



FEB 0 5 2018

Mr. Kevin Briscoe Merced Power, LLC 16457 Avenue 24½ Chowchilla, CA 93610

Re:

Notice of Final Action - Title V Permit Renewal

Facility Number: N-4607 Project Number: N-1161365

Dear Mr. Briscoe:

The District has issued the Final Renewed Title V Permit for Merced Power, LLC (see enclosure). The preliminary decision for this project was made on November 15, 2017. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

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

Sincerely,

Arnaud Marjollet

Director of Permit Services

August Menjoller

**Enclosures** 

CC:

Tung Le, CARB (w/enclosure) via email

CC:

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

Seyed Sadredin

Executive Director/Air Pollution Control Officer

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

### Title V Permit Renewal Evaluation Merced Power, LLC N-4607

### **TABLE OF CONTENTS**

١.	PROPOSAL	1
II.	FACILITY LOCATION	2
III.	EQUIPMENT LISTING	2
IV.	GENERAL PERMIT TEMPLATE USAGE	2
V.	SCOPE OF EPA AND PUBLIC REVIEW	2
VI.	FEDERALLY ENFORCEABLE REQUIREMENTS	2
VII.	REQUIREMENTS NOT FEDERALLY ENFORCEABLE	4
VIII.	PERMIT REQUIREMENTS	4
IX.	PERMIT SHIELD.	8
X.	CALIFORNIA ENVIRONMENT QUALITY ACT	
XI.	PERMIT CONDITIONS	8
ATTA	CHMENTS	8
ATTA	ACHMENT A - RENEWED TITLE V OPERATING PERMIT	
ATTA	ACHMENT B - EXPIRED TITLE V OPERATING PERMIT	
ATTA	ACHMENT C - DETAILED FACILITY REPORT	
ΔΤΤΔ	CHMENT D - FACILITY COMMENTS/DISTRICT RESPONSES	

### TITLE V PERMIT RENEWAL EVALUATION

### **Biomass Power Generation**

Engineer: Kamaljit Sran

**Date:** January 29, 2018

Facility Number: N-4607

Facility Name: Merced Power, LLC Mailing Address: 16457 Ave 24½

Chowchilla, CA 93610

Contact Name: Kevin Briscoe

**Phone:** (559) 665-0807 x107

Responsible Official: David Kandohla

Title: Plant Manager

Project #: N-1161365

Deemed Complete: May 26, 2016

### I. PROPOSAL

Merced Power, LLC was issued an initial Title V permit on September 19, 2011. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit has been reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

On November 15, 2017, the District issued public notice of its preliminary decision to issue the renewed Title V permit for Merced Power, LLC., Inc. In accordance with District Rule 2520, copies of the proposed permit and evaluation were forwarded to the facility, US EPA, and the Californian Air Resources Board. Copies were also made available for public review. The notice of District's preliminary decision was published in Merced Sun-Star (newspaper of general circulation in Merced County) on November 20, 2017.

During the review period that followed the notice of preliminary decision, the District received formal comments from Merced Power, LLC. District has addressed these comments (see attachments D) and therefore has decided to issue the renewed Title V permit to Merced Power, LLC.

### II. FACILITY LOCATION

The facility is located at 30 West Sandy Mush Road in Merced.

### III. EQUIPMENT LISTING

A detailed report listing all the permitted equipment at the facility is included as Attachment C.

### IV. GENERAL PERMIT TEMPLATE USAGE

The applicant does not propose to use any model general permit templates.

### V. SCOPE OF EPA AND PUBLIC REVIEW

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

### VI. FEDERALLY ENFORCEABLE REQUIREMENTS

### A. Rules Updated or Evaluated

- District Rule 2020, <u>Exemptions</u> (Amended August 18, 2011 ⇒ Amended December 18, 2014)
- District Rule 2201, New and Modified Stationary Source Review Rule (Amended April 21, 2011 ⇒ Amended February 18, 2016)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (Amended June 21, 2001)
- District Rule 4352, <u>Solid Fuel Fired Boilers</u>, <u>Steam Generators</u>, <u>and Process</u> <u>Heaters</u> (Amended May 18, 2006 ⇒ Amended December 15, 2011)
- District Rule 4702, <u>Internal Combustion Engines</u> (Amended August 18, 2011 ⇒ Amended December 14, 2013)
- 40 CFR 60 Subpart IIII, <u>Standards of Performance for Stationary Compression</u> Ignition Internal Combustion Engines (Amended July 7, 2016)
- 40 CFR Part 63, Subpart ZZZZ, <u>National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</u> (Amended February 27, 2014)

- 40 CFR Part 64, <u>Compliance Assurance Monitoring Program</u> (Adopted October 22, 1997)
- 40 CFR Part 82, Subpart B, <u>Servicing of Motor Vehicle Air Conditioners</u> (Amended June 25, 2013)<sup>1</sup>
- 40 CFR Part 82, Subpart F, <u>Recycling and Emission Reduction</u> (Amended November 18, 2016)<sup>1</sup>

#### B. Rules Rescinded

There have been no rules rescinded since the initial Title V permit was issued.

