



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

AUG 05 2013

Mr. Terry Maddox
Mt. Poso Cogeneration Company, LLC
P.O. Box 81256
Bakersfield, CA 93380-1256

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-91
Project # S-1132356**

Dear Mr. Maddox:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. Proposed modifications include revising monitoring, recordkeeping, and test methods.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authority to Construct with a Certificate of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. 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: Mike Tollstrup, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

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

Newspaper notice for publication in Bakersfield Californian and for posting on valleyair.org

**NOTICE OF PRELIMINARY DECISION
FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT AND
THE PROPOSED SIGNIFICANT MODIFICATION OF FEDERALLY
MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed significant modification of Mt. Poso Cogeneration Company, LLC at 36157 Famoso Road in Bakersfield, California. Proposed modifications include revising monitoring, recordkeeping, and test methods.

The District's analysis of the legal and factual basis for this proposed action, project #S-1132356, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and at any District office. There are no emission increases associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested, the District will hold a public hearing regarding issuance of this modification. For additional information, please contact the District at (661) 392-5500. Written comments on the proposed initial permit must be submitted by September 9, 2013 to **DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.**

San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Revise Monitoring, Recordkeeping, and Testing Conditions

Facility Name: Mt. Poso Cogeneration Company, LLC Date: July 8, 2013
Mailing Address: P.O. Box 81256 Engineer: Kris Rickards
Bakersfield, CA 93380 Lead Engineer: Allan Phillips *AP SUPER AQE*
Contact Person: Stu Welch
Telephone: 661-393-8891 JUN 10 2013
Fax: 661-393-6865
E-Mail: Welchs1@dteenergy.com
Application #(s): S-91-3-19
Project #: S-1132356
Deemed Complete: July 2, 2013

I. Proposal

Mt. Poso Cogeneration Company, LLC (MPCC) operates a 49.9 MW cogeneration plant fired on coal, petroleum coke, tire derived material, and biomass fuel that is incinerated in an atmospheric circulating fluidized bed combustor listed on permit number S-91-3. The combustor was previously authorized by Authority to Construct (ATC) S-91-3-12 to combust biomass.

MPCC has proposed modifying various monitoring, recordkeeping, and test method conditions listed on a previously issued ATC that authorized combustion of biomass fuel as follows:

- Remove the excess O₂ range condition (redundant of NO_x emission limit)
- Change the ammonia slip concentration compliance demonstration frequency from a 3 hour rolling average to annual source testing (consistent with other facilities of this type)
- Add EPA Method 6C for SO_x testing
- Remove NH₃ from the CEM condition since it will be tested annually during source testing, as proposed, and there is no standard for calibrating emissions monitors for ammonia

As indicated in section VIII below, the proposed modification does not constitute a NSR modification. Therefore, this project is not subject to District Rule 2201 and no calculations will be performed at this time.

Disposition of Outstanding ATCs:

ATCs S-91-3-15 and '3-18 authorize limecake injection, reduce permitted SO_x emissions, revise various monitoring conditions and will serve as the base documents (construction of biomass handling equipment is complete). Current PTO S-91-3-16 and ATCs S-91-3-15 and '3-18 are included in **Appendix B**.

MPCC received their Title V Permit on April 28, 2000. This modification can be classified as a Title V significant 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. MPCC must apply to administratively amend their Title V permit.

II. Applicable Rule

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention Of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99)) – Subpart Da - Standards of Performance for Electric Utility Steam Generation Units for Which Construction is Commenced After September 18, 1978
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
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 4305	Boilers, Steam Generators and Process Heaters – Phase II (8/21/03) Solid fueled boilers are exempt per §4.1.1
Rule 4306	Boilers, Steam Generators and Process Heaters – Phase III (10/16/08) Solid fueled boilers are exempt per §4.1.1
Rule 4320	Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr (10/16/08) Solid fueled boilers are exempt per §4.1.1
Rule 4351	Boilers, Steam Generators and Process Heaters – Phase I (8/21/03) Solid fueled boilers are exempt per §4.1.2
Rule 4352	Solid Fuel Fired Boilers, Steam Generators, and Process Heaters (12/15/2011)
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 36157 Famoso Road in 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

The 49.9 MW boiler is a fully circulating fluidized bed combustor manufactured by Pyropower. The unit has been in operation since 1989.

Circulating fluidized combustion conditions ensure maximum fuel residence time resulting in fuel burn out with minimal levels of CO and hydrocarbons. The combustor operates as a fully circulating fluidized bed and therefore does not experience detached plumes which may occur with bubbling bed combustors.

Ammonia and limestone/limecake injection are used to control NO_x and SO_x emissions, respectively. The ammonia injection system consists of two nozzles located at the inlet to each of the two cyclones (which collect bed material and ash). The temperature in this zone is approximately 1650°F. The boiler is equipped with a superheater and an economizer to achieve optimum efficiency in production of steam (of which over 90% drives a steam turbine to produce electricity and between 5% and 10% of the steam is diverted to a nearby thermally enhanced oil recovery operation). Cyclones followed by a baghouse are utilized for particulate control.

The proposed modifications to permit conditions will not affect the process or method of operation at the facility.

V. Equipment Listing

Pre-Project Equipment Description:

S-91-3-18: 49.9 MW COAL/PETROLEUM COKE/BIOMASS AND TIRE DERIVED FUEL (TDF) FIRED ATMOSPHERIC CIRCULATING FLUIDIZED BED COMBUSTOR COGENERATION POWER PLANT

Proposed Modification:

S-91-3-19: MODIFICATION OF 49.9 MW COAL/PETROLEUM COKE/BIOMASS AND TIRE DERIVED FUEL (TDF) FIRED ATMOSPHERIC CIRCULATING FLUIDIZED BED COMBUSTOR COGENERATION POWER PLANT: REVISING MONITORING, RECORDKEEPING AND TESTING CONDITIONS

Post Project Equipment Description:

S-91-3-19: 49.9 MW COAL/PETROLEUM COKE/BIOMASS AND TIRE DERIVED FUEL (TDF) FIRED ATMOSPHERIC CIRCULATING FLUIDIZED BED COMBUSTOR COGENERATION POWER PLANT

VI. Emission Control Technology Evaluation

Emissions from the combustor include NO_x, SO_x, PM₁₀, CO, and VOC. Ammonia, limestone, and limecake are injected to control NO_x and SO_x emissions. Limestone and limecake injection results in 96+% control of SO_x.

PM₁₀ emissions are controlled by the cyclones downstream of the combustion zone followed by a baghouse. Control efficiency of PM₁₀ is expected to exceed 99%.

VII. General Calculations

This project does not meet the criteria for a Rule 2201 Modification, as defined in Section 3.25, and is not subject to the requirements of Rule 2201. Therefore, formal calculations for Rule 2201 are not necessary. Rule 4352 requires reduced NO_x emission limits effective January 1, 2013 as discussed in the Rule 4352 compliance discussion. The permit already restricts the boiler to a NO_x level below the Rule 4352 limit (as discussed in the Rule 4352 compliance section); therefore, no further reduction in NO_x emissions is required.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

As noted in Section VII of this engineering evaluation, the following proposed modifications do not constitute an NSR modification:

- Remove the excess O₂ range condition (redundant of NO_x emission limit)
- Change the ammonia slip concentration compliance demonstration frequency from a 3 hour rolling average to annual source testing (consistent with other facilities of this type)
- Add EPA Method 6C for SO_x testing
- Remove NH₃ from the CEM condition since it will be tested annually during source testing, as proposed, and there is no standard for calibrating emissions monitors for ammonia

Pursuant to section 3.25 of District Rule 2201, a modification is defined as:

- 3.25.1.1 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.

The proposed modifications do not result in a change in the hours of operation, production rate, or method of operation which necessitates a change in permit conditions.

- 3.25.1.2 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.

The proposed modification does not constitute a structural change or addition to an existing emissions unit which necessitates a change in permit conditions.

- 3.25.1.3 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.

