



APR 30 2012

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

Re: **Proposed Authority to Construct / Certificate of Conformity (Minor Mod)**
District Facility # S-883
Project # 1114868

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for Rio Bravo Poso, located at 16609 Porterville Highway, Bakersfield, which has been issued a Title V permit. Rio Bravo Poso is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. A condition referencing the operation of TEOR wells was deleted from cogeneration unit PTO S-883-3-19 as it is no longer applicable. Please note that this project and project S-1121288 authorize the designation of heavy oil production operation equipment as a separate stationary source (non Title V). Crude oil storage tanks, TEOR system and flare previously designated as S-883-6 through '9 were removed from the Title V permit and added under new facility, S-8159.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authority to Construct # S-883-3-22 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

Enclosures
cc: Richard Edgehill, Permit Services



APR 30 2012

William Rossiter
Rio Bravo Poso
PO Box 81027
Bakersfield, CA 93380

**Re: Proposed Authority to Construct / Certificate of Conformity (Minor Mod)
District Facility # S-883
Project # 1114868**

Dear Mr. Rossiter:

Enclosed for your review is the District's analysis of your application for Authority to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. A condition referencing the operation of TEOR wells was deleted from cogeneration unit PTO S-883-3-19 as it is no longer applicable. Please note that this project and project S-1121288 authorize the designation of heavy oil production operation equipment as a separate stationary source (non Title V). Crude oil storage tanks, TEOR system and flare previously designated as S-883-6 through '-9 were removed from the Title V permit and added under new facility, S-8159.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

Enclosures
cc: Richard Edgehill, Permit Services

~~All wells producing from strata steamed by this unit shall be connected to a District approved emissions control system, have District approved closed casing vents, or be District approved uncontrolled cyclic wells. [District Rule 2201] Y~~

Deletion of this condition reflects a change in method of TEOR operation S-8159-9 (not to S-883-3) and therefore is administrative and is not a NSR modification to S-883-3.

Disposition of Outstanding ATCs

Current PTO S-883-3 is included in **Attachment I**.

Rio Bravo received their Title V Permit on April 28, 2000. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Rio Bravo must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4306	Boilers, Steam Generators and Process Heaters – Phase III (10/16/08) Solid fueled boilers are exempt per 4306.4.1.1
Rule 4320	Advanced emission reduction option options for boilers, steam generators, and Process Heaters greater than 5.0 MMBtu/hr (10/16/08) Solid fueled boilers are exempt per 4320.4.1.1
Rule 4351	Boilers, Steam Generators and Process Heaters – Phase I (8/21/03) Solid fueled boilers are exempt per 4351.4.1.2
Rule 4352	Solid Fuel Fired Boilers, Steam Generators and Process Heaters and Process Heaters (5/18/06)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)	
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines	

III. Project Location

The facility is located at 16608 Porterville Highway, Bakersfield., CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

Rio Bravo Poso operates a 36 MW circulating fluidizing bed combustor fired on coal and petroleum coke. The combustor produces steam, of which over 90% drives a steam turbine to produce electricity.

Between 5% and 10% of the steam is diverted to a nearby thermally enhanced oil recovery operation consisting of six steam enhanced wells currently operated with closed casing vents (PTO S-8159-9).

Proposed Modifications

As discussed in the proposal section Condition #43 of PTO S-885-3-19 will be deleted as it is no longer applicable.

V. Equipment Listing

Pre-Project Equipment Description:

S-883-3-19: 36.0 MW SOLID FUEL FIRED CIRCULATING BED COMBUSTOR COGENERATION UNIT INCLUDING 389 MMBTU/HR COMBUSTOR WITH LOW-TEMPERATURE STAGED COMBUSTION, AMMONIA INJECTION, AND PULVERIZED LIMESTONE INJECTION - POSO CREEK

Proposed Modification:

S-883-3-19: MODIFICATION OF 36.0 MW SOLID FUEL FIRED CIRCULATING BED COMBUSTOR COGENERATION UNIT INCLUDING 389 MMBTU/HR COMBUSTOR WITH LOW-TEMPERATURE STAGED COMBUSTION, AMMONIA INJECTION, AND PULVERIZED LIMESTONE INJECTION - POSO CREEK: REMOVE CONDITION REQUIRING WELL VENT CONTROL

Post-Project Equipment

S-883-3-20: 36.0 MW SOLID FUEL FIRED CIRCULATING BED COMBUSTOR COGENERATION UNIT INCLUDING 389 MMBTU/HR COMBUSTOR WITH LOW-TEMPERATURE STAGED COMBUSTION, AMMONIA INJECTION, AND PULVERIZED LIMESTONE INJECTION - POSO CREEK

VI. Emission Control Technology Evaluation

Emissions from the circulating fluidized bed combustor include NO_x, SO_x, PM₁₀, CO, and VOC. Circulating fluidized combustion conditions ensure maximum fuel residence time resulting in fuel burn out with minimal levels of CO and hydrocarbons; 99.9999% removal of hydrocarbon-based toxic air contaminants is expected. The combustor operates as a fully circulating fluidized bed and therefore does not experience detached plumes which may occur with bubbling bed combustors.