### C. Rules Adopted

 District Rule 2410, <u>Prevention of Significant Deterioration</u> (Adopted June 16, 2011 and effective November 26, 2012)

### D. Rules Not Updated

- District Rule 1070, <u>Inspections</u> (Amended December 17, 1992)
- District Rule 1081, Source Sampling (Amended December 16, 1993)
- District Rule 1100, Equipment Breakdown (Amended December 17, 1992)
- District Rule 1160, Emission Statements (Adopted November 18, 1992)
- District Rule 2010, Permits Required (Adopted December 17, 1992)
- District Rule 2031, <u>Transfer of Permits</u> (Adopted December 17, 1992)
- District Rule 2040, Applications (Adopted December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (Adopted December 17, 1992)
- District Rule 2080, Conditional Approval (Adopted December 17, 1992)
- District Rule 4201, <u>Particulate Matter Concentration</u> (Amended December 17, 1992)

<sup>&</sup>lt;sup>1</sup> These subparts were amended since initial TV permit was issued. However, the amendments to these subparts do not have any effect on existing permit requirements as addressed by conditions 27 & 28 of permit unit N-4607-0-2 on the draft renewed permit.

- 40 CFR 60 Subpart Db, <u>Standards of Performance for Industrial Commercial</u>
   <u>Institutional Steam Generating Units</u>
- 40 CFR Part 61, Subpart M, <u>National Emission Standard for Asbestos</u>
- 40 CFR Part 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
- 40 CFR Part 68 Risk Management Plans
- 40 CFR Part 72 Acid Rain Program

### VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

#### A. Rules Adopted or updated: None

#### B. Rules Not Updated

- District Rule 4102, Nuisance (amended December 17, 1992)
- District Rule 7012, <u>Hexavalent Chromium Cooling Towers</u> (amended December 17, 1992)
- Title 17 CCR 93115, <u>ATCM for Stationary Compression Ignition Engines</u> (amended May 19, 2011)

### VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the issuance of the initial Title V permit.

### 1. District Rule 2020 - Exemptions

District Rule 2020 lists equipment which is specifically exempt from obtaining permits and specifies record keeping requirements to verify such exemptions. The amendments to this rule do not have any affect on current permit requirements and will therefore not be addressed in this evaluation.

### 2. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since facility's Title V permit was last renewed. However the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into current Title V permit.

### 3. District Rule 2410 – Prevention of Significant Deterioration

This District Rule has been newly adopted since facility's last Title V was last renewed. However the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any PSD permit actions have already been incorporated into current Title V permit.

### 4. District Rule 2520 - Federally Mandated Operating Permits

No changes to this Rule have occurred since issuance of the previous TV permit; however, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

# 5. District Rule 4352 - Solid Fuel Fired Boilers, Steam Generators, and Process Heaters

The purpose of Rule 4352 is to limit NOx and CO emissions from solid fuel fired boilers, steam generators and process heaters.

The rule currently applies to units operated at any facility which is a major source. The rule was amended to align rule NOx requirements with EPA's Reasonably Available Control Technology standards. The NOx requirements for biomass plants were lowered from 115 ppmv @ 3% O<sub>2</sub> to 90 ppmv @ 3% O<sub>2</sub>.

Pursuant to Section 5.1, NO<sub>x</sub> emissions shall not exceed 90 ppmv @ 3% O<sub>2</sub>, and CO emissions shall not exceed 400 ppmv @ 3% O<sub>2</sub>.

The unit in this project falls under the category of "Biomass"; therefore the unit will be limited to 90 ppmv-NO<sub>X</sub> @ 3% O<sub>2</sub> and 400 ppmv-CO @ 3% O<sub>2</sub>. The unit is limited to 14.8 lb-NO<sub>X</sub>/hr and 10.55 lb-CO/hr and the maximum heat input of the unit is 185 MMBtu/hr.

The permit ppmv values are calculated as following:

$$\frac{14.8 \text{ lb - NO}_x}{\text{hr}} \times \frac{\text{hr}}{185 \text{ MMBtu}} \times \frac{\text{MMBtu}}{9,240 \text{ dscf}} \times \frac{1 \text{ lb - mol}}{46 \text{ lb}} \times \frac{20.9 - 3}{20.9} \times \frac{379.5 \text{ dscf}}{1 \text{ lb mol}} \times 10^6 = 61 \text{ ppmv NO}_x @ 3 \% O_2 \times \frac{10.55 \text{ lb - CO}}{1 \text{ lb mol}} \times \frac{\text{hr}}{185 \text{ MMBtu}} \times \frac{\text{MMBtu}}{9,240 \text{ dscf}} \times \frac{1 \text{ lb - mol}}{28 \text{ lb}} \times \frac{20.9 - 3}{20.9} \times \frac{379.5 \text{ dscf}}{1 \text{ lb mol}} \times 10^6 = 72 \text{ ppmv CO } @ 3 \% O_2 \times \frac{10.55 \text{ lb - CO}}{1 \text{ lb mol}} \times \frac{10.55 \text{ lb - CO}}{1 \text{ lb mol}} \times 10^6 = 72 \text{ ppmv CO } @ 3 \% O_2 \times \frac{10.55 \text{ lb - CO}}{1 \text{ lb mol}}$$

Since the NO<sub>X</sub> and CO permitted levels are lower than the Rule limits, this unit is expected to comply with this section of Rule 4352.

