



MAR 16 2011

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

**Re: Notice of Final Action - Title V Permit Renewal
District Facility # C-1820
Project # C-1084429**

Dear Mr. Spurlock:

The District has issued the Final Renewed Title V Permit for Rio Bravo Fresno. The preliminary decision for this project was made on May 6, 2010. A summary of the comments and the District's response to each comment is attached.

The public notice for issuance of the Final Renewed Title V Permit will be published approximately three days from the date of this letter.

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

Sincerely,

David Warner
Director of Permit Services

Attachments

cc: Sajjad Ahmad, Permit Services Engineer

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



MAR 16 2011

Gerardo C. Rios, Chief
Permits Office (AIR-3)
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

**Re: Notice of Final Action - Title V Permit Renewal
District Facility # C-1820
Project # C-1084429**

Dear Mr. Rios:

The District has issued the Final Renewed Title V Permit for Rio Bravo Fresno. The preliminary decision for this project was made on May 6, 2010. A summary of the comments and the District's response to each comment is attached.

The public notice for issuance of the Final Renewed Title V Permit will be published approximately three days from the date of this letter.

I would like to thank you and your staff for working with us. We appreciate your concurrence with this action. Should you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Attachments

cc: Sajjad Ahmad, Permit Services Engineer

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MAR 16 2011

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

**Re: Notice of Final Action - Title V Permit Renewal
District Facility # C-1820
Project # C-1084429**

Dear Mr. Tollstrup:

The District has issued the Final Renewed Title V Permit for Rio Bravo Fresno. The preliminary decision for this project was made on May 6, 2010. A summary of the comments and the District's response to each comment is attached.

The public notice for issuance of the Final Renewed Title V Permit will be published approximately three days from the date of this letter.

I would like to thank you and your staff for working with us. Should you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,



David Warner
Director of Permit Services

Attachments

cc: Sajjad Ahmad, Permit Services Engineer

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Fresno Bee

**SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT
NOTICE OF FINAL DECISION TO ISSUE
RENEWED FEDERALLY MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District has made its final decision to issue the renewed Federally Mandated Operating Permit to Rio Bravo Fresno for its biomass cogeneration facility located at 3350 S Willow Ave in Fresno, California.

The District's analysis of the legal and factual basis for this proposed action, project #C-1084429, 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 contact 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.



Permit to Operate

FACILITY: C-1820

EXPIRATION DATE: 11/30/2014

LEGAL OWNER OR OPERATOR: RIO BRAVO FRESNO
MAILING ADDRESS: 3350 S WILLOW AVE
FRESNO, CA 93725

FACILITY LOCATION: 3350 S WILLOW AVE
FRESNO, CA 93725

FACILITY DESCRIPTION: ELECTRICAL SERVICES COGENERATION

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: C-1820-0-3

EXPIRATION DATE: 11/30/2014

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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] 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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] 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: RIO BRAVO FRESNO
Location: 3350 S WILLOW AVE, FRESNO, CA 93725
C-1820-0-3 : Aug 24 2010 8:21AM - AHMA05

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 (2/17/05). 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, and County Rules 401 (in all eight counties in the San Joaquin Valley)] 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 (12/17/09) 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 (12/17/09) 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 (12/17/09). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (9/16/04) or Rule 8011 (8/19/04). [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: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), and Rule 111 (Kern, Tulare, Kings). 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 (2/17/05); 4601, sections 5.1, 5.2, 5.3, and 5.8 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1, 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, 9.5.2] 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. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan, and comply with all the requirements of Program 1, 2 or 3 when mandated by the regulation. [40 CFR 68] 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-1820-1-24

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. The fuel consumption in the fluidized bed combustor shall not exceed 36 tons at 30% moisture in any one hour. [District NSR Rule] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. 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
10. 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
11. 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

