



JUN 21 2013

Mr. Rick Spurlock
Rio Bravo Fresno
3350 S Willow Ave
Fresno, CA 93725

**Re: Notice of Final Action - Significant Title V Permit Modification
District Facility # C-1820
Project # C-1110744**

Dear Mr. Spurlock:

The Air Pollution Control Officer has modified the Title V permit for Rio Bravo Fresno located at 3350 S Willow Ave in Fresno incorporating ATC #C-1820-1-27. The modification consists of allowing longer startup and shutdown times, clarifying fuel storage requirements, modifying record keeping requirements, and adding an additional source testing method.

Enclosed is the modified Title V permit. The application and proposal were sent to CARB and US EPA Region IX on April 30, 2013. No comments were received following the District's preliminary decision on this project.

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

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

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Executive Director/Air Pollution Control Officer

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**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 Rio Bravo Fresno at 3350 S Willow Ave in Fresno, California. The modification consists of allowing longer startup and shutdown times, clarifying fuel storage requirements, modifying record keeping requirements, and adding an additional source testing method.

The District's analysis of the legal and factual basis for this proposed action, project #C-1110744, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm, the SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726, and at any other District office. For additional information, please contact the District at (559) 230-6000.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1820-1-28

EXPIRATION DATE: 11/30/2014

EQUIPMENT DESCRIPTION:

352 MMBTU/HR CIRCULATING FLUIDIZED-BED BIOMASS COMBUSTOR USED TO PRODUCE STEAM FOR ELECTRICAL POWER GENERATION (28.5 MW), WITH ONE COOLING TOWER, ONE AIR PREHEATER, ONE BARETUBE ECONOMIZER, AND TWO 900 AND ONE 700 HP FANS

PERMIT UNIT REQUIREMENTS

1. No more than 500 lb/day of "Ashvantage" anti-slag additive shall be used in this combustor. [District Rule 2201] Federally Enforceable Through Title V Permit
2. In the event that the use of "Ashvantage" anti-slag additive causes a violation of any applicable requirement of this permit, the operator shall immediately cease usage of the anti-slag additive. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Ammonia shall be injected into the fluidized bed combustor as necessary to meet the limits in these conditions and whenever the combustor is in full operation. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Filterable PM10 emissions from the exhaust of the electrostatic precipitator shall not exceed 5.8 lb/hr, and condensable PM10 emissions shall not exceed 17.4 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Combustion contaminants shall not exceed 10 lb/hr. Combustion contaminants are defined as particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state. Lab analysis testing shall be performed during each source test to determine the total amount of non-combustion contaminants, which shall be subtracted from the total particulate measured during the annual PM performance test to determine the total combustion contaminants. [District Rule 4301] Federally Enforceable Through Title V Permit
6. The SOx emissions (calculated as SO2) from the exhaust of the fluidized bed combustor shall not exceed 10.0 lb/hour nor 240 lb/day. [District NSR Rule, District Rule 4301] Federally Enforceable Through Title V Permit
7. Except during startup and shutdown periods, the NOx emissions (measured as NO2) from the exhaust of the fluidized bed combustor shall not exceed 0.08 lb/MMBTU, 660 lb/day, or 110 tons per year. [District NSR Rule, District Rules 4352, 5.1 and 4301] Federally Enforceable Through Title V Permit
8. Except during startup and shutdown periods, the carbon monoxide emissions from the fluidized bed combustor shall not exceed 400 ppmv @ 3% O2, 22 lb/hour, 528 lb/day, or 46 tons/year. [District NSR Rule and District Rule 4352, 5.1] Federally Enforceable Through Title V Permit
9. During the startup and shutdown periods, the NOx emissions (measured as NO2) from the exhaust of the fluidized bed combustor shall not exceed 0.16 lb/MMBTU, 660 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. During startup and shutdown periods, the carbon monoxide emissions from the fluidized bed combustor shall not exceed 44 lb/hour, 528 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Startup is defined as the period of time, not to exceed 96 hours, during which the unit is set in operation and heated from a lower temperature to a steady state operating temperature. [District Rule 4352, 3.18, 5.3.2] 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.