This unit was last source tested on June 10, 2016. Test result recorded NO<sub>X</sub> of 55.0 ppmv @ 3% O<sub>2</sub> and CO of 32.7 ppmv @ 3% O<sub>2</sub>. Therefore, the unit is in compliance with rule emissions limits. Conditions 29 & 31 of permit unit N-4607-8-8 ensure compliance with requirements of this section.

Section 5.3 of the rule describes the start-up and shutdown provisions. Condition 28 of permit unit N-4607-8-8 ensure compliance with requirements of this section.

Section 5.4 of the rule requires that any unit with ammonia injection for  $NO_X$  control shall operate a continuous emissions monitoring system (CEM) to monitor and record  $NO_X$  concentrations,  $NO_X$  emission rate, and either CO or  $O_2$  concentrations.

The permit unit is equipped with ammonia injection to control  $NO_X$  and equipped with CEMS. Therefore, this unit is expected to comply with this section of Rule 4352.

Section 6.0 of the rule describes recordkeeping and source testing requirements. Conditions 32, 33, 36, and 46 of permit unit N-4607-8-8 ensure compliance with requirements of this section.

#### 6. District Rule 4702 – Internal Combustion Engines

The amendments to this rule were only to Sections 3.37, 5.2, 5.10.2, 7.5.2.1, and 7.6.2.2 and were administrative clarifications of existing rule requirements and did not result in new or more stringent regulatory controls and did not affect air quality or emissions limitations. Pursuant to Section 4.2, except for the requirements of

Sections 5.9 and 6.2.3, the requirements of this rule do not apply to an emergency standby engine or a low-use engine provided that the engine is operated with an operating nonresettable elapsed time meter.

These amendments to this rule do not have any effect on current requirements of permit unit N-4607-11 and will therefore not be addressed any further.

# 7. 40 CFR 60 Subpart IIII – <u>Standards of Performance for Stationary</u> Compression Ignition Internal Combustion Engines

The Environmental Protection Agency (EPA) is finalized amendments to the standards of performance for stationary compression ignition (CI) internal combustion engines to allow manufacturers to design the engines so that operators can temporarily override performance inducements related to the emission control system for stationary CI internal combustion engines. The amendments apply to engines operating during emergency situations where the operation of the engine or equipment is needed to protect human life, and to require compliance with Tier 1 emission standards during such emergencies.

These amendments to this rule do not have any effect on current requirements of permit unit N-4607-11 and will therefore not be addressed any further.

# 8. 40 CFR 63 Subpart ZZZZ – <u>National Emissions Standards for Hazardous</u> Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This engine is an emergency standby compression ignition engine that is not operated in an emergency demand response program, is certified to meet the Tier 3 engine standards, is not subject to state and locally enforceable requirements requiring replacement of the engine by June 1, 2018, is not located and operated at a remote area source in Alaska, and is not on an offshore drilling vessel on the Outer Continental Shelf (OCS). Therefore, the amended sections of this subpart are not applicable to this engine.

### 9. 40 CFR Part 64 - Compliance Assurance Monitoring

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) The unit must have an emission limit for the pollutant;
- 2) The unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) The unit must have a pre-control potential to emit of greater than the major source thresholds.

This regulation was last amended on 10/22/1997; however, the Rule 2201 Major Source thresholds for NOx and VOC were lowered from 50,000 to 20,000 lb/year via the 12/18/2008 amendment to Rule 2201 (the amended rule was not effective until 6/10/10). The facility's permits were evaluated for CAM purposes in the initial Title V using the 20,000 lb/year NOx and VOC thresholds. Consequently, a CAM discussion is not required for these units.

### IX. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

### A. Requirements Addressed by Model General Permit Templates

The applicant does not propose to use any model general permit templates.

### B. Requirements not Addressed by Model General Permit Templates

The applicant is not requesting any permit shields.

### C. Obsolete Permit Shields from Existing Permit Requirements

The original permits did not contain any obsolete permit shields.

### X. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements.

Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility. Therefore, this project, a Title V permit renewal, is subject to a ministerial action that is exempt from CEQA.

### XI. PERMIT CONDITIONS

The renewed Title V operating permit is included as Attachment A.

## **ATTACHMENTS**

- A.
- B.
- C.,
- Renewed Title V Operating Permit Expired Title V Operating Permit Detailed Facility Report Facility Comments/District Responses D.

# ATTACHMENT A

Renewed Title V Operating Permit





Facility # N-4607 MERCED POWER, LLC P O BOX 298 CHOWCHILLA, CA 93610

### Notice of Permit Issuance

The enclosed permit unit requirements authorize the operation of the equipment as described. These permit unit requirements supersede any and all previous permits for the specified equipment.\* Please insert these documents into the Facility Permit to Operate, and post copies on or near the equipment as required by District Rule 2010.