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

12. Start-up operation is defined as the period of time during which a unit is heated to the operating temperature and pressure from a shutdown status. Shutdown operation is defined as the period of time during which a unit is taken from operational to nonoperational status by allowing it to cool down from its operating temperature and pressure to an ambient temperature. [District Rule 4352, 3.15, 3.18, 5.3] Federally Enforceable Through Title V Permit
13. The duration of each start-up shall not exceed 96 hours. The duration of each shutdown shall not exceed twelve (12) hours. [District Rule 4352, 5.3.1 and 5.3.2] Federally Enforceable Through Title V Permit
14. 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
15. 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
16. 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
17. 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
18. 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
19. 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
20. Only grape stems, grape pumice, almond shells, walnut shells, construction wood waste, urban wood waste, and up to 1,500 pounds per quarter of confiscated drugs shall be used as non-creditable fuels. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Fuels shall not be painted, oiled or stained. [District NSR Rule] Federally Enforceable Through Title V Permit
22. The NOx emission factor used to calculate emission offset credits for orchard and vineyard wastes shall be 4.3 lb NOx per ton, for forest residue shall be 4.0 lb NOx per ton and for all other permitted agricultural wastes shall be 4.26 lb NOx per ton. [District NSR Rule] Federally Enforceable Through Title V Permit
23. 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
24. 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
25. The owner/operator shall provide certification for all fuel which is assigned offset credit. [District NSR Rule] Federally Enforceable Through Title V Permit
26. 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
27. 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
28. 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
29. 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
30. 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

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

31. 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
32. 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
33. The mass ratio of creditable biomass fuel to total biomass fuel shall not be less than 0.48. Grape stems, grape pomace, almond and walnut shells, construction wood waste, urban wood waste and lawn trimmings are not considered biomass fuels. [District NSR Rule] Federally Enforceable Through Title V Permit
34. 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
35. 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
36. 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
37. The higher heating value of all as-fired solid fuels shall be certified by a third-party supplier or determined by ASTM Method E711 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
38. 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
39. 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
40. 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
41. 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
42. 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
43. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

44. 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
45. 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
46. 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
47. 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
48. A violation of NOx emission standards indicated by the NOx CEMS shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
49. 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
50. 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
51. 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
52. 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
53. 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
54. The net electrical power output shall not exceed 28.5 MW. [District NSR Rule] Federally Enforceable Through Title V Permit
55. 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
56. 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
57. 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
58. The storage and handling of fuels shall be conducted so as to prevent any fire in the facility's fuel storage area. [District Rule 4101]
59. Permittee shall maintain daily records of the amount of "Ashvantage" anti-slag additive used. [District Rule 2201] Federally Enforceable Through Title V Permit
60. Permittee shall record on a monthly basis the higher heating value of all fuels used. [District Rule 4352, 6.2.1] 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.

61. 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
62. The owner/operator shall maintain records of the type, quantity, and blend of all biomass received and used on a daily basis and of the certifications that the biomass has historically been burned in the San Joaquin Valley air basin. [District NSR Rule and District Rule 4352, 6.2.1] Federally Enforceable Through Title V Permit
63. 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.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1820-2-6

EXPIRATION DATE: 11/30/2014

EQUIPMENT DESCRIPTION:

BIOMASS FUEL RECEIVING AND UNLOADING OPERATION CONSISTING OF TWO 10'X70' TILTING LIFT PLATFORMS WITH TELESCOPING HYDRAULIC CYLINDERS FOR DUMPING INTO A RECEIVING HOPPER OF 5000 CU.FT CAPACITY. RATING: 365 HP.

PERMIT UNIT REQUIREMENTS

1. Fugitive emissions from all fuel transfer points shall be controlled to prevent excessive dust during operation. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Fogging dust controls shall be operated at all times when handling any fuels. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All conveyor covers shall be maintained securely in place and without leakage. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Operator shall maintain windscreen to prevent fugitive dust from storage piles. All screens shall be repaired within 24 hours. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Visible emissions from each transfer point shall be checked quarterly. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1820-3-4

EXPIRATION DATE: 11/30/2014

EQUIPMENT DESCRIPTION:

FUEL HANDLING SYSTEM CONSISTING OF COLLECTING BELT CONVEYOR, STACKER CONVEYOR, STORAGE, OVERPILE AND UNDERPILE RECLAIMERS, RECLAIM TRANSFER(CHAIN & BELT CONVEYOR, SELF CLEANING MAGNET, SCREEN CONVEYOR, SHREDDER, FEED CONVEYOR & BIN). RATING: 295 HP

PERMIT UNIT REQUIREMENTS

1. Fugitive emissions from all fuel transfer points and storage piles shall be controlled to prevent excessive dust during operation. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Visible emission from each transfer point shall be checked quarterly. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If excessive visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. 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

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1820-4-3

EXPIRATION DATE: 11/30/2014

EQUIPMENT DESCRIPTION:
ONE MULTICLONE MECHANICAL DUST COLLECTOR.