The unit is currently subject to a daily emissions limitation.

- 3.25.1.4 Addition of any new emissions unit which is subject to District permitting requirements.

The proposed modification does not result in the addition of any new emissions units.

3.25.1.5 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.

The proposed modification does not exempt the unit from an applicable requirement to which the source would otherwise be subject.

As discussed above, the modification proposed to unit S-91-3 does not meet any of the criteria for a modification. Therefore, it is not subject to the requirements of District Rule 2201.

The following condition requiring a specific level of O₂, which minimizes NO_x emissions is redundant of the NO_x emissions limit and does not result in lower NO_x emissions. It will be removed:

- ~~Flue gas O₂ content shall be maintained at a level (3-5% or 2.5-8.0% when combusting biomass) which shows compliance with all emission limits and which minimizes NO_x emissions. [District Rule 2201]~~

The ammonia slip monitoring condition on a three hour rolling average is not required to ensure compliance and not consistent with other facilities of this type. The following change to annual source testing of this pollutant will be made:

- Ammonia breakthrough shall not result in ground level odors and exhaust stack concentrations, except during periods of start-up/shutdown, shall not exceed 20.0 ppmv based on ~~three-hour rolling average~~ an annual source test. [District Rule 4102]

MPCC has requested that EPA Method 6C for SO_x testing be added to the approved list of test methods. EPA Method 6C describes the stationary source continuous instrumental analyzer for measuring SO₂ emissions and will be added to the permit as follows:

- Performance testing at maximum operating capacity shall be conducted annually for NO_x, SO_x, CO, PM-10, PM, ~~and VOCs, and NH₃~~ 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 6 ~~or 6c~~ or ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for PM(10) EPA Method 201A in combination with EPA Method 202; for PM EPA Methods 1-4 and 5; ~~and for VOCs EPA Method 25 or 18; and for NH₃ BAAQMD ST1B~~. [District Rules 2410, 2520, and 4352, ~~and PSD-ATC SJ-86-09~~]

NH₃ is removed from the CEM condition since it will be tested annually during source testing, as proposed, and there is no standard for calibrating emissions monitors for ammonia:

- Operator shall operate and maintain in calibration a system which continuously measures and records control system operating parameters; elapsed time of operation; exhaust gas Opacity, NO_x, SO₂, ~~and CO, and NH₃~~ concentrations. [District Rules 1080, 4.0, ~~and 2201~~, and 2410PSD-ATC-SJ ~~86-09~~]

Define the averaging periods as they are defined in Rule 4352 as follows:

- NO_x emissions shall not exceed 65 ppmv @ 3% O₂ at any time, except during startup and shutdown (as defined in ~~Rule 4352~~this permit), based on a block 24 hour (12 AM to 11:59 PM) averaging period. [District Rule 4352, 5.1]

- Except during periods of startup and shutdown (as defined in Rule 4352) the emission rate of carbon monoxide shall not exceed 183 ppmv @ 3% O₂. Compliance with the carbon monoxide emission limit shall be based on a block (12 AM to 11:59 PM) 24 hour average. [District Rules 2201 and 4352]

Define startup and shutdown periods on the permit and remove the reference to them in Rule 4352 as follows:

- Emission rate of oxides of nitrogen as NO₂ shall not exceed 58.60 lb/hr, except during startup and shutdown as defined in ~~Rule 4352~~this permit, based on three hour rolling average. [District Rules 2201 and 2410]
- Emission rate of carbon monoxide shall not exceed 50.30 lb/hr, except during startup and shutdown as defined in ~~Rule 4352~~this permit, based on three hour rolling average. [District Rules 2201 and 2410]
- NO_x emissions shall not exceed 65 ppmv @ 3% O₂ at any time, except during startup and shutdown (as defined in ~~Rule 4352~~this permit), based on a block 24 hour (12 AM to 11:59 PM) averaging period. [District Rule 4352, 5.1]
- Except during periods of startup and shutdown (as defined in ~~Rule 4352~~this permit) the emission rate of carbon monoxide shall not exceed 183 ppmv @ 3% O₂. Compliance with the carbon monoxide emission limit shall be based on a block 24 hour average. [District Rules 2201 and 4352]
- 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 a unit is heated to the operating temperature and pressure from a shutdown status or hot standby condition. [District Rule 4352]
- 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, or to a hot standby condition. [District Rule 4352]

Rule 2410 Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO₂ (as a primary pollutant)
- SO₂ (as a primary pollutant)
- CO
- PM
- PM₁₀
- Greenhouse gases (GHG): CO₂, N₂O, and CH₄

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

In the case the facility is new source, the second step of the PSD evaluation is to determine if this new facility will become a new PSD major Source as a result of the project and if so, to determine which pollutant will result in a PSD significant increase.

The facility or the equipment evaluated under this project is listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

Potential emissions listed in the table below are copied from the District's Permit Administration System (in lieu of calculations that were not required or performed as discussed in Section VII):

PSD Major Source Determination (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Estimated Facility PE before Project Increase	257	NA ¹					
PSD Major Source Thresholds	100	100	100	100	100	100	100,000
PSD Major Source ? (Y/N)	Y	-	-	-	-	-	-

¹Since this project is an existing major source for at least one pollutant, detailed calculations of other pollutants is not required.

As shown above, the facility is an existing major source for PSD for at least one pollutant. Therefore the facility is an existing major source for PSD.

- **Project Location Relative to Class 1 Area**

As demonstrated in the "PSD Major Source Determination" Section above, the facility was determined to be a existing major source for PSD. Because the project is not located within 10 km of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

- **Significance of Project Emission Increase Determination**

- a. **Potential to Emit of attainment/unclassified pollutant for New or Modified Emission Units vs PSD Significant Emission Increase Thresholds**

As a screening tool, the potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if total potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

PSD Significant Emission Increase Determination: Potential to Emit (tons/year)						
	NO ₂	SO ₂	CO	PM	PM ₁₀	CO _{2e}
Total PE from New and Modified Units	232	59	186	34 ¹	34	>75,000 ²
PSD Significant Emission Increase Thresholds	40	40	100	25	15	75,000
PSD Significant Emission Increase?	Y	Y	Y	Y	Y	Y

¹For combustion sources all PM is assumed to be PM₁₀.

²Due to the size of the boiler it is assumed that CO_{2e} emissions are significantly higher than 75,000 tons/year.

As demonstrated above, because the project has a total potential to emit from all new and modified emission units greater than PSD significant emission increase thresholds, further analysis is required to determine if the project has an emission increase greater than the PSD significant emission increase thresholds, see step below.

b. Emission Increase for Each Attainment/Unclassified Pollutant with a Significant Emission Increase vs PSD Significant Emission Increase Thresholds

In this step, the emission increase for each attainment/unclassified pollutant is compared to the PSD significant emission increase thresholds, and if emission increase for each attainment pollutant is below this threshold, no further analysis is needed.

For new emissions units, the increase in emissions is equal to the PE₂ for each new unit included in this project.

For existing emissions units, the increase in emissions is calculated as follows:

$$\text{Emission Increase} = \text{PAE} - \text{BAE} - \text{UBC}$$

Where: PAE = Projected Actual Emissions, and
 BAE = Baseline Actual Emissions

Since this project does not result in an increase in design capacity or potential to emit, does not impact the ability of the emission unit to operate at a higher utilization rate, and does not result in an annual increase in actual emissions, it can be concluded that PAE = BAE; therefore no emission increase is expected.

The project's combined total emission increases are compared to the PSD significant emission increase thresholds in the following table.

PSD Significant Emission Increase Determination: Emission Increase (tons/year)						
	NO₂	SO₂	CO	PM	PM₁₀	CO_{2e}
Emission Increases (only)	0	0	0	0	0	0
PSD Significant Emission Increase Thresholds	40	40	100	25	15	75,000
PSD Significant Emission Increase?	N	N	N	N	N	N

As shown in the table above, the project emission increase, for all new and modified emission units, does not exceed any of the PSD significant emission increase thresholds. Therefore the project does not result in a PSD major modification due to a significant emission increase and no further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. A significant permit modification is defined as a “permit amendment that does not qualify as a minor permit modification or administrative amendment.”