Ammonia injection is used to control NO_x and limestone injection is responsible for an expected 96%+ control of SO_x emissions. The comparatively low temperature of approximately 1650 °F combined with sub-stoichiometric conditions help control formation of NO_x. Cyclones followed by a baghouse are utilized for particulate control with an efficiency expected to exceed 99%.

VII. General Calculations

Assumptions

S-883-3

Deletion of the condition referencing operation of TEOR wells listed on '15 is not a NSR modification. PE2 only will be calculated for inclusion in the PAS emissions profile.

Calculations

S-883-3

NO_x: 340,764 lb/yr (condition# 34 '-3-19)

SO_x: 135,517 lb/yr (condition# 31 '-3-19)

PM₁₀: 4.31 lb/hr (condition# 27 '-3-19), 103.4 lb/day, 37,756 lb/yr

CO: 105.1 lb/hr (condition# 36 '-3-19), 2522.4 lb/day, 920,676 lb/yr

VOC: 6.03 lb/hr ((condition# 35 '-3-19), 144.7 lb/day, 52,823 lb/yr

S-883-3 (PAS emissions profile)

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	1867.7	340,764
SO _x	1027.2	135,517
PM ₁₀	103.4	37,756
CO	2522.4	920,676
VOC	144.7	52,816

Emission profiles are included in **Attachment II**.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

This project does not meet the following criteria for a Modification, as defined in Section 3.26, and is therefore not subject to this rule.

- Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
- An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
- Addition of any new emissions unit which is subject to District permitting requirements.
- A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Deletion of a permit condition applicable to operation of another permit unit (S-8159-9) is administrative and does not meet the any of the above criteria for a NSR Modification.

Therefore the rule is not applicable.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

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

As discussed above, the facility has applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment/minor modification application. Rio Bravo's Title V Compliance Certification form is included in **Attachment III**.

Rule 4001 New Source Performance Standards (NSPS)

The unit currently meets the requirements of 40 CFR Part 60 Subpart Da which applies to Industrial-Commercial-Industrial Steam Generators greater than 250 MMBtu/hr (post-9/18/78 construction, modification or, reconstruction). The administrative change authorized by this project has no effect on compliance status.

Continued compliance with NSPS subpart Da is expected.

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than

Ringelmann 1 (or 20% opacity). All transfer points from materials in this operation are served by baghouse or spray ring to suppress visible emissions.

The existing fuel handling and filtration equipment are not being modified as a result of this project. Continued compliance is expected.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

As demonstrated above, there are no increases in emissions associated with this project, therefore a health risk assessment is not necessary and no further risk analysis is required.

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot. These operations are currently in compliance with this rule and no modifications to the equipment or method of operation are proposed or expected that would jeopardize compliance. Therefore, continued compliance with this rule is expected.

Rule 4301 Fuel Burning Equipment

This rule specifies maximum emission rates in lb/hr for SO₂, NO₂, and combustion contaminants (defined as total PM in Rule 1020). This rule also limits combustion contaminants to ≤ 0.1 gr/scf.

The combustor is currently in compliance with this rule and no modifications to the equipment or method of operation are proposed or expected that would affect compliance. Therefore, continued compliance with this rule is expected.

Rule 4352 Solid Fuel Fired Boilers, Steam Generators, and Process Heaters

The purpose of this rule is to limit emissions of oxides of nitrogen (NO_x) and carbon monoxide (CO) from solid fuel fired boilers, steam generators and process heaters.

This rule applies to any boiler, steam generator or process heater fired on solid fuel. Heat may be supplied by liquid or gaseous fuels for start-ups, shutdowns, and during other flame stabilization periods, as deemed necessary by the owner/operator. The unit is subject to the rule. However, the administrative change authorized by this project has no effect on compliance status.

Continued compliance is expected.

Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO₂, on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the emission factors presented in Section VII, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = \frac{n RT}{P}$$

With:

N = moles SO₂

T (Standard Temperature) = 60°F = 520°R

P (Standard Pressure) = 14.7 psi

R (Universal Gas Constant) = $\frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}}$

$$\frac{0.11 \text{ lb} - \text{SO}_x}{\text{MMBtu}} \times \frac{\text{MMBtu}}{8,578 \text{ dscf}} \times \frac{1 \text{ lb} \cdot \text{mol}}{64 \text{ lb}} \times \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}} \times \frac{520^\circ\text{R}}{14.7 \text{ psi}} \times \frac{1,000,000 \cdot \text{parts}}{\text{million}} = 76 \frac{\text{parts}}{\text{million}}$$

$$\text{Sulfur Concentration} = 76 \frac{\text{parts}}{\text{million}} < 2,000 \text{ ppmv (or 0.2\%)} < 2,000 \text{ ppmv (or 0.2\%)}$$

