load period~~ transitional operation period as defined in District Rule 4703 (as amended September 20, 2007). Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit*

11. *The NO_x emission concentration shall not exceed 42 ppmvd @ 15% O₂ except for ~~thermal stabilization or reduced load period~~ transitional operation period as defined in District Rule 4703 (as amended September 20, 2007), and the NO_x emission rate shall not exceed 51 pounds in any one hour. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit*

13. *When firing on either natural gas or fuel oil, CO emissions shall not exceed 200 ppmvd @ 15% O₂, except during ~~thermal stabilization or reduced load period~~ transitional*

operation period as defined in District Rule 4703 (as amended September 20, 2007). Emissions shall be averaged over a three-hour period, using consecutive 15-minute sampling periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

Condition #10 - Condition #10 contains new language adding a NO_x emission limit of 51 lb/hr when burning fuel oil. This lb/hr NO_x limit is not necessary since it is not more restrictive than the 42 ppmv NO_x limit already in Condition #10. The District should remove this unnecessary and redundant lb/hr emission limit.

District Response: This is a NSR requirement and can not be removed during Title V permitting action. An ATC application is required to make such changes.

Condition #11 - Condition #11, which is new, specifies NO_x emission limits of 42 ppmv @ 15% O₂ and 51 lb/hr. The 42 ppmv NO_x limit is not more restrictive than the 42 ppmv NO_x limit already in Condition #10. The District should remove this unnecessary and redundant condition.

District Response: This is a NSR requirement and can not be removed during Title V permitting action. An ATC application is required to make such changes.

Condition #14 - Limits combined CO emissions from Units 1 and 2 to less than 200,000 lb/yr. This is a facility-wide limit that should include the emergency generators. The District should move this condition to the Facility-Wide Requirements (Permit Unit #N-2246-0).

District Response: This is a NSR requirement and can not be changed during Title V permitting action. An ATC application is required to make such changes.

Conditions #26 and #36 - Are essentially identical. The District should delete one of the two as being a redundant requirement.

District Response: The District has deleted condition 26.

Facility-Wide Requirements (N-7172-0-1)

No comments.

Gas Turbine Unit 1 (N-7172-1-1) and Unit 2 (N-7172-2-1)

Condition #38 - Limits combined annual CO emissions from Units 1 and 2 to less than 199,982 lb/year. This condition is not necessary since it is not more restrictive than Condition #34, which limits annual CO emissions from each unit to less than 99,991 lb/year. The District should remove this unnecessary and redundant condition.

District Response: This is a NSR requirement and can not be removed during Title V permitting action. An ATC application is required to make such changes.

Condition #46 - Requires TID to determine the turbine efficiency during source testing. This condition cites Rule 4703 (Stationary Gas Turbines) as the governing authority. Section 5.1.1 of Rule 4703 establishes an efficiency-based NOx emission limit. However, Section 5.1.1 of Rule 4703 is subsumed by Condition #20. The subsuming analysis was presented in the Compliance Plan Streamlining Table. The District should remove this unnecessary and subsumed condition.

District Response: The District has deleted condition 46.

Condition #55 - Is redundant with Condition 46. The District should remove this unnecessary condition.

District Response: The District has deleted condition 55.

Condition #61 - References the notification and recordkeeping requirements of 40 CFR 60.7 in its entirety. However, the notification requirements of 60.7(a) are construction requirements not relevant to an operating permit. The District should remove this condition and incorporate the recordkeeping requirements of 60.7(f) into Condition #56.

District Response: The District has deleted condition 61.

Condition #62 - Specifies the excess emissions reporting requirements for the fuel sulfur content limits of 40 CFR 60.333(b). However, Condition #5 subsumes the fuel sulfur content limits of 40 CFR 60.333(b), as noted in the Compliance Plan Streamlining Table. The District should delete Condition #62 and revise Condition #15 to include excess emissions reporting requirements for Condition #5. This will consolidate the excess emission reporting into a single quarterly report rather than separate quarterly and semi-annual reports.

District Response: The District has deleted condition 62.

Stanislaus County Rule 407 - Is subsumed by Condition #5. The subsuming analysis was presented in the Compliance Plan Streamlining Table. The District should add a condition that subsumes Rule 407 into the Title V permit.

District Response: The subsumed requirements need not to be stated exclusively.

Rule 1080 - The requirements of Sections 7.3 and 9.0 are missing from the Title V Permit. The District should incorporate the recordkeeping requirements of Section 7.3 into Condition #56. The District should add a new condition specifying that excess emissions, as measured and recorded by the CEMS, must be reported to the District within 96 hours.

District Response: The District has revised condition 56 as following.

56. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing;

dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative, maintenance of CEM's, and emission measurements. [District Rules 2201, and 4703, and 1080, 7.3] Federally Enforceable Through Title V Permit

and has added following condition

A violation of NOx and CO emission standards measured and recorded by the CEMs shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

Rule 4703 - The requirements of Sections 6.2.8 are missing from the Title V Permit. The District should incorporate the startup/shutdown recordkeeping requirements of Section 6.2.8 into Condition #57.

District Response: Condition 57 already addresses requirements of section 6.2.8 therefore no change is needed.

40 CFR 60, Subpart A - The requirements of 60.4(a) and 60.13(d)(1) are missing from the Title V Permit. The District should add to Conditions #14, #15, and #43 - language specifying that two copies of the required reports also should be submitted to USEPA Region IX. The District should add a new condition specifying the daily calibration requirements for the CEMS, pursuant to 60.13(d)(1), and further requiring the inclusion of a Daily Calibration Out-of-Control Detail Report, pursuant to Appendix F of 40 CFR 60, along with the Quarterly CEMS Report.

District Response: The District has full delegation of NSPS Subpart GG, therefore no change is needed.

Cooling Tower (N-7172-3-1)

No comments.

Fire Pump (N-7172-4-1)

Condition #6 - Limits operation for maintenance, testing, and required regulatory purposes to 50 hr/yr. This condition cites 17 CCR 93115 (Diesel Engine Air Toxic Control Measure) as the governing authority. 17 CCR 93115.6(b)(3) establishes this limit for in-use stationary emergency diesel engines. However, the fire pump is exempted from 17 CCR 93115.6(b)(3) pursuant to 17 CCR 93115.3(n), which specifies the testing requirements of NFPA 25 as governing non-emergency operation. The District should revise this condition to reflect the exemption criteria of 17 CCR 93115.3(n).

District Response: The District has revised condition 6 as following.

6. *This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. ~~Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours~~*

per year For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 2201, 4701, and 4702 and 17 CCR 93115]

Condition #10 - Requires TID to monitor the operational characteristics of the engine as recommended by the manufacturer or emissions control system supplier during periods of maintenance, testing, and required regulatory purposes. This condition cites Rule 4702 as the governing authority. The fire pump is subject only to sections 4.3.1 and 6.2.3 of Rule 4702. These sections do not contain this requirement. The District should remove this condition.

District Response: The District has deleted condition 10.

Stanislaus County Rule 407 - Is subsumed by Condition #7. The subsuming analysis was presented in the Compliance Plan Streamlining Table. The District should add a condition that subsumes Rule 407 into the Title V permit.

District Response: The subsumed requirements need not to be stated exclusively.