Minor permit modifications do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions. The monitoring O₂ is proposed to be removed and the monitoring of ammonia is proposed to be revised from a 3-hour rolling average to an annual basis, which is a relaxation in monitoring conditions. As a result, the proposed project constitutes a Significant Modification to the Title V Permit.

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 shall not implement the changes requested until the final permit is issued.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. 40 CFR Part 60, Subpart Da applies to Industrial-Commercial-Industrial Steam Generators greater than 250 MMBtu/hr (post-9/18/78 construction, modification or, reconstruction)

40 CFR Part 60, Subpart A defines a modification as any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the

emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

The combustor is not newly constructed or reconstructed. Since the modification to the combustor permit will not result in the increase of air pollutants the requirements of these sections do not apply to the unit. Therefore, it continues to be subject to 40 CFR, Part 60, Subpart Da and no further discussion is required.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

40 CFR Part 63 Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Section 63.11193 states you are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195.

Section 63.2 defines area source as any stationary source of hazardous air pollutants that is not a major source as defined in this part. Section 63.2 defines major source as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

This facility is an area source as it is not a major source of hazardous air pollutants. Therefore, the boiler is subject to this subpart.

Section 63.11194(b) states an affected source is an existing source if you commenced construction or reconstruction of the affected source on or before June 4, 2010. The boiler commenced construction prior to June 4, 2010 and therefore, is an existing source.

Section 63.11196 states (a) If you own or operate an existing affected boiler, you must achieve compliance with the applicable provisions in this subpart as specified in paragraphs (a)(1) through (3) of this section.

- (1) If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management standard no later than March 21, 2012.
- (2) If the existing affected boiler is subject to emission limits, you must achieve compliance with the emission limits no later than March 21, 2014.
- (3) If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than March 21, 2014.

Section 63.11201 states (a) You must comply with each emission limit specified in Table 1 to this subpart that applies to your boiler. (b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets the requirements in Table 2 to this subpart satisfies the energy assessment portion of this requirement. (c) You must comply with each operating limit specified in Table 3 to this subpart that applies to your boiler. (d) These standards apply at all times.

The boiler is subject to a work practice or management practice standard of a tune-up. Therefore, the following condition will ensure compliance:

- March 21, 2012, and every two years thereafter, permittee shall conduct a performance tune-up of the boiler in accordance with 40 CFR 63.11223(b). Permittee shall submit a signed statement of the Notification of Compliance Status report that a tune-up of the boiler was completed. [40 CFR 63.11214(b)]

The boiler is an existing boiler and is not subject to emission limits, and therefore is not subject to Table 1 or 3. However, the boiler is subject to an energy assessment requirement. Therefore, the following condition will ensure compliance:

- By March 21, 2014, the permittee shall conduct a one-time energy assessment as described in 40 CFR 63, Subpart JJJJJJ, Table 2. Permittee shall submit a signed statement in the Notification of Compliance Status report that the energy assessment was completed, and shall submit the energy assessment report upon request. [40 CFR 63.11214(c)]

Section 63.11201 states (a) You must comply with each emission limit specified in Table 1 to this subpart that applies to your boiler. (b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets the requirements in Table 2 to this subpart satisfies the energy assessment portion of this requirement. (c) You must comply with each operating limit specified in Table 3 to this subpart that applies to your boiler. (d) These standards apply at all times.

As stated above, the boiler is not subject to an emission limit and therefore is not subject to Table 1 or 3. The above condition satisfies the energy assessment requirement.

Section 63.11205 states (a) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

The following condition will ensure compliance with this subpart:

- The baghouse 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. [40 CFR 63.11205(a) and 40 CFR 64]

Section 63.11223 states (a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a biennial performance tune-up according to paragraphs (b) of this section and keep records as required in §63.11225(c) to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. (b) You must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shut down, but you must inspect each burner at least once every 36 months). (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (3) Inspect the system controlling the air to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available. (5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). (6) Maintain onsite and submit, if requested by the Administrator, biennial report containing the information in paragraphs (b)(6)(i) through (iii) of this section. (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler. (ii) A description of any corrective actions taken as a part of the tune-up of the boiler. (iii) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler. (7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

The following condition will ensure compliance:

- By March 21, 2012, and every two years thereafter, permittee shall conduct a performance tune-up of the boiler in accordance with 40 CFR 63.11223(b). Permittee shall submit a signed statement of the Notification of Compliance Status report that a tune-up of the boiler was completed. [40 CFR 63.11214(b)]

Therefore, compliance with the requirements of the subpart is expected.

Rule 4101 Visible Emissions

Rule 4101 states that 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). The proposed modifications are not expected to jeopardize visible emissions compliance and based on past inspections of the facility, 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. The following condition will remain on the permit to ensure compliance with this rule:

- Emission rate of PM-10 shall not exceed 7.92 lb/hr and 0.012 lb/MMBtu. Particulate Matter (PM) emissions shall not exceed 0.01 gr/dscf @ 12% CO₂. [District Rules 2201, 4201, and 4301 and PSD ATC SJ 86-09]

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 following table summarizes the maximum lb/hr emissions limits of this rule:

District Rule 4301 Limits (lb/hr)			
Pollutant	NO ₂	Total PM	SO ₂
ATC S-91-3	140.00	7.92	25.00
Rule Limit (lb/hr)	140	10	200

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.

Table 5.1 limits from this rule are as follows:

District Rule 4352 Limits (ppmv @3% O ₂)		
Pollutant	NO _x	CO
Biomass	90	400
All Other Fuel	65	400
Current Limit	65	183

Continued compliance with Rule 4352 is expected.

Rule 4801 Sulfur Compounds

Rule 4801 requires that sulfur compound emissions (as SO₂) shall not exceed 0.2% by volume (or 2,000 ppmv). Using the ideal gas equation, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = (n \times R \times T) \div P$$

n = moles SO₂

T (standard temperature) = 60 °F or 520 °R

$$R \text{ (universal gas constant)} = \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot \text{°R}}$$

$$\frac{0.04 \text{ lb} \cdot \text{SO}_x}{\text{MMBtu}} \times \frac{\text{MMBtu}}{8,578 \text{ ft}^3} \times \frac{1 \text{ lb} \cdot \text{mol}}{64 \text{ lb} \cdot \text{S}} \times \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot \text{°R}} \times \frac{520 \text{ °R}}{14.7 \text{ psi}} \times \frac{1,000,000 \cdot \text{parts}}{\text{million}} = 27.7 \frac{\text{parts} \cdot \text{SO}_x}{\text{million}}$$

Since 27.7 ppmv is ≤ 2,000 ppmv, compliance with Rule 4801 is expected. The following condition will remain on the ATC to ensure compliance:

- SO_x emissions (as SO₂) shall not exceed 0.04 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rules 2201 and 4801]

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) is exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District has determined that potential emission increases would have a less than significant health impact on sensitive receptors.