PERMIT UNIT REQUIREMENTS

1. The particulate matter concentration exiting the multiclone shall not exceed 0.5 grains/dscf at 12% CO₂. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Multiclone collector shall be strictly maintained at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
3. At no time shall the emissions passing through the multiclone be allowed to bypass the electrostatic precipitator. [District NSR Rule] 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-1820-5-12

EXPIRATION DATE: 11/30/2014

EQUIPMENT DESCRIPTION:

ONE 238 KVA RESEARCH COTTREL ELECTROSTATIC PRECIPITATOR EXHAUSTING TO ONE 147 FEET HIGH BY 8 FEET DIAMETER CARBON STEEL STACK

PERMIT UNIT REQUIREMENTS

1. Particulate matter concentration shall not exceed 0.010 grains/dscf corrected at 12% CO₂. [District NSR Rule and District Rule 4201] 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] Federally Enforceable Through Title V Permit
3. Electrostatic Precipitator shall be strictly maintained at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The precipitator automatic rapping system is to be operated to maximize collection efficiency including only one rapping position to be energized at any one time to minimize dust re-entrainment. [District NSR Rule] Federally Enforceable Through Title V Permit
5. All fields shall be operated at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Secondary voltage limit settings shall be maintained between 40 and 80 kilovolts at each cell. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Secondary current (amperage) limit settings shall be maintained between 0.05 and 1.40 amps at cell #1, 0.2 and 1.40 amps at cell #2, and 0.4 and 1.40 amps at cell #3. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Records shall be maintained on the quality and accuracy of all instruments used to verify compliance with the terms and conditions of the Permit to Operate and District regulations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Data from all monitors shall be submitted quarterly to the District. Malfunctions in the monitoring equipment shall be reported to the District. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
10. Source testing shall be required annually or as often as deemed necessary by the Air Pollution Control District. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Source testing to measure particulate matter including condensibles and particulate matter not including condensibles, shall be conducted using EPA Methods 5 and 8, and in accordance with Rule 1081, section 6.0 (12/16/93). [District Rule 1081; PSD SJ 76-44] Federally Enforceable Through Title V Permit
12. Each cell voltage and current (amperage) shall be checked and recorded on a daily basis. [District Rule 2520, 9.3.2] 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: C-1820-6-6

EXPIRATION DATE: 11/30/2014

EQUIPMENT DESCRIPTION:

ASH COLLECTION SYSTEM CONSISTING OF ENCLOSED DRY ASH CONVEYORS COLLECTING DRY ASH FROM THE BOILER, AIR HEATER, AND AIR POLLUTION CONTROL SYSTEM; ONE (1) ENCLOSED DRY ASH ELEVATOR; ONE (1) 4,000 FT³ DRY ASH STORAGE SILO SERVED BY A FLEX-KLEEN MODEL 84 BUBS 9LLG BAGHOUSE; ONE (1) WET ASH UNLOADING SYSTEM WITH A WET PUG MILL; ONE (1) DRY ASH UNLOADING SYSTEM WITH A SLY XP DUST-FREE LOADING SPOUT SERVED BY A DISA MODEL RJCA BAGHOUSE