Please contact any of our Small Business Assistance (SBA) staff at the numbers below if you have any questions:

Modesto:

(209) 557-6446

Fresno:

(559) 230-5888

Bakersfield:

(661) 392-5665

Seyed Sadredin

**Executive Director/Air Pollution Control Officer** 

<sup>\*</sup>Failure to comply with the permit unit requirements may result in enforcement action.





# **Permit to Operate**

FACILITY: N-4607

**EXPIRATION DATE: 10/31/2022** 

**LEGAL OWNER OR OPERATOR:** 

MERCED POWER, LLC

**MAILING ADDRESS:** 

P O BOX 298 CHOWCHILLA, CA 93610

**FACILITY LOCATION:** 

30 W SANDY MUSH ROAD

EL NIDO. CA

**FACILITY DESCRIPTION:** 

**BIOMASS FIRED POWER PLANT** 

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

**EXPIRATION DATE: 10/31/2022 FACILITY:** N-4607-0-2

### **FACILITY-WIDE REQUIREMENTS**

- The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later 1. than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced): 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
- A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

#### FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: MERCED POWER, LLC

- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

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

Facility Name: MERCED POWER, LLC

- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- 30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
- 31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004), [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
- 32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
- 33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
- 35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of each year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
- 43. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan, and comply with all the requirements of Program 1, 2, or 3 when mandated by the regulation. [40 CFR Part 68] Federally Enforceable Through Title V Permit

N-4607-0-2 Jan 29 2018 2:18PM -- SRANK

**PERMIT UNIT:** N-4607-6-6

**EXPIRATION DATE: 10/31/2022** 

#### **EQUIPMENT DESCRIPTION:**

BIOMASS RECEIVING, STORAGE, TRANSFER, SIZING OPERATION WITH DISC SCREEN AND FUEL SIZER SERVED BY A WATER SPRAY DUST SUPPRESSION SYSTEM, FUEL STORAGE BUILDING, FUEL STORAGE AREA, AND CONVEYING EQUIPMENT

### PERMIT UNIT REQUIREMENTS

- The operator shall use self-unloading trucks, or truck tipper system to unload the fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operating schedule shall not exceed 345 days per year. [District Rule 2201] Federally Enforceable Through Title V 2. Permit
- PM10 emissions from the unloading operation shall not exceed 0.0001 pounds per ton of fuel received. [District Rule 2201] Federally Enforceable Through Title V Permit
- The amount of the fuel received at this site shall not exceed 1,250 tons in any one day. The permittee shall keep records of the date and the amount of material received. [District Rule 2201] Federally Enforceable Through Title V **Permit**
- The fuel handling activities conducted by front-end loader(s) or other similar mobile equipment may include one or more of the following items: transfer the fuel from the receiving area to the fuel yard, receiving area to fuel storage building (or E/W drag-chain reclaim conveyors), the fuel yard to the fuel storage building (or E/W drag-chain reclaim conveyors), the fuel yard to N/S drag chain reclaim conveyors, and from receiving to N/S drag chain reclaim conveyors. [District Rule 2201] Federally Enforceable Through Title V Permit
- The total combined amount of fuel processed through the receiving area to the fuel yard, receiving area to the fuel storage building, or receiving area to the N/S drag-chain reclaim conveyors, shall not exceed 1,250 tons in any one day. The records on fuel received at this site may be used to demonstrate compliance with this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- The total combined amount of fuel processed through the fuel yard to the N/S drag-chain reclaim conveyors, or fuel yard to the E/W drag-chain reclaim conveyors, shall not exceed 480 tons in any one day. The records on fuel charged to the fluidized combustor may be used to demonstrate compliance with this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- PM10 emissions from each fuel handling activity shall not exceed 0.0011 pounds per ton of fuel handled. [District Rule 2201] Federally Enforceable Through Title V Permit
- The fuel conveying, screening, and sizing operation may include the following items: fuel transfer from N/S drag chain reclaim conveyors to duel collection conveyor (enclosed), E/W drag chain reclaim conveyors to duel collection conveyor (enclosed), duel collection conveyor to transfer conveyor (enclosed), transfer conveyor to weigh belt conveyor (enclosed), weigh belt conveyor to disc screen conveyor (enclosed), disc screening, oversized material transfer to storage (open), fuel sizing served by a wet suppression system, disc screen conveyor to incline belt conveyor (enclosed), incline belt conveyor to distribution drag-chain conveyor (enclosed), distribution drag-chain conveyor to the metering bins (enclosed) delivering fuel to the combustor. [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: MERCED POWER, LLC

30 W SANDY MUSH ROAD, EL NIDO, CA Location: 30 W SANDY N-4607-6-6 Jan 29 2018 2 18PM -- SRANK

- 10. The amount of the fuel processed through each unit in the fuel conveying, screening, and sizing operation shall not exceed 480 tons in any one day. The records on fuel charged to the fluidized combustor may be used to demonstrate compliance with this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. PM10 emissions from the enclosed fuel transfer shall not exceed 0.000046 pounds per ton of fuel processed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. PM10 emissions from the open fuel transfer shall not exceed 0.0011 pounds per ton of fuel processed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. PM10 emissions from the disc screen shall not exceed 0.00074 pounds per ton of fuel processed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. PM10 emissions from the fuel sizer shall not exceed 0.0022 pounds per ton of fuel processed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 16. Particulate matter emissions shall not exceed the hourly rate as calculated using the equation  $E = 3.59 \text{xP}^{0.62}$ ; P is less than or equal to 30 tons per hour or  $E = 17.31 \text{xP}^{\circ}0.16$ ; P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 17. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4202, Section 4.0 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