Compliance has been demonstrated using the highest SO_x emissions factor. The project is not expected to affect compliance status. Therefore, continued compliance with District Rule 4801 requirements is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District conducted a Risk Management Review and concludes that potential health impacts are less than significant.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue ATC S-883-3-20 in **Attachment IV**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-883-3	3020-08-AG	36 MW Cogeneration	\$10,215.00

Attachments

- I: Current PTOs
- II: Emissions Profiles
- III: Title V Compliance Certification
- IV: Draft ATCs

ATTACHMENT I
Current PTOs

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-883-3-19

EXPIRATION DATE: 01/31/2015

SECTION: SW28 **TOWNSHIP:** 27S **RANGE:** 27E

EQUIPMENT DESCRIPTION:

36.0 MW SOLID FUEL FIRED CIRCULATING BED COMBUSTOR COGENERATION UNIT INCLUDING 389 MMBTU/HR COMBUSTOR WITH LOW-TEMPERATURE STAGED COMBUSTION, AMMONIA INJECTION, AND PULVERIZED LIMESTONE INJECTION - POSO CREEK

PERMIT UNIT REQUIREMENTS

1. Permittee shall comply in full with all applicable Rule 4001 requirements (New Source Performance Standards, 40 CFR, Part 60, Subpart Da). [District Rule 4001] Federally Enforceable Through Title V Permit
2. Fuel collecting conveyor, two fuel crushers, two bucket elevators, two boiler feed conveyors, fuel feed bin, fuel feeder, and limestone conveyor/feeder shall be totally enclosed and ventilated to fabric collector. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operation shall be equipped with pneumatic limestone feed system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operation shall be equipped with primary and secondary combustion air blowers and air preheater with ash hopper. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operation shall be equipped with fabric collector with ash hopper serving fuel/limestone handling equipment and combustor. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The main exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples using approved EPA test methods. [District Rule 1081, 3.0; and PSD SJ 85-07] Federally Enforceable Through Title V Permit
7. Combustor shall be fired only on coal, petroleum coke, and/or biomass fuel. Propane or natural gas may be used as start-up fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Biomass introduced into the combustor shall not contain more than 2% by weight non-biomass material (plastics, metal, painted and preservative-treated wood, roofing material, fiberglass, etc.). [District Rule 4102]
9. At least once per quarter, operator shall collect a representative sample of the biomass material combusted and determine the weight percent of non-biomass material contained in that sample. Prior to collecting the first quarterly sample, operator shall submit a sampling plan to the District's compliance division for approval and shall follow the approved plan for all subsequent sampling, unless a revised plan is submitted and approved. [District Rules 1081 and 4102] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. "Biomass" means any organic material originating from plants including but not limited to products, by-products, residues 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 pruning, 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. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
11. 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 Rules 2201 and 4102] Federally Enforceable Through Title V Permit
12. No more than 836,520 lb (on a dry basis) of coal or coke fuel per day of no more than 4.0% by weight sulfur shall be introduced into the combustor. Two (2) pounds of biomass fuel of no more than 4.0% by weight sulfur may be substituted for one (1) pound of coal or coke fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
13. No more than 836,520 lb (on a dry basis) of solid fuel per day of no more than 4.0% by weight sulfur shall be introduced into the combustor. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
14. Limestone shall be capable of being directly injected into the combustor at a minimum of 0.042 lb limestone per lb of coal or coke introduced into the combustor, or 0.021 lb limestone per lb of biomass. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Peak temperature of combustor shall not exceed 1800 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Unit shall be operated as staged-combustion device by introducing sub-stoichiometric amount of combustion air in primary combustion zone. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Ash shall be removed from combustion system only by means authorized by ash handling and loadout operation (Permit No. S-883-4). [District Rule 2201] Federally Enforceable Through Title V Permit
18. Fuel feed and combustion air supply shall be automatically shutdown whenever fabric collector is shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Visible emissions shall not exceed 1/4 Ringelmann or equivalent 5% opacity at any time from fuel conveyors, crusher, feed bin, feeder, and fabric collector. [District Rule 2201] Federally Enforceable Through Title V Permit
20. All combustor exhaust gas shall pass through fabric collector prior to emission to atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Ammonia injection system shall be capable of delivering at least 2.0 moles of NH₃ for each mole of NO_x. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Soot-blowing shall not result in visible emissions of greater than Ringelmann 1 or equivalent 20% opacity, excluding uncombined water vapor, except for aggregate periods of less than 3 minutes in any one hour period. [District Rule 4101] Federally Enforceable Through Title V Permit
23. Start-up period is defined as the period of time, not exceeding 96 hours except during refractory curing when 192 hours are allowed, during which the combustor is heated to the operating temperature and pressure from a shutdown status. [District Rule 4352] Federally Enforceable Through Title V Permit
24. Shutdown period is defined as the period of time, not exceeding 12 hours, 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] 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.