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. Pending a successful EPA review period, issue ATC S-91-3-19 subject to the permit conditions on the attached draft ATC in **Appendix A**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-91-3-19	3020-08A-G	49,900 kW built before 3/17/99	\$10,215.00

Appendices

- A: Draft ATC
- B: Current PTO and Outstanding ATCs
- C: Compliance Certification

Appendix A

Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-91-3-19

LEGAL OWNER OR OPERATOR: MT POSO COGENERATION COMPANY, LLC
MAILING ADDRESS: P.O. BOX 81256
BAKERSFIELD, CA 93380-1256

LOCATION: HEAVY OIL CENTRAL
CA

SECTION: 18 TOWNSHIP: 27S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 49.9 MW COAL/PETROLEUM COKE/BIOMASS AND TIRE DERIVED FUEL (TDF) FIRED ATMOSPHERIC CIRCULATING FLUIDIZED BED COMBUSTOR COGENERATION POWER PLANT: REVISING MONITORING, RECORDKEEPING AND TESTING CONDITIONS

CONDITIONS

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Authority to Construct (ATC) S-91-3-18 shall be implemented prior to or concurrently with this ATC [District Rule 2201] Federally Enforceable Through Title V Permit
3. 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]
4. 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]
5. Operation shall include Ahlstrom Pyroflow atmospheric fluidized bed combustor incorporating low temperature staged combustion and ammonia injection (NOx control), and pulverized limestone/lime cake injection (SOx control). [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

DRAFT

DAVID WARNER, Director of Permit Services

S-91-3-19: Jul 10 2013 9:28AM - RICKARDK : Joint Inspection NOT Required

6. Operation shall include enclosed gravimetric belt weigh feeder discharging to fuel feed chutes and enclosed limestone/lime cake volumetric feeder with air lock system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Operation shall include four natural gas fired 62 MMBtu/hr Coen startup burners and two natural gas fired 23 MMBtu/hr Coen duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operation shall include two fly ash recycle cyclones, air heater with two fly ash hoppers, economizer and ash handling system. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Operation shall include 1250 HP primary combustion air fan, 500 HP secondary combustion air fan and 150 HP multi-staged centrifugal fluidizing air blower. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Operation shall include 12 compartment fabric collector with 1750 HP induced draft fan, reverse air cleaning mechanism and 100 HP reverse air fan. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fabric collector shall include a minimum of 134,230 sq. ft. of filtering area, fly ash hopper, with 8 KW electric heater, d.p. transmitter, capacitance type high level detector, vibrator and aeration pad. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Fly ash collected at fabric collector shall be discharged only to fly ash handling system. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Ash shall only be removed from combustion system by means authorized to Permit to Operate S-91-4. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operation shall be equipped with the following indicators: combustion temperature, combustion air system pressure, primary and secondary fan air flow, ammonia injection flow, fuel use rate and limestone/lime cake use rate. The permittee shall operate and maintain instrumentation to continuously monitor and record levels of combustion temperature, consumption of fuel, ammonia, and limestone/lime cake in boiler. [District Rules 2201 and 2410] Federally Enforceable Through Title V Permit
15. Each fabric collector compartment shall be equipped with access door and differential pressure indicator. The differential pressure across each compartment shall be maintained between 2" and 9.5" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Fabric collector inlet shall be equipped with operational pressure indicator and high temperature alarm which activates prior to high temperature failure. The pressure shall not exceed negative 35" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Fabric collector shall be equipped with automatic cleaning mechanism. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All combustor exhaust gas shall pass through fabric collector prior to being emitted to atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Unit shall be operated as a low temperature combustor with a peak temperature range of 1550 to 1750 deg F. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Unit shall be operated as a staged combustion device by introducing a substoichiometric amount of combustion air into primary combustion zone. [District Rule 2201] Federally Enforceable Through Title V Permit
21. There shall be no provisions for introduction of air into combustion system or exhaust system downstream of the combustion chamber except for air utilized for cyclone center pipe supports and cooling. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The sum of the combined coal, coke, and tire derived fuel throughput and 1/2 times the throughput of biomass introduced into the combustor shall not exceed 1,400,000 lbs/day and 58,333 lbs/hr (on a dry basis). Solid fuel introduced into the combustor shall contain no more than 4.0% by weight sulfur. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
23. Of the total fuel introduced into the combustor, no more than 54,000 lbs per day (on a dry basis) shall be TDF. [District Rule 2201] Federally Enforceable Through Title V Permit

24. "Biomass" means any organic material not derived from fossil fuels, such as agricultural crop residue, orchard prunings and removal, stone fruit pits, nut shells, cotton gin trash, cotton stalks, vineyard prunings, cull logs, eucalyptus logs, bark, lawn, yard and garden clippings, leaves, silvicultural residue, tree and brush pruning, wood and wood chips, and wood waste. Biomass does not include material containing sewage sludge or industrial, hazardous, radioactive or municipal solid waste. [District Rules 2201 and Rule 4102] Federally Enforceable Through Title V Permit
25. 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
26. Limestone/lime cake shall be introduced into combustor at a rate sufficient to maintain a minimum Ca/S molar ratio of 3, except when combusting biomass and/or natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Ammonia breakthrough shall not result in ground level odors and exhaust stack concentrations, except during periods of start-up/shutdown, shall not exceed 20.0 ppmv based on an annual source test. [District Rule 4102]
28. Emissions rates from boiler exhaust shall not exceed the following: PM10: 190.0 lb/day, VOC: 149.9 lb/day, NOx (as NO2): 1406.4 lb/day nor 463,084 lbs/yr, SOx (as SO2): 699.4 lb/day nor 118,113 lb/yr, or CO: 1207.2 lb/day nor 371,312 lb/yr. [District Rules 2201 and 4301] Federally Enforceable Through Title V Permit
29. Emission rate of PM-10 shall not exceed 7.92 lb/hr and 0.012 lb/MMBtu. Particulate Matter (PM) emissions shall not exceed 0.01 gr/dscf @ 12% CO2. [District Rules 2201, 4201, and 4301 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
30. Emission rate of SOx (as SO2) shall not exceed 25.0 lb/hr, based on three hour rolling average. [District Rules 2201 and 4301 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
31. SOx emissions (as SO2) shall not exceed 0.04 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rules 2201 and 4801 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
32. Emission rate of oxides of nitrogen as NO2 shall not exceed 58.60 lb/hr, except during startup and shutdown as defined in this permit, based on three hour rolling average. [District Rules 2201 and 2410] Federally Enforceable Through Title V Permit
33. NOx emissions shall not exceed 0.092 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
34. Emission rate of volatile organic compounds shall not exceed 6.25 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Emission rate of carbon monoxide shall not exceed 50.30 lb/hr, except during startup and shutdown as defined in this permit, based on three hour rolling average. [District Rules 2201 and 2410] Federally Enforceable Through Title V Permit
36. NOx emissions shall not exceed 65 ppmv @ 3% O2 at any time, except during startup and shutdown (as defined in this permit), based on a block 24 hour (12 AM to 11:59 PM) averaging period. [District Rule 4352, 5.1] Federally Enforceable Through Title V Permit
37. Except during periods of startup and shutdown (as defined in this permit) the emission rate of carbon monoxide shall not exceed 183 ppmv @ 3% O2. Compliance with the carbon monoxide emission limit shall be based on a block 24 hour (12 AM to 11:59 PM) average. [District Rules 2201 and 4352] Federally Enforceable Through Title V Permit
38. Nitrogen oxides (NOx) shall not exceed 140 lb/hr, calculated as NO2. [District Rule 4301] Federally Enforceable Through Title V Permit
39. 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 a unit is heated to the operating temperature and pressure from a shutdown status or hot standby condition. [District Rule 4352] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

40. 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, or to a hot standby condition. [District Rule 4352] Federally Enforceable Through Title V Permit
41. 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] Federally Enforceable Through Title V Permit
42. Performance testing at maximum operating capacity shall be conducted annually for NO_x, SO_x, CO, PM-10, PM, VOCs, and NH₃ 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 6 or 6C ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for PM(10) EPA Method 201A in combination with EPA Method 202; for PM EPA Methods 1-4 and 5; for VOCs EPA Method 25 or 18; and for NH₃ BAAQMD ST1B. [District Rules 2410, 2520, and 4352] Federally Enforceable Through Title V Permit
43. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
44. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
45. Permittee shall report the following emission exceedences to the District: SO₂, NO_x, and CO hourly emission rates on a three hour rolling average and daily emissions limitations. Excess emissions shall be defined as any consecutive 3-hour period during which the average emissions for CO, SO₂, and NO_x as measured by continuous monitoring system, exceeds the mass or concentration limit set for each pollutant. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
46. At the time of performance testing fuel being burned shall be tested for sulfur, nitrogen, ash content and heating value. [District Rule 2201] Federally Enforceable Through Title V Permit
47. Operator shall operate and maintain in calibration a system which continuously measures and records control system operating parameters; elapsed time of operation; exhaust gas Opacity, NO_x, SO₂, and CO concentrations. [District Rules 1080, 4.0, 2201, and 2410] Federally Enforceable Through Title V Permit
48. 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
49. Operator shall 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
50. 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
51. 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 and PSD ATC SJ 86-09] 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit

DRAFT

CONDITIONS CONTINUE ON NEXT PAGE

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 Rules 1080, 8.0 and 2520, 9.6.1 and PSD ATC SJ 86-09] 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. [District Rule 1080, 9.0] 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. 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] Federally Enforceable Through Title V Permit
56. March 21, 2012, and every two years thereafter, permittee shall conduct a performance tune-up of the boiler in accordance with 40 CFR 63.11223(b). Permittee shall submit a signed statement of the Notification of Compliance Status report that a tune-up of the boiler was completed. [40 CFR 63.11214(b)] Federally Enforceable Through Title V Permit
57. By March 21, 2014, the permittee shall conduct a one-time energy assessment as described in 40 CFR 63, Subpart JJJJJ, Table 2. Permittee shall submit a signed statement in the Notification of Compliance Status report that the energy assessment was completed, and shall submit the energy assessment report upon request. [40 CFR 63.11214(c)] Federally Enforceable Through Title V Permit
58. The baghouse 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. [40 CFR 63.11205(a) and 40 CFR 64] Federally Enforceable Through Title V Permit
59. By March 21, 2012, and every two years thereafter, permittee shall conduct a performance tune-up of the boiler in accordance with 40 CFR 63.11223(b). Permittee shall submit a signed statement of the Notification of Compliance Status report that a tune-up of the boiler was completed. [40 CFR 63.11214(b)] Federally Enforceable Through Title V Permit
60. 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 2520, 9.4.2 and 4352, 6.2] Federally Enforceable Through Title V Permit
61. Sulfur content of each type of fuel shall be measured and recorded at least every calendar quarter using current ASTM Methods or shall be certified by supplier for each shipment. [District Rule 2520, 9.3.2 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
62. The differential pressure across each compartment of the fabric collectors shall be checked and the results recorded quarterly. If the differential pressure across each compartment of the fabric collectors is not between 2" and 9.5" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
63. The pressure at the fabric collector inlet shall be checked and the results recorded quarterly. If the pressure at the fabric collector inlet is greater than negative 35" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
64. 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
65. 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

DRAFT
CONDITIONS CONTINUE ON NEXT PAGE

66. 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, 9.4.2] Federally Enforceable Through Title V Permit
67. Permittee shall maintain monthly records of NO_x, SO_x, and CO to ensure that emissions limits on an annual rolling average are met. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

Appendix B

Current PTO and Outstanding ATCs

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-91-3-16

EXPIRATION DATE: 08/31/2016

SECTION: 18 TOWNSHIP: 27S RANGE: 28E

EQUIPMENT DESCRIPTION:

49.9 MW COAL/PETROLEUM COKE/BIOMASS AND TIRE DERIVED FUEL (TDF) FIRED ATMOSPHERIC CIRCULATING FLUIDIZED BED COMBUSTOR COGENERATION POWER PLANT

PERMIT UNIT REQUIREMENTS

1. 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]
2. 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]
3. Operation shall include Ahlstrom Pyroflow atmospheric fluidized bed combustor incorporating low temperature staged combustion and ammonia injection (NO_x control), and pulverized limestone injection (SO_x control). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operation shall include enclosed gravimetric belt weigh feeder discharging to fuel feed chutes and enclosed limestone volumetric feeder with air lock system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operation shall include four natural gas fired 62 MMBtu/hr Coen startup burners and two natural gas fired 23 MMBtu/hr Coen duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operation shall include two fly ash recycle cyclones, air heater with two fly ash hoppers, economizer and ash handling system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Operation shall include 1250 HP primary combustion air fan, 500 HP secondary combustion air fan and 150 HP multi-staged centrifugal fluidizing air blower. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operation shall include 12 compartment fabric collector with 1750 HP induced draft fan, reverse air cleaning mechanism and 100 HP reverse air fan. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Fabric collector shall include a minimum of 134,230 sq. ft. of filtering area, fly ash hopper, with 8 KW electric heater, d.p. transmitter, capacitance type high level detector, vibrator and aeration pad. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Fly ash collected at fabric collector shall be discharged only to fly ash handling system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ash shall only be removed from combustion system by means authorized to Permit to Operate S-91-4. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: MT POSO COGENERATION COMPANY, LLC

Location: HEAVY OIL CENTRAL, CA

S-91-3-16 - Jul 8 2013 4:55PM - RICKARDK

12. Operation shall be equipped with the following indicators: combustion temperature, combustion air system pressure, primary and secondary fan air flow, ammonia injection flow, fuel use rate and limestone use rate. The permittee shall operate and maintain instrumentation to continuously monitor and record levels of combustion temperature, consumption of fuel, ammonia, and limestone in boiler. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
13. Each fabric collector compartment shall be equipped with access door and differential pressure indicator. The differential pressure across each compartment shall be maintained between 2" and 9.5" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Fabric collector inlet shall be equipped with operational pressure indicator and high temperature alarm which activates prior to high temperature failure. The pressure shall not exceed negative 35" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Fabric collector shall be equipped with automatic cleaning mechanism. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All combustor exhaust gas shall pass through fabric collector prior to being emitted to atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Unit shall be operated as a low temperature combustor with a peak temperature range of 1550 to 1750 deg F. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Unit shall be operated as a staged combustion device by introducing a substoichiometric amount of combustion air into primary combustion zone. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Flue gas O₂ content shall be maintained at a level (3%-5%) which shows compliance with all emission limits and which minimizes NO_x emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
20. There shall be no provisions for introduction of air into combustion system or exhaust system downstream of the combustion chamber except for air utilized for cyclone center pipe supports and cooling. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Combustor shall be fired only on natural gas, coal, petroleum coke, biomass, tire derived fuel (TDF) or combinations thereof as allowed for by this permit. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
22. The sum of the combined coal, coke, and tire derived fuel throughput and 1/2 times the throughput of biomass introduced into the combustor shall not exceed 1,400,000 lbs/day and 58,333 lbs/hr (on a dry basis). Solid fuel introduced into the combustor shall contain no more than 4.0% by weight sulfur. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
23. Of the total fuel introduced into the combustor, no more than 154,000 lbs per day (on a dry basis) shall be TDF. [District Rule 2201] Federally Enforceable Through Title V Permit
24. A minimum of 0.035 lbm limestone/lbm of fuel shall be introduced into the combustor. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Limestone shall be introduced into combustor at a rate sufficient to maintain a minimum Ca/S molar ratio of 3. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Ammonia breakthrough shall not result in ground level odors and exhaust stack concentrations, except during periods of start-up/shutdown, shall not exceed 20.0 ppmv based on three hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Emissions rates from boiler exhaust shall not exceed the following: PM₁₀: 190.0 lb/day, VOC: 149.9 lb/day, NO_x (as NO₂): 1406.4 lb/day nor 463,084 lbs/yr, SO_x (as SO₂): 699.4 lb/day nor 209,016 lb/yr, and CO: 1207.2 lb/day nor 371,312 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Emission rate of PM-10 shall not exceed 7.92 lb/hr and 0.012 lb/MMBtu. Particulate Matter (PM) emissions shall not exceed 0.01 gr/dscf @ 12% CO₂. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit

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

29. Emission rate of SO_x (as SO₂) shall not exceed 25.0 lb/hr, based on three hour rolling average. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
30. SO_x emissions (as SO₂) shall not exceed 0.04 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
31. Emission rate of oxides of nitrogen as NO₂ shall not exceed 58.60 lb/hr, based on three hour rolling average. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
32. NO_x emissions shall not exceed 0.20 lb/MMBtu at any time, except during startup and shutdown (as defined in Rule 4352), based on a 24 hour averaging period. [District Rule 4352, 5.1] Federally Enforceable Through Title V Permit
33. NO_x emissions shall not exceed 0.092 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
34. Emission rate of volatile organic compounds shall not exceed 6.25 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Emission rate of carbon monoxide shall not exceed 50.30 lb/hr based on three hour rolling average. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
36. Except during periods of startup and shutdown (as defined in Rule 4352), when fired on coal, petroleum coke, or TDF the emission rate of carbon monoxide shall not exceed 400 ppmv @ 3% O₂. Except during periods of startup and shutdown (as defined in Rule 4352), on any calendar day when at least 50% by weight biomass is fired the emission rate of carbon monoxide shall not exceed 183 ppmv @ 3% O₂. Compliance with the carbon monoxide emission limit shall be based on a based on a block 24 hour average. [District Rules 2201 and 4352] Federally Enforceable Through Title V Permit
37. 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] Federally Enforceable Through Title V Permit
38. Performance testing at maximum operating capacity shall be conducted annually for NO_x, SO_x, CO, PM-10, PM, and VOCs 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 6 or ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for PM(10) EPA Method 201A in combination with EPA Method 202; for PM EPA Methods 1-4 and 5; and for VOCs EPA Method 25 or 18. [District Rule 4352, 6.4; District Rule 2520, 9.4.2; PSD ATC SJ 86-09] 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
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 & PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
41. Permittee shall report the following emission exceedences to the District: SO₂, NO_x, and CO hourly emission rates on a three hour rolling average and daily emissions limitations. Excess emissions shall be defined as any consecutive 3-hour period during which the average emissions for CO, SO₂, and NO_x as measured by continuous monitoring system, exceeds the mass or concentration limit set for each pollutant. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
42. At the time of performance testing fuel being burned shall be tested for sulfur, nitrogen, ash content and heating value. [District Rule 2201] Federally Enforceable Through Title V Permit
43. Operator shall operate and maintain in calibration a system which continuously measures and records control system operating parameters; elapsed time of operation; exhaust gas Opacity, NO_x, SO₂, CO, and NH₃ concentrations. [District Rule 2201; District Rule 1080, 4.0; & PSD ATC SJ 86-09] 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. 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
45. Operator shall 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
46. 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
47. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
48. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
49. 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, 9.6.1; Rule 1080, 8.0; and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
50. Any violation of emission standards, as indicated by the CEM, shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
51. Operator shall notify the District no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the District of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit
52. Permittee shall maintain an operating log containing type and quantity of fuel used and higher heating value of such fuels on daily basis. [District Rule 2520, 9.4.2; District Rule 4352, 6.2] Federally Enforceable Through Title V Permit
53. Sulfur content of the each type of fuel shall be measured and recorded at least every calendar quarter using current ASTM Methods or shall be certified by supplier for each shipment. [District Rule 2520, 9.3.2 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
54. The differential pressure across each compartment of the fabric collectors shall be checked and the results recorded quarterly. If the differential pressure across each compartment of the fabric collectors is not between 2" and 9.5" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
55. The pressure at the fabric collector inlet shall be checked and the results recorded quarterly. If the pressure at the fabric collector inlet is greater than negative 35" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
56. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

57. 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
58. 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, 9.4.2] Federally Enforceable Through Title V Permit
59. Permittee shall maintain monthly records of NO_x, SO_x, and CO to ensure that emissions limits on an annual rolling average are met. [District Rule 2201]

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

Facility Name: MT POSO COGENERATION COMPANY, LLC

Location: HEAVY OIL CENTRAL, CA

S-91-3-16: Jul 8 2013 4:55PM - RICKARDX

AUTHORITY TO CONSTRUCT

PERMIT NO: S-91-3-15

ISSUANCE DATE: 01/31/2011

LEGAL OWNER OR OPERATOR: MT POSO COGENERATION COMPANY, LLC
MAILING ADDRESS: P.O. BOX 81256
BAKERSFIELD, CA 93380-1256

LOCATION: HEAVY OIL CENTRAL
CA

SECTION: 18 TOWNSHIP: 27S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 49.9 MW COAL/PETROLEUM COKE/BIOMASS AND TIRE DERIVED FUEL (TDF) FIRED ATMOSPHERIC CIRCULATING FLUIDIZED BED COMBUSTOR COGENERATION POWER PLANT: INCLUDE LIME CAKE INJECTION FOR SOX CONTROL AND LOWER SOX EMISSION RATE (RE-ISSUANCE OF S-91-3-14)

CONDITIONS

1. 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. 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. Authority to Construct (ATC) S-91-3-12 shall be implemented prior to or concurrently with this ATC [District Rule 2201]
4. Authority to Construct (ATC) S-91-3-14 shall be cancelled upon issuance of this ATC. [District Rule 2201]
5. 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]

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-91-3-15 - Jul 8 2013 4:55PM - RICKARDK : Joint Inspection Required with RICKARDK

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

6. 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]
7. Operation shall include Ahlstrom Pyroflow atmospheric fluidized bed combustor incorporating low temperature staged combustion and ammonia injection (NO_x control), and pulverized limestone/lime cake injection (SO_x control). [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operation shall include enclosed gravimetric belt weigh feeder discharging to fuel feed chutes and enclosed limestone/lime cake volumetric feeder with air lock system. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Operation shall include four natural gas fired 62 MMBtu/hr Coen startup burners and two natural gas fired 23 MMBtu/hr Coen duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Operation shall include two fly ash recycle cyclones, air heater with two fly ash hoppers, economizer and ash handling system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Operation shall include 1250 HP primary combustion air fan, 500 HP secondary combustion air fan and 150 HP multi-staged centrifugal fluidizing air blower. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Operation shall include 12 compartment fabric collector with 1750 HP induced draft fan, reverse air cleaning mechanism and 100 HP reverse air fan. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fabric collector shall include a minimum of 134,230 sq. ft. of filtering area, fly ash hopper, with 8 KW electric heater, d.p. transmitter, capacitance type high level detector, vibrator and aeration pad. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Fly ash collected at fabric collector shall be discharged only to fly ash handling system. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Ash shall only be removed from combustion system by means authorized to Permit to Operate S-91-4. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Operation shall be equipped with the following indicators: combustion temperature, combustion air system pressure, primary and secondary fan air flow, ammonia injection flow, fuel use rate and limestone use rate. The permittee shall operate and maintain instrumentation to continuously monitor and record levels of combustion temperature, consumption of fuel, ammonia, and limestone in boiler. [PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
17. Operation shall be equipped with the following indicators: combustion temperature, combustion air system pressure, primary and secondary fan air flow, ammonia injection flow, fuel use rate and limestone/lime cake use rate. The permittee shall operate and maintain instrumentation to continuously monitor and record levels of combustion temperature, consumption of fuel, ammonia, and limestone/lime cake in boiler. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Each fabric collector compartment shall be equipped with access door and differential pressure indicator. The differential pressure across each compartment shall be maintained between 2" and 9.5" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Fabric collector inlet shall be equipped with operational pressure indicator and high temperature alarm which activates prior to high temperature failure. The pressure shall not exceed negative 35" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Fabric collector shall be equipped with automatic cleaning mechanism. [District Rule 2201] Federally Enforceable Through Title V Permit
21. All combustor exhaust gas shall pass through fabric collector prior to being emitted to atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