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
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]
3. Fugitive emissions from all ash transfer points shall be controlled to prevent excessive dust during operation. [District NSR Rule]
4. Visible emissions from baghouses serving the dry ash silo loading and unloading operations shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]
5. The baghouses serving the dry ash silo loading and unloading operations shall be maintained and operated according to manufacturer's specifications. [District Rule 2201]
6. A spare set of bags for each baghouse serving the dry ash silo loading and unloading operations shall be maintained on the premises at all times. [District Rule 2201]
7. Each baghouse serving the dry ash silo loading and unloading operations shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]
8. The pressure differential gage reading range shall be established per manufacturer's recommendation at the time of start-up inspection. [District Rule 2201]
9. Dust collector filters shall be inspected quarterly while in operation for evidence of particulate matter breakthrough and replaced as needed. [District Rule 2520, 9.3.2]
10. Dust collector filters shall be inspected quarterly while not in operation for tears, scuffs, abrasions or holes which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2]
11. Visible emissions from all ash transfer points shall be checked quarterly. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If excessive visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2]
12. The maximum combined daily quantity of dry ash and wet ash (on a dry basis) unloaded from the dry ash storage silo shall not exceed 200 ton-dry ash/day. [District Rule 2201]
13. For the wet ash unloading process, compliance with the dry ash maximum daily unloading throughput limit shall be demonstrated utilizing the following calculation: [equivalent quantity of dry ash unloaded from the storage silo (ton-dry ash / day)] = [quantity of wet ash unloaded from the silo (lb-wet ash unloaded/day)] x [1 - wet ash moisture content (lb-water / lb-wet ash)]. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. Moisture content of wet ash unloaded from the dry ash storage silo shall be maintained above 10% or greater, by weight. [District Rule 2201]
15. The percent moisture of wet ash unloaded from the dry ash storage silo shall be determined by weighing an approximately 2-lb sample of wet ash, bringing the sample to dryness in a drying oven, then weighing the dried sample; the weight difference is the moisture content. [District Rule 2201]
16. Moisture content of wet ash unloaded from the dry ash storage silo shall be measured on a monthly basis and when requested by the District. [District Rule 2201]
17. PM10 emissions from the baghouse serving the dry ash storage silo loading system shall not exceed 0.0072 lb/ton of dry ash loaded in the silo. [District Rule 2201]
18. PM10 emissions from the baghouse serving the dry ash unloading system shall not exceed 0.02 lb/ton of dry ash loaded in truck. [District Rule 2201]
19. PM10 emissions during the truck closing process, after truck is loaded with dry ash, shall not exceed 0.037 lb/ton of dry ash loaded in truck. [District Rule 2201]
20. Daily records of the total quantity of dry ash, wet ash, and total dry ash calculated as the sum of dry ash and wet ash (on a dry ash basis), unloaded from the dry ash storage silo shall be maintained, retained on-site for a period of at least five (5) years and made available for District inspection upon request. [District Rule 1070]
21. Records of dust collector 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]
22. Record of monthly moisture content of the wet ash unloaded from the dry ash storage silo shall be maintained, retained on-site for a period of at least five (5) years and made available for District inspection upon request. [District Rule 1070]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1820-8-3

EXPIRATION DATE: 11/30/2014

EQUIPMENT DESCRIPTION:

COOLING TOWER FOR ELECTRIC POWER PRODUCTION

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. No hexavalent chromium containing compounds shall be added to the water that is circulating through the cooling tower or will circulate through the cooling tower. [District Rule 7012] Federally Enforceable Through Title V Permit
3. The operator shall maintain records of all circulating water tests performed. Records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] 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: C-1820-11-1

EXPIRATION DATE: 11/30/2014

EQUIPMENT DESCRIPTION:

SAND AND LIMESTONE RECEIVING AND STORAGE OPERATION INCLUDING ONE PNEUMATICALLY-FILLED 120-TON STORAGE SILO WITH FABRIC DUST COLLECTOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Visible emissions shall not exceed 1/4 Ringelmann or equivalent 5% opacity. [District Rule 4101]
3. Sand and limestone shall not be transferred into silo unless fabric filter baghouse is operating and functioning properly. [District Rule 1070]
4. Collected fines shall be returned to sand and limestone system. [District Rule 1070]
5. Sand and limestone receiving shall not exceed 48 hr/month. [District Rule 1070]
6. Silo fabric filter baghouse particulate matter (PM-10) emission rate shall not exceed 0.141 lb/hr and 0.02 gr/scf. [District Rule 4201, 4202]
7. Fabric filter baghouse shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed. [District Rule 1070]
8. Fabric filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 1070]
9. The records of hours of operation of sand and limestone receiving system shall be maintained on a monthly basis. [District Rule 1070]
10. Records of fabric filter baghouse 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 1070]
11. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

District's Response to the Comments Received from the Facility on June 7, 2010

Comment #1:

1. Condition 3 states: "The fuel consumption in the fluidized bed combustor shall not exceed 36 tons at 30% moisture in any one hour.

Comment: The fuel usage number is apparently based on a HHV for the as-fired fuel of approximately 7,000 Btu/lb. While the biomass fuel generally has a HHV greater than 7,000 Btu/lb, over the years, fuels with HHVs as low as 6,000 Btu/lb have been burned successfully in the boiler while meeting the emission limits of the Title V permit. While this is not a normal fuel mix for the facility, it has been successfully burned in the past and there is no regulatory benefit to adding another fuel throughput limit in the permit since the facility is already limited to an output of 28.5 MW (net) (Condition 57)

The moisture content is not measured continuously and requires a laboratory analysis to determine. With that in mind, the facility could be out of compliance with the fuel flow limit, but not know it until after the fact, even while maintaining compliance with the emission limits. This does not seem to be in accordance with the emission limits in the Title V permit, which do allow the facility to monitor the parameter on a real-time basis and thus take actions to ensure that the facility maintains compliance with the permit condition.