25. "Non-operational (shutdown) status" is defined as a period when no combustion is occurring, and thus no combustion emissions are being generated or emitted, even though there is residual heat in the boiler. During "shutdown" status the unit shall be considered "boiler off-line" and no emission limits shall apply. "Shutdown" status ends with a startup. [District Rule 2201 5.7.1 and 5.7.2] Federally Enforceable Through Title V Permit
26. 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] Federally Enforceable Through Title V Permit
27. Particulate matter (PM-10) emission rate shall not exceed 4.31 lb/hr, 0.0111 lb/MMBtu and 0.007 grains/dscf. [District NSR Rule and 40 CFR 60.42 (a)(1)] Federally Enforceable Through Title V Permit
28. Except during periods of combustor start-up and shutdown, sulfur oxide emissions (as SO₂) shall not exceed 15.47 lb/hr and 0.0398 lb/MM Btu. [District Rule 2201 and 40 CFR 60.43 (a)(2)] Federally Enforceable Through Title V Permit
29. Except during periods of startup or shutdown, sulfur dioxide emissions shall not exceed 30% of the potential combustion concentration (70% reduction in potential emissions of sulfur dioxide based on sulfur analysis of "as-fired" fuel). [40CFR60 Subpart Da] Federally Enforceable Through Title V Permit
30. During periods of combustor start-up and shutdown, sulfur oxide emissions (as SO₂) shall not exceed 0.11 lb/MMBtu, calculated on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Sulfur oxide emissions (as SO₂) shall not exceed the following quarterly amounts: 1st Qtr., 33,415 lb; 2nd Qtr., 33,786 lb; 3rd Qtr., 34,158 lb; and 4th Qtr., 34,158 lb. [District Rule 2201 and 40 CFR 60.43Da] Federally Enforceable Through Title V Permit
32. Except during periods of combustor start-up and shutdown, nitrogen oxides emissions (as NO₂) shall not exceed 38.90 lb/hr and 0.1000 lb/MMBtu, as calculated on a daily basis. [District Rule 2201 and 40 CFR 60.42 (a)(1), (2)] Federally Enforceable Through Title V Permit
33. During periods of combustor start-up and shutdown, nitrogen oxide emissions (as NO₂) shall not exceed 0.20 lb/MMBtu, calculated on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Nitrogen oxide emissions (as NO₂) shall not exceed the following quarterly amounts: 1st Qtr., 84,024 lb; 2nd Qtr., 84,958 lb; 3rd Qtr., 85,891 lb; and 4th Qtr., 85,891 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Volatile organic compound (VOC) emission rate shall not exceed 6.03 lb/hr and 0.0155 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
36. Carbon monoxide (CO) emission rate shall not exceed 105.10 lb/hr (3-hour average) and 0.2701 lb/MMBtu. [District Rule 2201 & PSD SJ 85-07] Federally Enforceable Through Title V Permit
37. Performance testing shall be conducted annually for NO_x, SO_x, CO, VOCs, and PM(10) at steady-state steam production rate of at least ninety (90) percent of 305,000 pounds per hour using the following test methods; for NO_x EPA Methods 1-4 and 7 or ARB Method 100; for SO_x EPA Methods 1-4 and 8 or ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for VOCs EPA Method 25 or 18; and for PM(10) EPA Method 201A in combination with EPA Method 202 or any other test methods and procedures approved by the District. [District Rules 4352, 6.4 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
38. Performance testing shall be conducted annually for NO_x, SO_x, CO, VOCs, and PM(10) at the maximum operating capacity using following test methods; for NO_x EPA Methods 1-4 and 7 or ARB Method 100; for SO_x EPA Methods 1-4 and 8 or ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for VOCs EPA Method 25 or 18; and for PM(10) EPA Method 201A in combination with EPA Method 202. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
39. The District and EPA must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1 & PSD SJ 85-07] 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.