N-4607-6-6 Jan 29 2018 2:18PM -- SRANK

**PERMIT UNIT:** N-4607-7-4 **EXPIRATION DATE: 10/31/2022** 

#### **EQUIPMENT DESCRIPTION:**

LIMESTONE/SODIUM BICARBONATE RECEIVING, STORAGE, AND TRANSFER OPERATION WITH AN ENCLOSED STORAGE SILO SERVED BY A BIN VENT FILTER, ENCLOSED TRUCK UNLOADING SYSTEM. AND ENCLOSED TRANSFER SYSTEM

### PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Material removed from the bin vent filter shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The bin vent filter shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- The bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- There shall be no visible emissions from the transfer operation, for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- Visible emissions from the bin vent filter serving the storage silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- The maximum throughput of material loaded into the storage silo shall not exceed either of the following limits: 44 tons of in any one day and 1,600 tons in any year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. PM10 emissions from the silo loading operation shall not exceed 0.00034 lb-PM10 per ton of material loaded. [District Rule 2201] Federally Enforceable Through Title V Permit
- Records of daily and annual amounts of material processed at the receiving and storage operation (in tons) shall be maintained, retained on-site for a period of at least five years, and made available for District inspection upon request. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit
- 10. Particulate matter emissions shall not exceed the hourly rate as calculated using the equation  $E = 3.59 \text{xP}^{\circ} 0.62$ ; P is less than or equal to 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201, Section 3.0 (Amended December 17, 1992), and Rule 4202, Section 4.0 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: MERCED POWER, LLC

30 W SANDY MUSH ROAD, EL NIDO, CA Location: Location: 30 W SANDY N-4607-7-4 Jan 29 2018 2:18PM -- SRANK

**PERMIT UNIT:** N-4607-8-8

EXPIRATION DATE: 10/31/2022

#### **EQUIPMENT DESCRIPTION:**

185 MMBTU/HR ENERGY PRODUCTS OF IDAHO BIOMASS-FIRED BUBBLING FLUIDIZED BED COMBUSTOR WITH ONE 15 MMBTU/HR PROPANE-FIRED AUXILIARY BURNER POWERING A 13 MW STEAM TURBINE GENERATOR. SERVED BY A SELECTIVE NON-CATALYTIC REDUCTION SYSTEM WITH AN AUTOMATED AMMONIA INJECTION SYSTEM, A LIMESTONE/SODIUM BICARBONATE INJECTION SYSTEM, AND A GENERAL ELECTRIC BAGHOUSE

### PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Operating schedule shall not exceed 345 days per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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. [District Rule 2201] Federally Enforceable Through Title V Permit
- The differential pressure gauge reading range shall be maintained between 2" and 8.5" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
- Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 7. 2201] Federally Enforceable Through Title V Permit
- Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- Material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The applicant shall maintain an operational ammonia volume flow-rate indicator for the selective non-catalytic reduction ammonia injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The applicant shall maintain and operate an automated ammonia injection system in the selective non-catalytic reduction (SNCR) system. The automated mode may be overridden by the facility operator as necessary to maintain compliance with the emission limits listed within this permit. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. The facility, the applicant shall maintain and operate a stack gas flow monitoring system. [District Rule 1080] 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: MERCED POWER, LLC

Location: 30 W SANDY MUSH ROAD, EL NIDO, CA N-4607-8-8: Jan 30 2018 4:09PM -- SRANK

- 13. The permittee shall maintain and operate a continuous emissions monitoring system (CEMS) to measure stack gas NOx, SOx, CO, and O2 concentrations and mass emission rates and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. The CEMS systems shall also be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c) and 40 CFR 60.13. [District Rules 1080, 2201, and 4352] Federally Enforceable Through Title V Permit
- 14. The permittee shall maintain and operate a continuous opacity monitor (COM) and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rules 1080 and 2201, and 40 CFR 64] Federally Enforceable Through Title V Permit
- 15. The permittee shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. [District Rule 1080 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 16. Upon notice by the District that the facility's CEMS system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 17. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 18. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 19. Permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 20. The CEM system shall be operated and maintained in accordance with the operation and maintenance procedures identified in the continuous emission monitoring system quality assurance/quality control plan. [District Rule 1080] Federally Enforceable Through Title V Permit
- 21. The plant shall only be fueled by biomass materials listed in the following conditions. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 22. Allowed fuels: Almond Prunings, Apple Prunings, Apricot Prunings, Cherry Prunings, Citrus Prunings, Fig Prunings, Generic Orchard Prunings, Grape Prunings, Nectarine Prunings, Olive Prunings, Peach Prunings, Pecan Prunings, Pistachio Prunings, Plum Prunings, Walnut Prunings, (continued); [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 23. Allowed fuels: Cedar Bark, Forest Slash/Cull, Hog Fuel (Mill Residue), Sawdust, Construction Wood Waste, Landfill Derived Wood, Landscape Tree Trimmings, Pallet/Bins Wood, Urban Development Clearing Trees, (continued); [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 24. Allowed fuels: Grape Pomace, Olive Pomace, Raisin Pomace, Tomato Pomace, Cherry Pits, Nectarine Pits, Olive Pits, Peach Pits, Prune Pits, Almond Shells, Peanut Shells, Pecan Shells, Pistachio Shells, Walnut Shells, Cotton Stalks, Coffee Grounds, Cotton Gin Trash, Turkey (Wood) Shavings, Ditchbank or Canal Weeds, Tumbleweeds, Alfalfa Straw, Barley Straw, Bean Straw/Stalks, Corn Stalks, Milo Sorghum, Rice Straw, Wheat Straw, Char, or other fuels as approved by the District. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 25. Urban woodwaste (construction and landfill derived wood wastes) is approved as fuel provided the mixed urban wood waste fuel contains less than 1% by weight, of plastic, rubber, metals, roofing felt paper, and other non-wood contaminants (other than dirt or ash). No asbestos-containing materials are approved as fuel. [District Rule 4102]

