



AUG 28 2014

Ms. Carol Romero
Pacific Ethanol Madera
400 Capital Mall, Suite 2060
Sacramento, CA, 95814

Re: Notice of Minor Title V Permit Modification
District Facility # C-4261
Project # 1141119

Dear Ms. Romero:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued Authorities to Construct (ATC's) C-4261-50-3 and '-51-3 into the Title V operating permit. These ATC's authorized the modifications of two 75.6 MMBtu/hr natural gas fired boilers to remove the dormant operating status of each unit and retune each unit's ultra-low NO_x burner to achieve NO_x emissions of 7 ppmvd @ 3% O₂ for District Rule 4320 compliance.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued ATC's C-4261-50-3 and '-51-3, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,



Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

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 93726-0244
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

TITLE V APPLICATION REVIEW

Minor Modification
Project #: 1141119

Engineer: Dustin Brown
Date: August 27, 2014

Facility Number: C-4261
Facility Name: Pacific Ethanol Madera
Mailing Address: 400 Capital Mall, Suite 2060
Sacramento, CA 95814

Contact Name: Carol Romero
Phone: (209) 235-0370

Responsible Official: Bryon McGregor
Title: Chief Operating Officer

I. PROPOSAL

Pacific Ethanol Madera is proposing a Title V minor permit modification to incorporate recently issued Authorities to Construct (ATC's) C-4261-50-3 and '51-3 into the Title V operating permit. These ATC's authorized the modifications of two 75.6 MMBtu/hr natural gas fired boilers to remove the dormant status of each unit and to retune each unit's ultra-low NO_x burner to achieve NO_x emissions of 7 ppmvd @ 3% O₂ for District Rule 4320 compliance.

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.

II. FACILITY LOCATION

Pacific Ethanol Madera is located at 31470 Avenue 12 in Madera, CA.

III. EQUIPMENT DESCRIPTION

Current Permit Equipment Descriptions:

C-4261-50-2: NON-COMPLIANT DORMANT 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS, OR EQUIVALENT, NATURAL GAS-FIRED BOILER #1 WITH AN ALZETA MODEL CSB 756, OR EQUIVALENT, ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION

C-4261-51-2: NON-COMPLIANT DORMANT 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS, OR EQUIVALENT, NATURAL GAS-FIRED BOILER #2 WITH AN ALZETA MODEL CSB 756, OR EQUIVALENT, ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION

ATC Equipment Descriptions:

C-4261-50-3: MODIFICATION OF NON-COMPLIANT DORMANT 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS NATURAL GAS-FIRED BOILER #1 WITH AN ALZETA MODEL CSB 756 ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION: REMOVE DORMANT STATUS AND RETUNE THE BURNER TO ACHIEVE 7 PPMVD-NOX @ 3% O2 FOR RULE 4320 COMPLIANCE (RENEWED ONE TIME 4/19/14 - DB)

C-4261-51-3: MODIFICATION OF NON-COMPLIANT DORMANT 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS NATURAL GAS-FIRED BOILER #2 WITH AN ALZETA MODEL CSB 756 ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION: REMOVE DORMANT STATUS AND RETUNE THE BURNER TO ACHIEVE 7 PPMVD-NOX @ 3% O2 FOR RULE 4320 COMPLIANCE (RENEWED ONE TIME 4/19/14 - DB)

Post Project Equipment Descriptions:

C-4261-50-4: 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS, OR EQUIVALENT, NATURAL GAS-FIRED BOILER #1 WITH AN ALZETA MODEL CSB 756, OR EQUIVALENT, ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION

C-4261-51-4: 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS, OR EQUIVALENT, NATURAL GAS-FIRED BOILER #2 WITH AN ALZETA MODEL CSB 756, OR EQUIVALENT, ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

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

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Pacific Ethanol Madera is proposing to modify two 75.6 MMBtu/hr natural gas fired boilers by removing their dormant operating status. They are also proposing to re-tune the ultra-low NO_x burner on each of boiler to achieve NO_x emissions of 7 ppmvd @ 3% O₂ in order to comply with District Rule 4320. There will be no other changes to the methods of operation of these boilers or the facility operations as a part of this project.