40. Performance testing shall be witnessed or authorized District personnel and EPA. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3; 40 CFR 60.51Da (a) & PSD SJ 85-07] Federally Enforceable Through Title V Permit
41. Quarterly, start-up, and shutdown NOx and SOx emissions shall be measured by maintaining CEM, fuel use and fuel Btu content records, and such records shall be made available for District inspection upon request. [District Rule 1070, 4.0] Federally Enforceable Through Title V Permit
42. Permittee shall maintain an operating log containing type and quantity of fuel used and higher heating value of such fuels on daily basis. [District Rules 2201 and 4352, 6.2; PSD SJ 85-07] Federally Enforceable Through Title V Permit
43. All wells producing from strata steamed by this unit shall be connected to a District approved emissions control system, have District approved closed casing vents, or be District approved uncontrolled cyclic wells. [District Rule 2201] Federally Enforceable Through Title V Permit
44. Sulfur fuel of the each type of fuel shall be measured and recorded on monthly basis using current ASTM Methods or shall be certified by supplier for each shipment. [District Rule 2520, 9.3.2; 40 CFR 60.51Da (a) & PSD SJ 85-07] Federally Enforceable Through Title V Permit
45. Operator shall install, operate, and maintain in calibration a system which continuously measures and records control system operating parameters; elapsed time of operation; and exhaust gas opacity, NOx, SO2, and O2 (or CO) concentrations. [District Rules 2201 and 1080; 40 CFR 60.49Da(b); & PSD SJ 85-07] Federally Enforceable Through Title V Permit
46. The continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; 40 CFR 60, Appendix F; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5; and PSD SJ 85-07] Federally Enforceable Through Title V Permit
47. Operator shall install, operate, and maintain in calibration a system which continuously measures and records stack gas volumetric flow rates meeting the performance specifications of 40 CFR Part 52, Appendix E. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
48. 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, 7.2] Federally Enforceable Through Title V Permit
49. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEMs that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3; 40 CFR 60.52Da and PSD SJ 85-07] Federally Enforceable Through Title V Permit
50. The permittee shall maintain hourly, daily, and 30-day rolling average records of NOx and SOx emissions and of the percentage SOx reduction. [40 CFR 60.48Da (f), (g), 60.43Da (a), 60.51Da (b)] Federally Enforceable Through Title V Permit
51. The permittee shall obtain emission data from the CEMS for at least 22 out of 30 successive boiler operating days for compliance determination. If this minimum data requirement can not be met with the CEMS, the permittee shall supplement the emission data with other monitoring systems approved by the APCO or with the reference methods and procedures described in 40 CFR 60.49(h). [40 CFR 60.49Da(f)] Federally Enforceable Through Title V Permit
52. Permittee shall submit a CEMs written report for each calendar quarter to the District and to EPA. The report is due on the 30th day following the end of the calendar quarter. [District Rule 1080, 8.0; 40 CFR 60.51Da (a); and PSD SJ 85-07] 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.

53. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 2520, 9.5.1; Rule 1080, 8.0 and PSD SJ 85-07] Federally Enforceable Through Title V Permit
54. Any violation of emission standards, as indicated by the CEM, shall be reported by the operator to the APCO within 96 hours. Excess emissions shall be defined as any three-hour period during which emissions of SO_x or NO_x as measured by CEM system exceeds the SO_x and NO_x maximum emission limits set forth for each the pollutants in this permit. [District Rule 1080, 9.0; and PSD SJ 85-07] Federally Enforceable Through Title V Permit
55. Operator shall notify the District no later than one hour after the detection of a breakdown of the CEM unless the owner or operator demonstrates to the APCO's satisfaction that a longer noticing period was necessary. The operator shall inform the District of the intent to shut down the CEM at least 24 hours prior to the event. [District Rules 1080 and 1100 and 40 CFR 64] Federally Enforceable Through Title V Permit
56. Permittee shall not discharge or cause the discharge into the atmosphere SO₂ in excess of the more stringent of 14.0 lb/hr or 20 ppm at 3% O₂ (3-hour average) from stack venting from the combustion unit except during periods of startup and shutdown. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
57. Permittee shall not discharge or cause the discharge into the atmosphere NO_x in excess of the more stringent of 38.9 lb/hr or 78 ppm at 3% O₂ (3-hour average) from stack venting from the combustion unit except during periods of startup and shutdown. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
58. During startup or shutdown, permittee shall not discharge or cause the discharge into the atmosphere SO₂ in excess of 0.11 lb/MMBtu averaged over a 24-hour period. [PSD ATC SJ 85-07] Federally Enforceable Through Title V Permit
59. During startup and shutdown, permittee shall not discharge or cause the discharge into the atmosphere NO_x in excess of 0.20 lb/MMBtu averaged over a 24-hour period. [PSD ATC SJ 85-07] Federally Enforceable Through Title V Permit
60. Fabric collection system shall be completely inspected annually while in operation for evidence of particulate matter breakthrough and shall be repaired as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
61. Fabric collector filters shall be completely inspected annually while not in operation for tears, scuffs, abrasives or holes which might interfere with PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
62. Records of fabric collector filter maintenance, inspection, and repairs shall be maintained. The records shall include identification of equipment, date of inspection, corrective action taken, and identification of individual performing inspection. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

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

ATTACHMENT II
Emissions Profiles

Permit #: S-883-3-20	Last Updated
Facility: RIO BRAVO POSO	02/16/2012 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	340764.0	135517.0	37756.0	920676.0	52816.0
Daily Emis. Limit (lb/Day)	1867.7	1027.2	103.4	2522.4	144.7
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