22. Unit shall be operated as a low temperature combustor with a peak temperature range of 1550 to 1750 deg F. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Unit shall be operated as a staged combustion device by introducing a substoichiometric amount of combustion air into primary combustion zone. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Flue gas O₂ content shall be maintained at a level (3%-5%) which shows compliance with all emission limits and which minimizes NO_x emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
25. There shall be no provisions for introduction of air into combustion system or exhaust system downstream of the combustion chamber except for air utilized for cyclone center pipe supports and cooling. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Combustor shall be fired only on natural gas, coal, petroleum coke, biomass, tire derived fuel (TDF) or combinations thereof as allowed for by this permit. [PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
27. The sum of the combined coal, coke, and tire derived fuel throughput and 1/2 times the throughput of biomass introduced into the combustor shall not exceed 1,400,000 lbs/day and 58,333 lbs/hr (on a dry basis). Solid fuel introduced into the combustor shall contain no more than 4.0% by weight sulfur. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
28. Of the total fuel introduced into the combustor, no more than 154,000 lbs per day (on a dry basis) shall be TDF. [District Rule 2201] Federally Enforceable Through Title V Permit
29. "Biomass" means any organic material not derived from fossil fuels, such as agricultural crop residue, orchard prunings and removal, stone fruit pits, nut shells, cotton gin trash, cotton stalks, vineyard prunings, cull logs, eucalyptus logs, bark, lawn, yard and garden clippings, leaves, silvicultural residue, tree and brush pruning, wood and wood chips, and wood waste. Biomass does not include material containing sewage sludge or industrial, hazardous, radioactive or municipal solid waste. [District Rules 2201 and Rule 4102] Federally Enforceable Through Title V Permit
30. 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
31. Limestone/lime cake shall be introduced into combustor at a rate sufficient to maintain a minimum Ca/S molar ratio of 3. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Ammonia breakthrough shall not result in ground level odors and exhaust stack concentrations, except during periods of start-up/shutdown, shall not exceed 20.0 ppmv based on three hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Emissions rates from boiler exhaust shall not exceed the following: PM₁₀: 190.0 lb/day, VOC: 149.9 lb/day, NO_x (as NO₂): 1406.4 lb/day nor 463,084 lbs/yr, SO_x (as SO₂): 699.4 lb/day nor 118,113 lb/yr, or CO: 1207.2 lb/day nor 371,312 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Emission rate of PM-10 shall not exceed 7.92 lb/hr and 0.012 lb/MMBtu. Particulate Matter (PM) emissions shall not exceed 0.01 gr/dscf @ 12% CO₂. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
35. Emission rate of SO_x (as SO₂) shall not exceed 25.0 lb/hr, based on three hour rolling average. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
36. SO_x emissions (as SO₂) shall not exceed 0.04 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rules 2201 and 4801 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
37. Emission rate of oxides of nitrogen as NO₂ shall not exceed 58.60 lb/hr, based on three hour rolling average. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
38. NO_x emissions shall not exceed 115 ppmv at any time, except during startup and shutdown (as defined in Rule 4352), based on a 24 hour averaging period. [District Rule 4352, 5.1] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

39. NO_x emissions shall not exceed 0.092 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
40. Emission rate of volatile organic compounds shall not exceed 6.25 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Emission rate of carbon monoxide shall not exceed 50.30 lb/hr based on three hour rolling average. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
42. Except during periods of startup and shutdown (as defined in Rule 4352) the emission rate of carbon monoxide shall not exceed 183 ppmv @ 3% O₂. Compliance with the carbon monoxide emission limit shall be based on a block 24 hour average. [District Rules 2201 and 4352] Federally Enforceable Through Title V Permit
43. 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] Federally Enforceable Through Title V Permit
44. Performance testing at maximum operating capacity shall be conducted annually for NO_x, SO_x, CO, PM-10, PM, and VOCs 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 6 or ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for PM(10) EPA Method 201A in combination with EPA Method 202; for PM EPA Methods 1-4 and 5; and for VOCs EPA Method 25 or 18. [District Rule 4352, 6.4; District Rule 2520, 9.4.2; PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
45. 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
46. 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 & PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
47. Permittee shall report the following emission exceedences to the District: SO₂, NO_x, and CO hourly emission rates on a three hour rolling average and daily emissions limitations. Excess emissions shall be defined as any consecutive 3-hour period during which the average emissions for CO, SO₂, and NO_x as measured by continuous monitoring system, exceeds the mass or concentration limit set for each pollutant. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
48. At the time of performance testing fuel being burned shall be tested for sulfur, nitrogen, ash content and heating value. [District Rule 2201] Federally Enforceable Through Title V Permit
49. Operator shall operate and maintain in calibration a system which continuously measures and records control system operating parameters; elapsed time of operation; exhaust gas Opacity, NO_x, SO₂, CO, and NH₃ concentrations. [District Rule 2201; District Rule 1080, 4.0; & PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
50. 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
51. Operator shall 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
52. 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
53. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

54. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
55. 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, 9.6.1; Rule 1080, 8.0; and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
56. Any violation of emission standards, as indicated by the CEM, shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
57. Operator shall notify the District no later than one hour after the detection of a breakdown of the CEM. 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] Federally Enforceable Through Title V Permit
58. Permittee shall maintain an operating log containing type and quantity of fuel used and higher heating value of such fuels on daily basis. [District Rule 2520, 9.4.2; District Rule 4352, 6.2] Federally Enforceable Through Title V Permit
59. Sulfur content of each type of fuel shall be measured and recorded at least every calendar quarter using current ASTM Methods or shall be certified by supplier for each shipment. [District Rule 2520, 9.3.2 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
60. The differential pressure across each compartment of the fabric collectors shall be checked and the results recorded quarterly. If the differential pressure across each compartment of the fabric collectors is not between 2" and 9.5" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
61. The pressure at the fabric collector inlet shall be checked and the results recorded quarterly. If the pressure at the fabric collector inlet is greater than negative 35" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
62. 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
63. 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
64. 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, 9.4.2] Federally Enforceable Through Title V Permit
65. Permittee shall maintain monthly records of NO_x, SO_x, and CO to ensure that emissions limits on an annual rolling average are met. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-91-3-18

ISSUANCE DATE: 02/01/2013

LEGAL OWNER OR OPERATOR: MT POSO COGENERATION COMPANY, LLC

MAILING ADDRESS: P.O. BOX 81256
BAKERSFIELD, CA 93380-1256

LOCATION: HEAVY OIL CENTRAL
CA

SECTION: 18 TOWNSHIP: 27S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 49.9 MW COAL/PETROLEUM COKE/BIOMASS AND TIRE DERIVED FUEL (TDF) FIRED ATMOSPHERIC CIRCULATING FLUIDIZED BED COMBUSTOR COGENERATION POWER PLANT: REVISE EXHAUST O2 RANGE, CA/S MOLAR RATIO, STEADY STATE NOX AND CO HOURLY EMISSION LIMITS, AND STARTUP/SHUTDOWN CONDITIONS

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Authority to Construct (ATC) S-91-3-15 shall be implemented prior to or concurrently with this ATC [District Rule 2201]
3. 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]
4. 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]
5. Operation shall include Ahlstrom Pyroflow atmospheric fluidized bed combustor incorporating low temperature staged combustion and ammonia injection (NOx control), and pulverized limestone/lime cake injection (SOx control). [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
8-01-3-18: Jul 8 2013 4:55PM - RICKARDCX : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