12. Shutdown is defined as the period of time, when fuel is curtailed and the unit begins cooling from the unit's normal operating temperature, as specified by the manufacturer, and ends when steam flow is zero or 24 hours have elapsed since the start of a shutdown, whichever occurs first. [District Rule 4352, 3.15, 5.3.4] Federally Enforceable Through Title V Permit
13. The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during start-up or shutdown. [District Rule 4352, 5.3.3] Federally Enforceable Through Title V Permit
14. The VOC emissions from the exhaust of the fluidized bed combustor shall not exceed 10.4 lb/hour nor 250 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
15. The concentration of filterable PM10 in the exhaust from the electrostatic precipitator shall not exceed 0.010 gr/dscf corrected to 12% CO₂. [District NSR Rule and District Rule 4201] Federally Enforceable Through Title V Permit
16. The concentration of ammonia in the exhaust of the fluidized bed combustor shall not exceed 25 ppmv at 3% O₂. [District NSR Rule] Federally Enforceable Through Title V Permit
17. The electrostatic precipitator shall be operated in a manner so as to minimize the emissions of particulate matter whenever the fluidized bed combustor is fired. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Only alfalfa, barley, beanstraw, corn, orchard prunings, vineyard prunings, oats, wheat, and forest residues shall be used as offset creditable fuels. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Only biomass and wood waste not included in the creditable fuels shall be used as non-creditable fuels. Biomass is defined as any organic material originating from plants including but not limited to products, by-products and wastes from agriculture, forestry, aquatic, and related industries, such as agricultural, energy or feed crops, residues and wastes, orchard and vineyard prunings and removal, stone fruit pits, nut shells, cotton gin trash, corn stalks and stover, straw, seedhulls, sugarcane leavings and bagasse, aquatic plants and algae, cull logs, eucalyptus logs, poplars, willows, switchgrass, alfalfa, bark, lawn, yard, and garden clippings, waste paper (unprinted), leaves, silvicultural residue, tree and brush prunings, sawdust, timber slash, mill scrap, wood and wood chips, and wood waste. Biomass does not include material containing sewage sludge or industrial, hazardous, radioactive, municipal solid waste, or any material chemically treated or derived from fossil fuels. Wood waste includes clean, chipped wood products, plywood, wood products, manufacturing wood materials, construction and demolition wood materials, and wood pallets, crates and boxes. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Fuels shall not be painted, oiled or stained. [District NSR Rule] Federally Enforceable Through Title V Permit
21. The NO_x emission factor used to calculate emission offset credits for orchard and vineyard wastes shall be 4.3 lb NO_x per ton, for forest residue shall be 4.0 lb NO_x per ton and for all other permitted agricultural wastes shall be 4.26 lb NO_x per ton. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Open-burn emission factors used to determine the quantity of offsets available from the diversion of biomass (as defined in District Rule 2201, Section 3.10, 4/25/02 version) from open-burning are listed in District Policy SSP 2005 "Open Burn Emission Factors". [District NSR Rule] Federally Enforceable Through Title V Permit
23. The owner/operator shall verify all emissions and related data and make the verifications available upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
24. The owner/operator shall provide certification for all fuel which is assigned offset credit. [District NSR Rule] Federally Enforceable Through Title V Permit
25. The owner/operator shall submit written contracts between the owner/operator and all fuel suppliers annually to the District for approval. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Agreements between each fuel supplier and the owner/operator shall be considered as part of the permit to operate after District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
27. The owner/operator shall be responsible for ensuring that emission credits are properly evaluated according to the provisions of the agreements with fuel suppliers. [District NSR Rule] Federally Enforceable Through Title V Permit
28. The owner/operator shall project and use the proper mix of fuels to ensure that all emissions are offset as required with credits from the use of creditable fuels. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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29. The emission credits for the use of creditable fuels shall be calculated using the protocol approved in the District's December 9, 1999 correspondence to the facility. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Emission offset credit will be calculated using the formula $EC(y) = CO(y-1) + \text{Summation } (1/DF(i) \times T(i) \times EF(i))$, where $EC(y)$ = the amount of offset credit available for the year, $CO(y-1)$ = the amount of offset carryover available from the previous year, i = the i th load of biomass received for the offset year, $DF(i)$ = the distance factor for the i th load of biomass, $T(i)$ = the number of Tons of biomass in the i th load, and $EF(i)$ = the emission factor for the type of biomass in the i th load. [District NSR Rule] Federally Enforceable Through Title V Permit
31. The offset Distance Factor (DF) shall be 1.2 for biomass originating within a 15 mile radius of this facility and 2.0 for biomass originating outside of the 15 mile radius. [District NSR Rule] Federally Enforceable Through Title V Permit
32. The owner operator shall curtail operation proportionately and notify the District whenever, due to changes in the quantity or quality of wastes supplied, the emissions exceed the offsets. [District NSR Rule] Federally Enforceable Through Title V Permit
33. All fuels shall be burned on a first-in, first-out basis. Compliance with this condition shall be based on mixed fuel piles (first-mixed, first-burned). [District NSR Rule] Federally Enforceable Through Title V Permit
34. Performance testing shall be conducted annually for NO_x, CO, SO_x, PM and PM(10) at the maximum operating capacity using following test methods; for NO_x EPA Method 7E or ARB Method 100; for CO EPA Method 10 or ARB Method 100; for SO_x EPA Method 6 or 6C ; for PM EPA Method 5 (including back half); and for PM(10) EPA Method 5 (including back half assuming 100% of PM is PM10) or EPA Method 201A in combination with EPA Method 202 or any others test methods and procedures approved by the District. [District Rule 4301, 4352 & 1081] Federally Enforceable Through Title V Permit
35. The higher heating value of all as-fired solid fuels shall be certified by a third-party supplier or determined by ASTM Method E711, ASTM D5865, or other test method(s) with prior written approval of the APCO, ARB, and EPA. [District Rule 4352, 6.4] Federally Enforceable Through Title V Permit
36. All emissions measurements during a source test shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No compliance determination shall be established within two hours after a period in which fuel flow to the unit is zero, or is shut off for 30 minutes or longer. [District Rule 4352, 6.3.2, 6.3.3] Federally Enforceable Through Title V Permit
37. The District must be notified 30 days prior to any performance test, and a test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
38. The results of each performance test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
39. Permittee shall operate a Continuous Emissions Monitoring (CEM) system to monitor and record NO_x concentrations and O₂ concentrations, as well as the NO_x emission rate whenever the unit is operating. The CEM system shall be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c), 60.13, and 60.48b. The CEM system must also comply with 40 CFR 60 Appendix B, Performance Specifications 2 and 3, and 40 CFR 60 Appendix F, Quality Assurance Procedures. Per Section 5.1.1 of Appendix F, at least once each calendar year, a Relative Accuracy Test Audit (RATA) must be conducted. Per Sections 5.1.2 and 5.1.3 of Appendix F, a Cylinder Gas Audit (CGA) or a Relative Accuracy Audit (RAA) must be conducted once each calendar quarter, except in the quarter where a RATA is performed. [District Rules 1080 and 4352, 5.5 and 40 CFR 60.7(c), 40 CFR 60.13, and 40 CFR 60.48b] Federally Enforceable Through Title V Permit
40. Compliance with the daily NO_x emission limit shall be based on a block 24-hour averaging period using CEM system data. [District Rule 4352, 5.2 and 40 CFR 60.44b(i)] Federally Enforceable Through Title V Permit
41. The continuous monitoring equipment must be linked to a data acquisition system that is accessible via modem. [District Rules 1080 and 4352, 5.5] Federally Enforceable Through Title V Permit