There are no emission increases associated with the proposed changes to these boilers. The two boiler permits and ATC's are identical; therefore, the following discussion for the condition changes associated with this Title V permit modification will be applicable for both boilers.

Existing PTO Changes:

Existing PTO condition 5 was revised in accordance with the NO_x emission requirements of District Rule 4320. The revised requirement has been included as condition 5 of this revised permit.

Existing PTO condition 6 was revised in accordance with the emission measurement requirements of District Rule 4320. The revised requirement has been included as condition 6 of this revised permit.

Existing PTO condition 7 was revised in accordance with the source testing requirements of District Rule 4320. The revised requirement has been included as condition 7 of this revised permit.

New PTO Conditions:

Condition 19 of the requirements for this revised permit was added to assure ongoing compliance fuel sulfur content testing requirements of District Rule 4320.

ATC Condition Changes:

ATC condition 2 has been removed and not included in the requirements for these revised permits as this condition is already included as condition 41 on the requirements for Pacific Ethanol Madera's facility wide permit, C-4261-0-1.

ATC condition 8 specified requirements for the NO_x and CO source testing to be performed within 60 days of re-starting operation of the unit. Pacific Ethanol Madera has performed the source test within 60 days of re-starting the unit and is in the processing of submitting their source test report for approval. Therefore, this condition has been removed and has not been included on the requirements for this revised permit. Note that Pacific Ethanol Madera will need to perform ongoing source testing for NO_x and CO emissions in accordance with condition 7 of the requirements of this revised permit.

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

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 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permits C-4261-50-4 and '-51-4
- B. Authorities to Construct C-4261-50-3 and '-51-3
- C. Application
- D. Previous Title V Operating Permits C-4261-50-2 and '-51-2

ATTACHMENT A

Proposed Modified Title V Operating Permits
C-4261-50-4 and '-51-4

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-4261-50-4

EXPIRATION DATE: 11/30/2017

EQUIPMENT DESCRIPTION:

75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS, OR EQUIVALENT, NATURAL GAS-FIRED BOILER #1 WITH AN ALZETA MODEL CSB 756, OR EQUIVALENT, ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION

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 Rule 2201] Federally Enforceable Through Title V Permit
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 and 40 CFR 60.43c(e)(2)] 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. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 and 4320 and 40 CFR 60.45c(c) and 60.47c(c)] Federally Enforceable Through Title V Permit
5. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.006 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306, and 4320 and 40 CFR 60.43c(e)(2), 60.45c(c) and 60.47c(c)] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. 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
9. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
10. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] 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. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
12. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. 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
15. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
16. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
18. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
19. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
20. Permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(c)] Federally Enforceable Through Title V Permit
21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4305, 4306, and 4320 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-4261-51-4

EXPIRATION DATE: 11/30/2017

EQUIPMENT DESCRIPTION:

75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS, OR EQUIVALENT, NATURAL GAS-FIRED BOILER #2 WITH AN ALZETA MODEL CSB 756, OR EQUIVALENT, ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION

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 Rule 2201] Federally Enforceable Through Title V Permit
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 and 40 CFR 60.43c(e)(2)] 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. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 and 4320 and 40 CFR 60.45c(c) and 60.47c(c)] Federally Enforceable Through Title V Permit
5. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.006 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306, and 4320 and 40 CFR 60.43c(e)(2), 60.45c(c) and 60.47c(c)] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
7. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. 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
9. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
10. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] 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. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
12. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. 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
15. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
16. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
18. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
19. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
20. Permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(c)] Federally Enforceable Through Title V Permit
21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4305, 4306, and 4320 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

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

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ATTACHMENT B

Authorities to Construct
C-4261-50-3 and '-51-3



AUTHORITY TO CONSTRUCT

PERMIT NO: C-4261-50-3

ISSUANCE DATE: 04/19/2012

LEGAL OWNER OR OPERATOR: PACIFIC ETHANOL MADERA LLC

MAILING ADDRESS: 400 CAPITOL MALL, SUITE 2060
SACRAMENTO, CA 95814

LOCATION: 31470 AVENUE 12
MADERA, CA 93637

EQUIPMENT DESCRIPTION:

MODIFICATION OF NON-COMPLIANT DORMANT 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS NATURAL GAS-FIRED BOILER #1 WITH AN ALZETA MODEL CSB 756 ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION: REMOVE DORMANT STATUS AND RETUNE THE BURNER TO ACHIEVE 7 PPMVD-NOX @ 3% O2 FOR RULE 4320 COMPLIANCE

CONDITIONS

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 Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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 and 40 CFR 60.43c(e)(2)]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 and 4320 and 40 CFR 60.45c(c) and 60.47c(c)]
6. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.006 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306, and 4320 and 40 CFR 60.43c(e)(2), 60.45c(c) and 60.47c(c)]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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 Saadedin, Executive Director / AP/CO

DAVID WARNER, Director of Permit Services

C-4261-50-3 : Apr 19 2012 8:20AM -- BROWND : Joint Inspection NOT Required

7. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
8. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted within 60 days of re-starting the unit. [District Rules 2201, 4305, 4306 and 4320]
9. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320]
10. 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]
11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320]
16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
17. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320]
18. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320]
21. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]
22. Permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(c)]
23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4305, 4306, and 4320 and 40 CFR 60.48c(i)]



AUTHORITY TO CONSTRUCT

PERMIT NO: C-4261-51-3

ISSUANCE DATE: 04/19/2012

LEGAL OWNER OR OPERATOR: PACIFIC ETHANOL MADERA LLC
MAILING ADDRESS: 400 CAPITOL MALL, SUITE 2060
SACRAMENTO, CA 95814

LOCATION: 31470 AVENUE 12
MADERA, CA 93637

EQUIPMENT DESCRIPTION:

MODIFICATION OF NON-COMPLIANT DORMANT 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS NATURAL GAS-FIRED BOILER #2 WITH AN ALZETA MODEL CSB 756 ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION: REMOVE DORMANT STATUS AND RETUNE THE BURNER TO ACHIEVE 7 PPMVD-NOX @ 3% O2 FOR RULE 4320 COMPLIANCE

CONDITIONS

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 Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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 and 40 CFR 60.43c(e)(2)]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 and 4320 and 40 CFR 60.45c(c) and 60.47c(c)]
6. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.006 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, 4306, and 4320 and 40 CFR 60.43c(e)(2), 60.45c(c) and 60.47c(c)]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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.

Sayed Sadleed, Executive Director / APCO



DAVID WARNER, Director of Permit Services

C-4261-51-3: Apr 19 2012 8:20AM -- BROWND - Joint Inspection NOT Required

7. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]
8. Source testing to measure NO_x and CO emissions from this unit while fired on natural gas shall be conducted within 60 days of re-starting the unit. [District Rules 2201, 4305, 4306 and 4320]
9. Source testing to measure NO_x and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320]
10. 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]
11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
12. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]
13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
14. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320]
16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
17. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320]
18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320]
21. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]
22. Permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(c)]
23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4305, 4306, and 4320 and 40 CFR 60.48c(i)]

ATTACHMENT C

Application

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: Pacific Ethanol Madera, LLC	
2. MAILING ADDRESS:	
STREET/P.O. BOX: <u>400 Capital Mall, Suite 2060</u>	
CITY: <u>Sacramento</u>	STATE: <u>California</u> 9-DIGIT ZIP CODE: <u>95814</u>
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:	INSTALLATION DATE: 2006
STREET: <u>3142 Avenue 12</u> CITY: <u>Madera</u>	
_____ ¼ SECTION _____ TOWNSHIP _____ RANGE _____	
4. GENERAL NATURE OF BUSINESS: Manufacture of Denatured Ethanol and various by products.	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)	
Permit numbers C-4261-50-1 and C-4261-51-1. Pacific Ethanol Madera, LLC intends to meet 7 ppm NOx emissions limit as per District Rule 4320 for boilers by fine tuning both boilers at the site.	
6. TYPE OR PRINT NAME OF APPLICANT: Carol Romero	TITLE OF APPLICANT: EHS Mgr.
7. SIGNATURE OF APPLICANT: 	DATE: 3/31/2014
	PHONE: (209)235-0370
	FAX: (209)235-0376
	EMAIL: cromero@pacificethanol.net