- 26. If urban wood wastes have been burned during the 365 day period prior to October 31, of any year, fuel testing shall be conducted by December 31 of that year, as follows: equivalent of one truckload or mixed urban wood waste fuel prepared for combustion in the boiler shall be weighed, dumped, and all contaminants shall be sorted from the fuel, identified (plastic, rubber, metals, roofing felt paper, or other non-wood contaminants) and weighted The report for this test shall be forwarded to the District by January 31 (one month after fuel testing deadline). [District Rule 4102]
- 27. The auxiliary burner shall be used during start-up to reach the solid fuel ignition temperature throughout the combustor before feeding any solid fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- "Startup" is the period of time during which the boiler is heated to operating temperature at steady state load from a lower temperature, not to exceed 96 hours. If curing of the refractory is required after furnace repair or modification, startup time may be extended to no longer than 192 hours. "Shutdown" is the period of time during which the boiler is allowed to cool from its operating temperature at steady state load to a lower temperature, not to exceed 12 hours. [District Rule 4352] Federally Enforceable Through Title V Permit
- 29. Emissions from the fluidized bed combustor unit, except during periods of startup and shutdown, shall not exceed any of the following limits: NOx - 14.8 lb/hr or 0.08 lb/MMBtu; SOx - 6.48 lb/hr or 0.035 lb/MMBtu; PM10 - 7.40 lb/hr or 0.04 lb/MMBtu; CO - 10.55 lb/hr or 72 ppmv @ 3% O2 (equivalent to 0.057 lb/MMBtu); or VOC - 0.93 lb/hr or 0.005 lb/MMBtu. NOx (as NO2) and CO emission limits are based on 24 hour rolling averages. SOx emission limits are based on 3 hour rolling averages. [District Rules 2201, 4352, and 4801] Federally Enforceable Through Title V Permit
- 30. The ammonia (NH3) emissions shall not exceed 85 ppmv @ 3% O2 (equivalent to 0.041 lb/MMBtu) over a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 31. Emissions from the auxiliary burner shall not exceed any of the following limits: NOx 0.202 lb/MMBtu; SOx 0.005 lb/MMBtu; PM10 - 0.006 lb/MMBtu; CO - 0.038 lb/MMBtu; or VOC - 0.003 lb/MMBtu. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
- 32. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the ARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Source testing to measure the NOx, SOx, PM10, CO, VOC, and NH3 emission rates (lb/hr and lb/MMBtu or ppmvd @ 3% O2) for the fluidized bubbling bed combustor shall be conducted at least once every twelve months. [District Rules 1081 and 4352] Federally Enforceable Through Title V Permit
- 34. All emission measurements shall be made with the unit operating at conditions representative of normal operations. No compliance determination shall be established within two hours after a continuous period in which fuel flow to the unit is zero, or is shut off for 30 minutes or longer. [District Rule 4352] Federally Enforceable Through Title V Permit
- 35. Compliance demonstration (source testing) shall be witnessed or authorized by the District, and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 36. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100; NOx (lb/MMBtu) -EPA Method 19; SOx - EPA Method 6 or ARB Method 100; PM10 - EPA Method 5 (front half and back half) or 201 and 202a; CO (ppmv) - EPA Method 10 or ARB Method 100; CO2 - EPA Method 3 or ARB Method 100; VOC - EPA Method 18 or 25 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; ammonia -BAAQMD ST-1B; Stack Gas Flow Rate - EPA Method 2; Moisture Content - EPA Method 4; Fuel Heating Value -ASTM Method D2015-96 or E711-87. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing, and written approval received from the District, prior to the submission of the source test plan. [District Rules 1081, 4001, and 4352] Federally Enforceable Through Title V Permit

Facility Name: MERCED POWER, LLC

Location: 30 W SANDY MUSH ROAD,EL NIDO, CA N-4607-8-8: Jan 30 2018 4:09PM -- SRANK