ATTACHMENT III
Title V Compliance Certification

San Joaquin Valley
Unified Air Pollution Control District

RECEIVED
DEC 15 2011
SJVAPCD
Southern Region

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

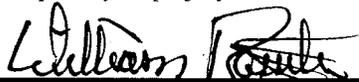
- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: Rio Bravo Poso	FACILITY ID: S - 883
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input checked="" type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Rio Bravo Poso	
3. Agent to the Owner: N/A	

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

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

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



Signature of Responsible Official

12-12-11

Date

William Rossiter

Name of Responsible Official (please print)

Director of Operations

Title of Responsible Official (please print)

ATTACHMENT IV
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-883-3-20

LEGAL OWNER OR OPERATOR: RIO BRAVO POSO
MAILING ADDRESS: 19100 VON KARMAN, STE 570
IRVINE, CA 92612

LOCATION: 16608 PORTERVILLE HWY
BAKERSFIELD, CA 93308

SECTION: SW28 TOWNSHIP: 27S RANGE: 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 36.0 MW SOLID FUEL FIRED CIRCULATING BED COMBUSTOR COGENERATION UNIT INCLUDING 389 MMBTU/HR COMBUSTOR WITH LOW-TEMPERATURE STAGED COMBUSTION, AMMONIA INJECTION, AND PULVERIZED LIMESTONE INJECTION - POSO CREEK: REMOVE CONDITION REQUIRING WELL VENT CONTROL

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Permittee shall comply in full with all applicable Rule 4001 requirements (New Source Performance Standards, 40 CFR, Part 60, Subpart Da). [District Rule 4001] Federally Enforceable Through Title V Permit
4. Fuel collecting conveyor, two fuel crushers, two bucket elevators, two boiler feed conveyors, fuel feed bin, fuel feeder, and limestone conveyor/feeder shall be totally enclosed and ventilated to fabric collector. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operation shall be equipped with pneumatic limestone feed system. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-883-3-20 : Apr 23 2012 3:10PM -- EDGEHLR : Joint Inspection NOT Required

6. Operation shall be equipped with primary and secondary combustion air blowers and air preheater with ash hopper. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Operation shall be equipped with fabric collector with ash hopper serving fuel/limestone handling equipment and combustor. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The main exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples using approved EPA test methods. [District Rule 1081, 3.0; and PSD SJ 85-07] Federally Enforceable Through Title V Permit
9. Combustor shall be fired only on coal, petroleum coke, and/or biomass fuel. Propane or natural gas may be used as start-up fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Biomass introduced into the combustor shall not contain more than 2% by weight non-biomass material (plastics, metal, painted and preservative-treated wood, roofing material, fiberglass, etc.). [District Rule 4102]
11. At least once per quarter, operator shall collect a representative sample of the biomass material combusted and determine the weight percent of non-biomass material contained in that sample. Prior to collecting the first quarterly sample, operator shall submit a sampling plan to the District's compliance division for approval and shall follow the approved plan for all subsequent sampling, unless a revised plan is submitted and approved. [District Rules 1081 and 4102] Federally Enforceable Through Title V Permit
12. "Biomass" means any organic material originating from plants including but not limited to products, by-products, residues 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 pruning, 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. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
13. 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 Rules 2201 and 4102] Federally Enforceable Through Title V Permit
14. No more than 836,520 lb (on a dry basis) of coal or coke fuel per day of no more than 4.0% by weight sulfur shall be introduced into the combustor. Two (2) pounds of biomass fuel of no more than 4.0% by weight sulfur may be substituted for one (1) pound of coal or coke fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
15. No more than 836,520 lb (on a dry basis) of solid fuel per day of no more than 4.0% by weight sulfur shall be introduced into the combustor. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
16. Limestone shall be capable of being directly injected into the combustor at a minimum of 0.042 lb limestone per lb of coal or coke introduced into the combustor, or 0.021 lb limestone per lb of biomass. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Peak temperature of combustor shall not exceed 1800 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Unit shall be operated as staged-combustion device by introducing sub-stoichiometric amount of combustion air in primary combustion zone. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Ash shall be removed from combustion system only by means authorized by ash handling and loadout operation (Permit No. S-883-4). [District Rule 2201] Federally Enforceable Through Title V Permit
20. Fuel feed and combustion air supply shall be automatically shutdown whenever fabric collector is shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Visible emissions shall not exceed 1/4 Ringelmann or equivalent 3% opacity at any time from fuel conveyors, crusher, feed bin, feeder, and fabric collector. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