6. Operation shall include enclosed gravimetric belt weigh feeder discharging to fuel feed chutes and enclosed limestone/lime cake volumetric feeder with air lock system. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Operation shall include four natural gas fired 62 MMBtu/hr Coen startup burners and two natural gas fired 23 MMBtu/hr Coen duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operation shall include two fly ash recycle cyclones, air heater with two fly ash hoppers, economizer and ash handling system. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Operation shall include 1250 HP primary combustion air fan, 500 HP secondary combustion air fan and 150 HP multi-staged centrifugal fluidizing air blower. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Operation shall include 12 compartment fabric collector with 1750 HP induced draft fan, reverse air cleaning mechanism and 100 HP reverse air fan. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fabric collector shall include a minimum of 134,230 sq. ft. of filtering area, fly ash hopper, with 8 KW electric heater, d.p. transmitter, capacitance type high level detector, vibrator and aeration pad. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Fly ash collected at fabric collector shall be discharged only to fly ash handling system. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Ash shall only be removed from combustion system by means authorized to Permit to Operate S-91-4. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operation shall be equipped with the following indicators: combustion temperature, combustion air system pressure, primary and secondary fan air flow, ammonia injection flow, fuel use rate and limestone/lime cake use rate. The permittee shall operate and maintain instrumentation to continuously monitor and record levels of combustion temperature, consumption of fuel, ammonia, and limestone/lime cake in boiler. [District Rules 2201 and 2410]
15. Each fabric collector compartment shall be equipped with access door and differential pressure indicator. The differential pressure across each compartment shall be maintained between 2" and 9.5" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Fabric collector inlet shall be equipped with operational pressure indicator and high temperature alarm which activates prior to high temperature failure. The pressure shall not exceed negative 35" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Fabric collector shall be equipped with automatic cleaning mechanism. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All combustor exhaust gas shall pass through fabric collector prior to being emitted to atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Unit shall be operated as a low temperature combustor with a peak temperature range of 1550 to 1750 deg F. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Unit shall be operated as a staged combustion device by introducing a substoichiometric amount of combustion air into primary combustion zone. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Flue gas O2 content shall be maintained at a level (3-5% or 2.5-8.0% when combusting biomass) which shows compliance with all emission limits and which minimizes NOx emissions. [District Rule 2201]
22. There shall be no provisions for introduction of air into combustion system or exhaust system downstream of the combustion chamber except for air utilized for cyclone center pipe supports and cooling. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The sum of the combined coal, coke, and tire derived fuel throughput and 1/2 times the throughput of biomass introduced into the combustor shall not exceed 1,400,000 lbs/day and 58,333 lbs/hr (on a dry basis). Solid fuel introduced into the combustor shall contain no more than 4.0% by weight sulfur. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. Of the total fuel introduced into the combustor, no more than 154,000 lbs per day (on a dry basis) shall be TDF. [District Rule 2201] Federally Enforceable Through Title V Permit
25. "Biomass" means any organic material not derived from fossil fuels, such as agricultural crop residue, orchard prunings and removal, stone fruit pits, nut shells, cotton gin trash, cotton stalks, vineyard prunings, cull logs, eucalyptus logs, bark, lawn, yard and garden clippings, leaves, silvicultural residue, tree and brush pruning, wood and wood chips, and wood waste. Biomass does not include material containing sewage sludge or industrial, hazardous, radioactive or municipal solid waste. [District Rules 2201 and Rule 4102] Federally Enforceable Through Title V Permit
26. 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
27. Limestone/lime cake shall be introduced into combustor at a rate sufficient to maintain a minimum Ca/S molar ratio of 3, except when combusting biomass and/or natural gas. [District Rule 2201]
28. Ammonia breakthrough shall not result in ground level odors and exhaust stack concentrations, except during periods of start-up/shutdown, shall not exceed 20.0 ppmv based on three hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Emissions rates from boiler exhaust shall not exceed the following: PM10: 190.0 lb/day, VOC: 149.9 lb/day, NOx (as NO2): 1406.4 lb/day nor 463,084 lbs/yr, SOx (as SO2): 699.4 lb/day nor 118,113 lb/yr, or CO: 1207.2 lb/day nor 371,312 lb/yr. [District Rules 2201 and 4301] Federally Enforceable Through Title V Permit
30. Emission rate of PM-10 shall not exceed 7.92 lb/hr and 0.012 lb/MMBtu. Particulate Matter (PM) emissions shall not exceed 0.01 gr/dscf @ 12% CO2. [District Rules 2201, 4201, and 4301 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
31. Emission rate of SOx (as SO2) shall not exceed 25.0 lb/hr, based on three hour rolling average. [District Rules 2201 and 4301 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
32. SOx emissions (as SO2) shall not exceed 0.04 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rules 2201 and 4801 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
33. Emission rate of oxides of nitrogen as NO2 shall not exceed 58.60 lb/hr, except during startup and shutdown as defined in Rule 4352, based on three hour rolling average. [District Rules 2201 and 2410]
34. NOx emissions shall not exceed 0.092 lb/MMBtu, based on a three hour rolling average, during any period in which the power output exceeds 40 MW. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
35. Emission rate of volatile organic compounds shall not exceed 6.25 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
36. Emission rate of carbon monoxide shall not exceed 50.30 lb/hr, except during startup and shutdown as defined in Rule 4352, based on three hour rolling average. [District Rules 2201 and 2410]
37. NOx emissions shall not exceed 65 ppmv @ 3% O2 at any time, except during startup and shutdown (as defined in Rule 4352), based on a 24 hour averaging period. [District Rule 4352, 5.1]
38. Except during periods of startup and shutdown (as defined in Rule 4352) the emission rate of carbon monoxide shall not exceed 183 ppmv @ 3% O2. Compliance with the carbon monoxide emission limit shall be based on a block 24 hour average. [District Rules 2201 and 4352] Federally Enforceable Through Title V Permit
39. Nitrogen oxides (NOx) shall not exceed 140 lb/hr, calculated as NO2. [District Rule 4301]
40. 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] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

41. Performance testing at maximum operating capacity shall be conducted annually for NO_x, SO_x, CO, PM-10, PM, and VOCs 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 6 or ARB Method 100; for CO EPA Method 1-4 and 10 or ARB Method 100; for PM(10) EPA Method 201A in combination with EPA Method 202; for PM EPA Methods 1-4 and 5; and for VOCs EPA Method 25 or 18. [District Rules 2520 and 4352, 6.4 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
42. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
43. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
44. Permittee shall report the following emission exceedences to the District: SO₂, NO_x, and CO hourly emission rates on a three hour rolling average and daily emissions limitations. Excess emissions shall be defined as any consecutive 3-hour period during which the average emissions for CO, SO₂, and NO_x as measured by continuous monitoring system, exceeds the mass or concentration limit set for each pollutant. [District Rule 2201 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
45. At the time of performance testing fuel being burned shall be tested for sulfur, nitrogen, ash content and heating value. [District Rule 2201] Federally Enforceable Through Title V Permit
46. Operator shall operate and maintain in calibration a system which continuously measures and records control system operating parameters; elapsed time of operation; exhaust gas Opacity, NO_x, SO₂, CO, and NH₃ concentrations. [District Rules 1080, 4.0 and 2201 and PSD ATC SJ 86-09] 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 ATC SJ 86-09] Federally Enforceable Through Title V Permit
48. Operator shall 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 ATC SJ 86-09] 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
51. 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 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
52. 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 Rules 1080, 8.0 and 2520, 9.6.1 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
53. Any violation of emission standards, as indicated by the CEM, shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

54. Operator shall notify the District no later than one hour after the detection of a breakdown of the CEM. 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] Federally Enforceable Through Title V Permit
55. 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 2520, 9.4.2 and 4352, 6.2] Federally Enforceable Through Title V Permit
56. Sulfur content of each type of fuel shall be measured and recorded at least every calendar quarter using current ASTM Methods or shall be certified by supplier for each shipment. [District Rule 2520, 9.3.2 and PSD ATC SJ 86-09] Federally Enforceable Through Title V Permit
57. The differential pressure across each compartment of the fabric collectors shall be checked and the results recorded quarterly. If the differential pressure across each compartment of the fabric collectors is not between 2" and 9.5" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
58. The pressure at the fabric collector inlet shall be checked and the results recorded quarterly. If the pressure at the fabric collector inlet is greater than negative 35" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
59. 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
60. 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
61. 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, 9.4.2] Federally Enforceable Through Title V Permit
62. Permittee shall maintain monthly records of NO_x, SO_x, and CO to ensure that emissions limits on an annual rolling average are met. [District Rule 2201] Federally Enforceable Through Title V Permit

Appendix C

Compliance Certification

JUN 03 2013

SJVAPCD
Southern Region

San Joaquin Valley Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: MT POSO COGENERATION COMPANY, LLC	FACILITY ID: S - 91
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: MT POSO COGENERATION COMPANY, LLC	
3. Agent to the Owner: -----	

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

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

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

Terry L. Maddox

Signature of Responsible Official

JUNE 3, 2013

Date

TERRY L. MADDOX

Name of Responsible Official (please print)

PLANT MANAGER

Title of Responsible Official (please print)