The facility monitors the fuel flow to the boiler, however, the boiler operations are controlled by the steam output. The fuel load is adjusted to allow the facility to meet a specified steam output and specified electrical generation. The quantity of fuel fed is measured by weigh belts which are fairly accurate, however, they are exceedingly difficult to calibrate due to the requirement to bring the facility offline to run a calibration procedure.

The facility believes that this permit condition should be removed from the Title V permit as it does not add any additional environmental emission protection in terms of ensuring the facility meets the stack emission limits. Rather, it adds additional recordkeeping requirements with no increase in ensuring the facility maintains compliance with the emission limits.

Recommendation: Remove this permit condition from the draft Title V permit.

District's Response to Comment #1:

This is an NSR condition and cannot be removed from the permit during Title V permit renewal. Therefore, the facility is advised to submit an ATC application, requesting an NSR modification to the PTO, to remove this condition from the permit.

Comment #2:

2. Conditions 12 and 13 (Start-up and Shut-down Operations)

Comment: The draft Title V permit imposes new definitions of a start-up and shut-down on the facility. Neither new definition can be met due to physical characteristics of the boiler. The key item is the definition of a shut-down (Condition 12) which states: "Shutdown operation is defined as the period of time during which a unit is taken from operational to nonoperational status by allowing it to cool down from its operating temperature and pressure to an ambient temperature." Also, in Condition 13: "The duration of each shut down shall not exceed twelve (12) hours."

Taken together, it is physically impossible for the facility to cool from normal operating temperatures of approximately 1,700°F to ambient in 12 hours without potentially damaging the combustor. The manufacturer's criteria for cooling the boiler is no more than 100°F per hour, which would require a minimum of 16 hours to cool from normal operating conditions to ambient. However, since the boiler has concrete walls (which act as a heat sink), the actual

cool down process can take longer than 16 hours as the concrete releases the heat absorbed. If the boiler is cooled down faster than the recommended rate, significant damage to the physical structure (concrete walls and steel wall tubes) can occur, and in fact, has been observed during times when the facility has been forced into an emergency situation where it was imperative to cool the system faster than recommended. Thus, the requirement to cool the system to ambient within 12 hours is likely to result in significant damage to the system and subsequent substantially increased maintenance costs for no environmental emission gain, as there is no emission benefit to cooling the boiler down faster than at its designed rate.

A second concern is that the boiler does not always need to be taken to ambient conditions to facilitate repairs. Often, the boiler can be 'bottled' to retain as much heat as possible in the system so that the subsequent start-up operation is substantially shortened, which reduces emissions from the system, since the start-up is shorter and the system attains an equilibrium much faster than a start-up from ambient conditions. Also, the proposed definition of a start-up requires that a shut-down have occurred, which would require the boiler to be taken to ambient conditions, which is a time-consuming process.

The pollution control system on the boiler is designed to operate at normal operating conditions; the efficiency of the ESP (particulate control) is significantly degraded when the system temperature is below 1,000°F. The ammonia injection (NOx control) is ineffective when system temperatures are below 750°F. Thus, requiring the system to be taken to ambient conditions to meet the definition of a shut-down would require additional periods of time when the pollution control systems are not as effective as designed and result in greater emissions from the facility than utilizing the definition of a shut-down (and start-up) in the current permit.

The final concern is the definition of a start-up requires that a shut-down have occurred. With the shut-down requirement to reach ambient temperatures before attaining a shut-down, the facility operations are significantly and unnecessarily impacted due to an administrative dictate rather than working with each facility to ensure that the physical characteristics of each boiler are considered when determining how best to minimize emissions during the start-up and shut-down process.

Recommendation: Modify the definitions in the rule to allow facilities that cannot meet the shut-down duration requirement during all types of shut-down operations different requirements. For example:

Definition of a shutdown: A shutdown starts when fuel feed 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.

Definition of a startup: The period of time a unit is heated to the normal operating temperature, not to exceed 96 hours.