- 37. Permittee shall project and use the proper mix of fuels to ensure that actual emissions from this boiler are offset with creditable biomass on a quarterly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
- 38. Open-burning emission factors used to determine the quantity of offsets generated by the diversion of biomass from open-burning are listed in the attachment "Open Burn Emission Factors" (District policy SSP-2005). [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. If quarterly actual NOx emissions from this boiler are greater than 5,000 lbs (e.g. 1/4 offset threshold), the emission reduction credit from creditable biomass fuel shall be calculated for NOx using the following formula: Pq = x \* [sum ]of j=1 to n for (Bj) \* (EFj) \* (HBFj) \* (QDFjq)] where: Pq= Pollutant offset credit in lb/qtr = sum of NOx emissions from ag waste credit < 15 miles + NOx emissions > 15 miles from facility; q = calendar quarter; x = 0.5 for biomass originating > 15 miles and 0.769 for < 15 miles; j = each creditable biomass type; B = tons of biomass type (j) used per quarter; EF = emission factor for particular biomass (from SSP-2005); HBFj = Historical Burn Fraction - fraction of biomass type (j) that has been demonstrated to have historically been open field burned (a District approved HBF factor must be used); QDFjq = Quarterly Distribution Factor - fraction of burning of biomass (i) which occurs in calendar quarter (q). [District Rule 2201] Federally Enforceable Through Title V Permit
- 40. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals; data and magnitude of excess emissions; nature and cause of excess emission (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventive measures adopted; applicable time and date of each period during which a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred, and reports on opacity monitors giving the number of three minute periods during which the average opacity exceeded the standard for each hour of operation. The average may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time exempted shall be considered before determining the excess averages of opacity. [District Rule 1080 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 41. Permittee shall maintain accurate records of continuous emissions monitoring (CEM) results, dates of occurrences and duration of start-up, shutdown, malfunction, performance testing, evaluations, calibrations, checks, adjustments, and maintenance, and daily records of propane fuel usage. [District Rules 1080 and 2201] Federally Enforceable Through Title V Permit
- 42. Daily records for each load of creditable biomass received shall be maintained which include the geographic origin (for applicability of distance offset ratio), date, weigh ticket number, supplier name, fuel type, tons received, the distance offset ratio for the load of biomass, and the amount of offset credit (in pounds of NOx) attributable to each load of biomass. Records shall include certifications that any creditable biomass for which offset credit is claimed has historically been open burned in the San Joaquin Valley air basin. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. Any fuel which is not combusted in the boiler within 12 months of delivery to the site shall not have any value for emission credits purposes. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. Permittee shall submit to the District a quarterly report accounting for the tonnage of agricultural waste eliminated from open field burning and used as plant fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- 45. Quarterly report of agricultural waste eliminated from open field burning (to offset NOx emissions) used as fuel at facility shall document the following: historical burn fraction (HBF) and quarterly distribution factor (QDF) for each biomass fuel used to calculate credit; creditable ag waste fuel receipt quantities; if fuel originates > 15 miles from facility, offset credit ratios; emission factors used; and summary of the resultant emissions offsets provided using the calculation above. The report shall be submitted to the District within 30 days of the end of the quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 46. The owner/operator shall maintain an operating log that includes the type and quantity of fuel used and the hhv of each fuel as determined by District Rule 4352, section 6.4 (as amended 10/19/95), or as certified by a third party fuel supplier. [District Rule 4352] Federally Enforceable Through Title V Permit
- 47. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [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: MERCED POWER, LLC

30 W SANDY MUSH ROAD, EL NIDO, CA Location: 1607-8-8 Jan 30 2018 4:09PM - SRANK

- 48. All records shall be maintained for a period of at least five years and made available for District, ARB, or EPA inspection upon request. [District Rules 1070 and 4352] Federally Enforceable Through Title V Permit
- 49. No owner or operator of an affected facility that combusts wood, or wood with other fuels, except coal, shall cause to be discharged from that affected facility any gases that contain particulate matter in excess of the following emission limits: (1) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility has an annual capacity factor greater than 30 percent (0.30) for wood. (2) 86 ng/J (0.20 lb/million Btu) heat input if (i) The affected facility has an annual capacity factor of 30 percent (0.30) or less for wood, (ii) Is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for wood, and (iii) Has a maximum heat input capacity of 73 MW (250 million Btu/hour) or less. [40 CFR 60.43b(c)] Federally Enforceable Through Title V Permit
- 50. No owner or operator of an affected facility that combusts municipal-type solid waste or mixtures of municipal-type solid waste with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of the following emission limits: (1) 43 ng/J (0.10 lb/million Btu) heat input, (i) If the affected facility combusts only municipal-type solid waste, or (ii) If the affected facility combusts municipal-type solid waste and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less. (2) 86 ng/J (0.20 lb/million Btu) heat input if the affected facility combusts municipal-type solid waste or municipal-type solid waste and other fuels; and (i) Has an annual capacity factor for municipal-type solid waste and other fuels of 30 percent (0.30) or less, (ii) Has a maximum heat input capacity of 73 MW (250 million Btu/hour) or less, (iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) for municipal-type solid waste, or municipal-type solid waste and other fuels, and (iv) Construction of the affected facility commenced after June 19, 1984, but before November 25, 1986. [40 CFR 60.43b(d)] Federally Enforceable Through Title V Permit
- 51. No owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43b(f)] Federally Enforceable Through Title V Permit
- 52. The particulate matter emission standards and opacity limits under 40 CFR 60.43b apply at all times except during periods of startup, shutdown, or malfunction. [40 CFR 60.46b(a)] Federally Enforceable Through Title V Permit
- 53. The owner or operator of an affected facility subject to the opacity standard under 40 CFR 60.43b shall calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system [40 CFR 60.48b(a) and 40 CFR 64] Federally Enforceable Through Title V Permit
- 54. The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for each fuel combusted for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR 60.49b(d)(1)] Federally Enforceable Through Title V Permit
- 55. The owner or operator shall maintain records of opacity. [40 CFR 60.49b(f) and 40 CFR 64] Federally Enforceable Through Title V Permit
- 56. The owner or operator shall submit deviation reports to report any opacity exceedance that occurred during the reporting period. [40 CFR 60.49b(h) and 40 CFR 64] Federally Enforceable Through Title V Permit
- 57. The owner of operator may submit electronic quarterly reports for opacity in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format. [40 CFR 60.49b(v) and 40 CFR 64] 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.