22. All combustor exhaust gas shall pass through fabric collector prior to emission to atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Ammonia injection system shall be capable of delivering at least 2.0 moles of NH₃ for each mole of NO_x. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Soot-blowing shall not result in visible emissions of greater than Ringelmann 1 or equivalent 20% opacity, excluding uncombined water vapor, except for aggregate periods of less than 3 minutes in any one hour period. [District Rule 4101] Federally Enforceable Through Title V Permit
25. Start-up period is defined as the period of time, not exceeding 96 hours except during refractory curing when 192 hours are allowed, during which the combustor is heated to the operating temperature and pressure from a shutdown status. [District Rule 4352] Federally Enforceable Through Title V Permit
26. Shutdown period is defined as the period of time, not exceeding 12 hours, 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] Federally Enforceable Through Title V Permit
27. "Non-operational (shutdown) status" is defined as a period when no combustion is occurring, and thus no combustion emissions are being generated or emitted, even though there is residual heat in the boiler. During "shutdown" status the unit shall be considered "boiler off-line" and no emission limits shall apply. "Shutdown" status ends with a startup. [District Rule 2201 5.7.1 and 5.7.2] Federally Enforceable Through Title V Permit
28. 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] Federally Enforceable Through Title V Permit
29. Particulate matter (PM-10) emission rate shall not exceed 4.31 lb/hr, 0.0111 lb/MMBtu and 0.007 grains/dscf. [District NSR Rule and 40 CFR 60.42 (a)(1)] Federally Enforceable Through Title V Permit
30. Except during periods of combustor start-up and shutdown, sulfur oxide emissions (as SO₂) shall not exceed 15.47 lb/hr and 0.0398 lb/MM Btu. [District Rule 2201 and 40 CFR 60.43 (a)(2)] Federally Enforceable Through Title V Permit
31. Except during periods of startup or shutdown, sulfur dioxide emissions shall not exceed 30% of the potential combustion concentration (70% reduction in potential emissions of sulfur dioxide based on sulfur analysis of "as-fired" fuel). [40CFR60 Subpart Da] Federally Enforceable Through Title V Permit
32. During periods of combustor start-up and shutdown, sulfur oxide emissions (as SO₂) shall not exceed 0.11 lb/MMBtu, calculated on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Sulfur oxide emissions (as SO₂) shall not exceed the following quarterly amounts: 1st Qtr., 33,415 lb; 2nd Qtr., 33,786 lb; 3rd Qtr., 34,158 lb; and 4th Qtr., 34,158 lb. [District Rule 2201 and 40 CFR 60.43Da] Federally Enforceable Through Title V Permit
34. Except during periods of combustor start-up and shutdown, nitrogen oxides emissions (as NO₂) shall not exceed 38.90 lb/hr and 0.1000 lb/MMBtu, as calculated on a daily basis. [District Rule 2201 and 40 CFR 60.42 (a)(1), (2)] Federally Enforceable Through Title V Permit
35. During periods of combustor start-up and shutdown, nitrogen oxide emissions (as NO₂) shall not exceed 0.20 lb/MMBtu, calculated on a daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
36. Nitrogen oxide emissions (as NO₂) shall not exceed the following quarterly amounts: 1st Qtr., 84,024 lb; 2nd Qtr., 84,958 lb; 3rd Qtr., 85,891 lb; and 4th Qtr., 85,891 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
37. Volatile organic compound (VOC) emission rate shall not exceed 6.03 lb/hr and 0.0155 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
38. Carbon monoxide (CO) emission rate shall not exceed 105.10 lb/hr (3-hour average) and 0.2701 lb/MMBtu. [District Rule 2201 & PSD SJ 85-07] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