Rio Bravo Fresno (Fresno) will be pleased to help the San Joaquin Valley Air Pollution Control District (SJVAPCD) modify the definitions in the rule in question (Rule 4352) so that all of the facilities can comply with the requirements. Please note that Fresno does comply

with the emission limitations for a start-up and shut-down as currently defined in the Title V permit.

District's Response to Comment #2:

Section 5.3.4 of District Rule 4352 allows the District, ARB and EPA to approve a longer start-up or shutdown duration, if an operator submits an application for a Permit to Operate which provides a justification for the requested additional duration.

The application has provided enough technical justification for a prolonged shutdown period, however, an ATC application will be required to approved these changes. Therefore, the facility is advised to submit an ATC application, requesting these changes.

Comment #3:

3. Condition 37 (Higher Heating Value Measurement)

This permit condition is unclear as to what fuels need to be tested for the higher heating value (HHV). If the intent of the condition is to test the as-fired fuel to determine the HHV, the requirement can be met by the facility. However, if the intent is to test every truck load of fuel coming in to the facility for HHV, the requirement cannot be met due to the large administrative burden placed on the facility for no gain in ensuring compliance with the emission limits (which the facility already meets). The section of Rule 4352 does require that a specific ASTM method be used to determine the HHV, however, there are no requirements for frequency, thus, our understanding is that the frequency should be left to each facility's discretion.

Historically, Fresno has used laboratories that are certified in ASTM Method D5865 to determine the HHV of the fuel samples. Method D5865 uses the same analytical procedure as ASTM E711; however, the preparation is slightly different in that ASTM D5865 pulverizes the sample prior to the actual HHV analysis. Due to the greater homogeneity of the biomass samples after pulverization, Fresno believes that this is a better indication of the HHV. Rule 4352 section 6.4 does allow for alternate analytical methods, however, an alternate analytical method requires the written approval of SJVAPCD, CARB, and USEPA.

Recommendation: Modify Rule 4352 to allow for alternate analytical methods that are already approved by SJVAPCD, CARB, and USEPA in current analytical procedures.

District's Response to Comment #3:

Since Section 6.4.1 of Rule 4352 already allows other test methods approved by the District, ARB, and EPA, there is no need to amend the District Rule 4352. However, the facility will be required to submit an ATC application to get the approval of the alternate test method ASTM D5865.

Comment #4:

4. Conditions 50, 51, and 52. (ESP Operations)

The electrostatic precipitator (ESP) is used to control particulate matter (PM) emissions from the boiler and as a control device has its own permit (C-1820-5-11 and in the Title V Draft permit package C-1820-C-12). These three conditions duplicate existing requirements in the ESP permit or are in conflict with conditions in the ESP permit and actual ESP operations.

Condition 50 requires that the permittee establish primary and secondary current and voltage readings. As part of the normal operations of the ESP and the Compliance Assurance Monitoring (CAM) plan, these settings have already been determined. However, the condition goes further and states that the minimum reading (threshold) for each must be set at 15% below the average value measured during the PM source test. In addition, a maximum reading (threshold) be set at 15% above the average value measured during the PM source test. There is no requirement in 40 CFR 64 for the 15% thresholds described in the draft permit condition. In addition, the ESP operation precludes such a threshold and the permit condition is in direct conflict with permit conditions in the ESP permit, specifically Conditions 6 and 7 which state:

Condition 6: "Secondary voltage limit settings shall be maintained between 40 and 80- kilovolts at each cell."

Condition 7: "Secondary current (amperage) limit settings shall be maintained between 0.05 and 1.40 amps at cell #1, 0.2 and 1.40 amps at cell #2, and 0.4 and 1.40 amps at cell #3."

These voltage and amperage settings were determined as a result of previous source tests and better represent the operation of the ESP. The reason for this is that the ESP operations are controlled by a dedicated control system that maintains the static charge on the ESP electrodes without excessive sparking (spark rate) to the collection rods. The spark rate in actual operations is affected by a broad range of parameters including: ash resistivity, quantity of ash in the exhaust gas stream, rapping rate of the collection rods, moisture content in the exhaust gas stream, exhaust gas flow rate, HHV of the fuel burned, oxygen content in the exhaust gas stream, and others. The control system modifies the voltage and amperage going to each cell to maximize the collection efficiency of the ESP. There is essentially a 'box' of acceptable voltages and amperages that can maximize the ESP collection efficiency. This 'box' is currently defined in Conditions 6 and 7 of the ESP permit. Limiting the control system to the 15% above and below the average values observed during a PM source test will make it impossible for the control system to adequately control ESP operations to maximize collection efficiency and thus minimize stack emissions. In fact, it would make it impossible for the ESP to adequately function in its role as a particulate control device and would result in regular emission exceedances due to the wide variety of parameters that affect ESP collection efficiency.