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42. Permittee shall operate a Continuous Opacity Monitoring (COM) system to monitor and record opacity whenever the unit is operating. The COM system shall be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c), 60.13, and 60.48b. The COM system must also satisfy Performance Specification 1 of 40 CFR 60 Appendix B. [District Rule 1080 and 40 CFR 60.7(c), 40 CFR 60.13, 40 CFR 60.48b, and 40 CFR 64.3(a) and (d)] Federally Enforceable Through Title V Permit
43. A quarterly CEM and COM report shall be submitted to the District which includes the following: hours of operation, the date and time of each exceedance of emissions limits (including startup, shutdown, malfunctions or any other reason), the quantity of excess emissions, any conversion factors used to calculate excess emissions, the nature and cause of each malfunction, any corrective action taken and any preventive measures adopted, hours of CEM (and COM) down time, and the cause of all CEM (and COM) down time. [District Rules 1080 and 4352, 5.5; 40 CFR 60.49b(h), and 40 CFR 64.3(d)(i)] Federally Enforceable Through Title V Permit
44. Quarterly reports shall be submitted to the District within 30 days after the end of each calendar quarter. [District Rules 1080 and 4352, 5.5] Federally Enforceable Through Title V Permit
45. Results of continuous emissions monitoring must 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
46. A violation of NO_x emission standards indicated by the NO_x CEMS shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
47. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. Operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
48. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
49. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
50. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR part 64] Federally Enforceable Through Title V Permit
51. All equipment or systems installed or used to achieve compliance with the terms and conditions of this Title V permit shall be maintained in good working order and be operated as efficiently as possible to minimize air pollution emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
52. The net electrical power output shall not exceed 28.5 MW. [District NSR Rule] Federally Enforceable Through Title V Permit
53. Natural gas, butane, and propane may be used as start-up fuel and combustion stabilization purposes only. [District NSR Rule] Federally Enforceable Through Title V Permit
54. Records of system maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
55. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
56. The storage and handling of fuels shall be conducted so as to minimize the potential of any fire in the facility's fuel storage area. [District Rule 4101]
57. Permittee shall maintain daily records of the amount of "Ashvantage" anti-slag additive used. [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.

58. Permittee shall record the higher heating value of the as-fired fuel on a monthly basis. The HHV shall be determined on either a composite monthly sample (comprised of weekly grab samples, or biweekly grab samples). [District Rule 4352, 6.2.1] Federally Enforceable Through Title V Permit
59. Records of all daily fuel consumption shall be maintained on site and submitted to the District with quarterly reports and upon request. [District NSR Rule, District Rule 4352, 6.2.1 and 40 CFR 60.49b(d)] Federally Enforceable Through Title V Permit
60. The owner/operator shall maintain daily records of the type and quantity of all biomass received. [District NSR Rule and District Rule 4352, 6.2.1] Federally Enforceable Through Title V Permit
61. All records required by this permit shall be retained on site for a minimum of five years, and shall be made available for District inspection upon request. [District NSR Rule, and District Rules 2520, 9.4.2 and 4352, 6.2.2] Federally Enforceable Through Title V Permit

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