39. Performance testing shall be conducted annually for NO_x, SO_x, CO, VOCs, and PM(10) at steady-state steam production rate of at least ninety (90) percent of 305,000 pounds per hour using the following test methods; for NO_x EPA Methods 1-4 and 7 or ARB Method 100; for SO_x EPA Methods 1-4 and 8 or ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for VOCs EPA Method 25 or 18; and for PM(10) EPA Method 201A in combination with EPA Method 202 or any other test methods and procedures approved by the District. [District Rules 4352, 6.4 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
40. Performance testing shall be conducted annually for NO_x, SO_x, CO, VOCs, and PM(10) at the maximum operating capacity using following test methods; for NO_x EPA Methods 1-4 and 7 or ARB Method 100; for SO_x EPA Methods 1-4 and 8 or ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for VOCs EPA Method 25 or 18; and for PM(10) EPA Method 201A in combination with EPA Method 202. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
41. The District and EPA must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1 & PSD SJ 85-07] Federally Enforceable Through Title V Permit
42. Performance testing shall be witnessed or authorized District personnel and EPA. Test results must be submitted to the District within 60 day of performance testing. [District Rule 1081, 7.2, 7.3; 40 CFR 60.51Da (a) & PSD SJ 85-07] Federally Enforceable Through Title V Permit
43. Quarterly, start-up, and shutdown NO_x and SO_x emissions shall be measured by maintaining CEM, fuel use and fuel Btu content records, and such records shall be made available for District inspection upon request. [District Rule 1070, 4.0] Federally Enforceable Through Title V Permit
44. Permittee shall maintain an operating log containing type and quantity of fuel used and higher heating value of such fuels on daily basis. [District Rules 2201 and 4352, 6.2; PSD SJ 85-07] Federally Enforceable Through Title V Permit
45. Sulfur fuel of the each type of fuel shall be measured and recorded on monthly basis using current ASTM Methods or shall be certified by supplier for each shipment. [District Rule 2520, 9.3.2; 40 CFR 60.51Da (a) & PSD SJ 85-07] Federally Enforceable Through Title V Permit
46. Operator shall install, operate, and maintain in calibration a system which continuously measures and records control system operating parameters; elapsed time of operation; and exhaust gas opacity, NO_x, SO₂, and O₂ (or CO) concentrations. [District Rules 2201 and 1080; 40 CFR 60.49Da(b); & PSD SJ 85-07] Federally Enforceable Through Title V Permit
47. The continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; 40 CFR 60, Appendix F; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5; and PSD SJ 85-07] Federally Enforceable Through Title V Permit
48. Operator shall install, operate, and maintain in calibration a system which continuously measures and records stack gas volumetric flow rates meeting the performance specifications of 40 CFR Part 52, Appendix E. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
49. 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, 7.2] Federally Enforceable Through Title V Permit
50. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEMs that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3; 40 CFR 60.52Da and PSD SJ 85-07] Federally Enforceable Through Title V Permit
51. The permittee shall maintain hourly, daily, and 30-day rolling average records of NO_x and SO_x emissions and of the percentage SO_x reduction. [40 CFR 60.48Da (f), (g), 60.43Da (a), 60.51Da (b)] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

52. The permittee shall obtain emission data from the CEMS for at least 22 out of 30 successive boiler operating days for compliance determination. If this minimum data requirement can not be met with the CEMS, the permittee shall supplement the emission data with other monitoring systems approved by the APCO or with the reference methods and procedures described in 40 CFR 60.49(h). [40 CFR 60.49Da(f)] Federally Enforceable Through Title V Permit
53. Permittee shall submit a CEMs written report for each calendar quarter to the District and to EPA. The report is due on the 30th day following the end of the calendar quarter. [District Rule 1080, 8.0; 40 CFR 60.51Da (a); and PSD SJ 85-07] Federally Enforceable Through Title V Permit
54. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 2520, 9.5.1; Rule 1080, 8.0 and PSD SJ 85-07] Federally Enforceable Through Title V Permit
55. Any violation of emission standards, as indicated by the CEM, shall be reported by the operator to the APCO within 96 hours. Excess emissions shall be defined as any three-hour period during which emissions of SOx or NOx as measured by CEM system exceeds the SOx and NOx maximum emission limits set forth for each the pollutants in this permit. [District Rule 1080, 9.0; and PSD SJ 85-07] Federally Enforceable Through Title V Permit
56. Operator shall notify the District no later than one hour after the detection of a breakdown of the CEM unless the owner or operator demonstrates to the APCO's satisfaction that a longer noticing period was necessary. The operator shall inform the District of the intent to shut down the CEM at least 24 hours prior to the event. [District Rules 1080 and 1100 and 40 CFR 64] Federally Enforceable Through Title V Permit
57. Permittee shall not discharge or cause the discharge into the atmosphere SO₂ in excess of the more stringent of 14.0 lb/hr or 20 ppm at 3% O₂ (3-hour average) from stack venting from the combustion unit except during periods of startup and shutdown. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
58. Permittee shall not discharge or cause the discharge into the atmosphere NO_x in excess of the more stringent of 38.9 lb/hr or 78 ppm at 3% O₂ (3-hour average) from stack venting from the combustion unit except during periods of startup and shutdown. [PSD SJ 85-07] Federally Enforceable Through Title V Permit
59. During startup or shutdown, permittee shall not discharge or cause the discharge into the atmosphere SO₂ in excess of 0.11 lb/MMBtu averaged over a 24-hour period. [PSD ATC SJ 85-07] Federally Enforceable Through Title V Permit
60. During startup and shutdown, permittee shall not discharge or cause the discharge into the atmosphere NO_x in excess of 0.20 lb/MMBtu averaged over a 24-hour period. [PSD ATC SJ 85-07] Federally Enforceable Through Title V Permit
61. Fabric collection system shall be completely inspected annually while in operation for evidence of particulate matter breakthrough and shall be repaired as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
62. Fabric collector filters shall be completely inspected annually while not in operation for tears, scuffs, abrasives or holes which might interfere with PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
63. Records of fabric collector filter maintenance, inspection, and repairs shall be maintained. The records shall include identification of equipment, date of inspection, corrective action taken, and identification of individual performing inspection. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

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