Recommendation: Remove these three permit conditions from the boiler permit as the existing conditions in the draft ESP permit (C-1820-5-12) adequately define the ESP operations that are required to maintain compliance with the emission limits.

District's Response to Comment #4:

Permit conditions # 50, 51, and 52 have been removed from the proposed PTO C-1820-1-24 as they are duplicate with the conditions # 6 and 7 of the ESP PTO C-1820-5-11.

Comment #5:

5. Condition 61 (Storage and Handling of Fuel)

Rule 4101 does not require preventing any fire in the facility's fuel storage area, rather it prohibits visible air contaminants to the atmosphere. Since the biomass fuel represents the primary revenue source for the facility, every effort is made to maintain the fuel yard and prevent fuel yard fires. However, due to many circumstances, including moisture of incoming fuel, rain fall in the area, amount of fuel moving needed to mix the received fuels, and others, it is impossible to not have a fire in the fuel yard at some point.

Recommendation: Modify permit condition from: "The storage and handling of fuels shall be conducted so as to prevent any fire in the facility's fuel storage area."

To:

"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's Response to Comment #5:

The permit condition cannot be changed as requested without an ATC application. Therefore, the facility is advised to submit an ATC application to get the approval of the condition as requested.

Comment #6:

6. Condition 63 (HHV Records)

This permit condition as written is very unclear as to what HHVs need to be recorded. Currently, the facility takes as-fired fuel samples and records the HHV on a monthly basis.

Recommendation: Modify the wording of the condition to reflect the actual facility operations.
For example:

"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 bi-weekly grab samples).

District's Response to Comment #6:

The permit condition cannot be changed as requested without an ATC application. Therefore, the facility is advised to submit an ATC application to get the approval of the condition as requested.

Comment #7:

7. Condition 65 (Fuel Records and Certification that Fuel has Historically been Burned in the San Joaquin Valley Air Basin)

The permit condition as written is impossible to comply with. The reason for this is that the biomass facilities receive fuel from a wide variety of sources each day and mix the truck loads in a cell that provides fuel for two to three weeks. Every effort is made to make the fuel pile homogenous; however, caterpillar dozers and front-end loaders are not able to perfectly mix the thousands of tons of fuel received in each fuel pile. Thus, the actual composition of the fuel that is fed to the boiler varies continuously. The permit condition as currently worded requires that records be maintained of the "type, quantity, and blend of all biomass received and used on a daily basis". The facility maintains and currently provides to SJVAPCD records of all fuels received which includes fuel source, creditable or non-creditable and offset distance factors for each source of fuel received. The additional requirement to maintain these records on a daily basis provides no additional information to SJVAPCD with regards to maintaining compliance with the emission limits in the Title V permit. Also, Section 6.4 of Rule 4352 requires monthly log containing the following information:

1. type and quantity of fuel used,
2. the higher heating value (HHV) of each fuel as determined by Section 6.4, or as certified by a third party fuel supplier.

The current practice of providing the fuel receipts and creditable/non-creditable fuel report meets the requirement of type and quantity of fuel used. The fuel receipts allow determination of the type of fuel and the quantity of fuel received. The HHV of the monthly composite as-fired fuel samples meets the requirement of Section 6.2.1.2.

There is no requirement in Rule 4352 to have a certification that the biomass has historically been burned in the San Joaquin Valley air basin. In addition, the facility questions who would provide that certification? Our understanding is that historically virtually all of the agricultural fuel received by the facility was previously burned in the fields by the farmers.

Though this condition did exist in the previous boiler permit, further review of the specific requirements of complying with this condition has resulted in a recommendation to modify the permit condition.

Recommendation: Modify the wording of the condition from: "The owner/operator shall maintain records of the type, quantity, and blend of all biomass received and used on a daily basis and of the certifications that the biomass has historically been burned in the San Joaquin Valley air basin."

To:

"The owner/operator shall maintain records of the type and quantity of all biomass received."

District's Response to Comment #7:

This is an NSR permit condition and cannot be changed as requested without an ATC application. Therefore, the facility is advised to submit an ATC application to get the approval of the condition as requested.