For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <u>C-114119</u> FACILITY ID: <u>C-4261</u>

Central Regional Office o 1990 E. Gettysburg Avenue o Fresno, CA 93726-0244 o (559) 230-5900 o FAX (559) 230-6061

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: Pacific Ethanol Madera, LLC	FACILITY ID: C - 4261
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Pacific Ethanol Madera, LLC	
3. Agent to the Owner: Bryon McGregor	

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

- BM* 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).
- BM* 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.
- BM* Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- BM* 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:

Bryon McGregor
Signature of Responsible Official

3/31/2014
Date

Bryon Mc Gregor
Name of Responsible Official (please print)

COO
Title of Responsible Official (please print)



RECEIVED

MAR 31 2014

Permits Services
SJVAPCD

Pacific Ethanol, Inc.

March 31, 2014

Dustin Brown
Permit Engineer
San Joaquin Valley Unified APCD
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244

Subject: Minor Modification Application
Reference: Facility ID C-4261

Dear Mr. Brown:

Please find the enclosed Minor Modification Application for the boilers associated with Permit to Operate C-4261-50-1 and C-4261-51-1. District Rule 4320 requires that the boiler nitrogen oxides (NOx) emissions not exceed 7 ppm. Pacific Ethanol Madera' LLC intends to meet the 7 ppm NOx limit by fine tuning both boilers. Engineers have confirmed that both boilers are configured to meet the 7 ppm limit.

Please email me at cromero@pacificethanol.net or call me at 209-235-0370 ext. 6009 if you have any questions or require further information.

Best regards,

Carol Romero
EHS Manager

209-235-0370
3028 NAVY DRIVE
STOCKTON, CA 95206
www.pacificethanol.net

ATTACHMENT D

Previous Title V Operating Permits
C-4261-50-2 and '-51-2

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-4261-50-2

EXPIRATION DATE: 11/30/2017

EQUIPMENT DESCRIPTION:

NON-COMPLIANT DORMANT 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS, OR EQUIVALENT, NATURAL GAS-FIRED BOILER #1 WITH AN ALZETA MODEL CSB 756, OR EQUIVALENT, ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION

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 Rule 2201] Federally Enforceable Through Title V Permit
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 and 40 CFR 60.43c(e)(2)] 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. The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201 and 40 CFR 60.45c(c) and 60.47c(c)] Federally Enforceable Through Title V Permit
5. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.006 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, and 4306 and 40 CFR 60.43c(e)(2), 60.45c(c) and 60.47c(c)] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
7. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
8. 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
9. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
10. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] 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. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
12. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
14. 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
15. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
16. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
18. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
19. Permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(c)] Federally Enforceable Through Title V Permit
20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305 and 4306 and 40 CFR 60.48c(i)] 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: C-4261-51-2

EXPIRATION DATE: 11/30/2017

EQUIPMENT DESCRIPTION:

NON-COMPLIANT DORMANT 75.6 MMBTU/HR SUPERIOR MODEL SEMINOLE 3 PASS, OR EQUIVALENT, NATURAL GAS-FIRED BOILER #2 WITH AN ALZETA MODEL CSB 756, OR EQUIVALENT, ULTRA LOW-NOX BURNER, AND FORCED FLUE GAS RECIRCULATION

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 Rule 2201] Federally Enforceable Through Title V Permit
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 and 40 CFR 60.43c(e)(2)] 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. The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201 and 40 CFR 60.45c(c) and 60.47c(c)] Federally Enforceable Through Title V Permit
5. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu; 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu; 0.006 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rules 2201, 4305, and 4306 and 40 CFR 60.43c(e)(2), 60.45c(c) and 60.47c(c)] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
7. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
8. 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
9. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
10. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] 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. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
12. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
14. 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
15. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
16. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
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19. Permittee shall record monthly fuel consumption. [District Rule 1070 and 40 CFR 60.48c(c)] Federally Enforceable Through Title V Permit
20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305 and 4306 and 40 CFR 60.48c(i)] Federally Enforceable Through Title V Permit

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