Location: 30 W SANDY MUSH ROAD,EL NIDO, CA N-4607-8-8 Jan 30 2018 4:09PM -- SRANK

- 58. The reporting period for the reports required is each 6 month period. All reports shall be submitted to the San Joaquin Valley Air Pollution Control District and shall be postmarked by the 30th doing the end of the reporting period. The owner or operator shall submit excess emission reports for any excess emissions that occurred during the reporting period. [40 CFR 60.49b(w)] Federally Enforceable Through Title V Permit
- 59. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 1080, sections 4.0, 6.5, 7.2, 7.3, and 8.0 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 1081, sections 3.1, 5.0, and 7.0 (Amended December 16, 1993). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 61. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4352, sections 5.1, 5.5, 6.2, 6.3, and 6.4 (Amended May 18, 2006). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 62. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of 40 CFR 60 Subpart Db, sections 60.43b(c), 60.43b(d), 60.43b(f), 60.46b(a), 60.48b(a), 60.49b(d)(1), 60.49b(f), 60.49b(h), 60.49b(v), and 60.49b(w). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 63. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rule 4801 and Merced County Rule 407. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 64. The heat input rating of this unit is less than 250 MMBtu/hr. Therefore, the requirements of 40 CFR 60 Subparts D and Da do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 65. This unit commercial operation before November 15, 1990 and did not, as of November 15, 1990, and does not currently, serve a generator with a nameplate capacity of greater than 25 MWe. Therefore, the requirements of 40 CFR Part 72, Subpart A, do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 66. By the applicable due date specified in 40 CFR 63, Subpart JJJJJJ 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
- 67. By the applicable due date specified in 40 CFR 63, Subpart JJJJJJ, 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)] Federally Enforceable Through Title V Permit
- 68. Permittee shall submit Notification of Compliance Status reports by the applicable due date specified in 40 CFR 63, Subpart JJJJJJ. [40 CFR 63.11225(a)(4)] Federally Enforceable Through Title V Permit

N-4607-8-8 | Jan 30 2018 4:09PM -- SRANK

30 W SANDY MUSH ROAD, EL NIDO, CA Location:

**PERMIT UNIT: N-4607-9-2** 

**EXPIRATION DATE: 10/31/2022** 

#### **EQUIPMENT DESCRIPTION:**

12.500 GALLON PER MINUTE MECHANICAL/INDUCED DRAFT COOLING TOWER WITH 2 CELLS SERVED BY DRIFT **ELIMINATORS** 

## PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Operating schedule shall not exceed 345 days per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
- Drift eliminator drift rate shall not exceed 0.005%. [District Rule 2201] Federally Enforceable Through Title V Permit 5.
- PM10 emission rate shall not exceed 7.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with the PM10 daily emission limit shall demonstrated as follows: PM10 lb/day = (water recirculation 7. rate) x (total dissolved solids concentration in the blowdown water) x (design drift rate). [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory every calendar quarter. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201, Section 3.0 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

Facility Name: MERCED POWER, LLC 30 W SANDY MUSH ROAD, EL NIDO, CA Location: 4607-9-2 Jan 29 2018 2 18PM - SRANK

**PERMIT UNIT: N-4607-10-5** 

**EXPIRATION DATE: 10/31/2022** 

#### **EQUIPMENT DESCRIPTION:**

FLY ASH HANDLING, AND LOADOUT OPERATION CONSISTING OF ROTARY FEEDERS, ENCLOSED SCREW/CHAIN CONVEYORS, A SURGE BIN, AND A WET CONDITIONING SCREW CONVEYOR

### PERMIT UNIT REQUIREMENTS

- The enclosed conveyors include: economizer conveyor to boiler ash conveyor, multiclone conveyor #1 to the boiler ash conveyor, multiclone conveyor #2 to the boiler ash conveyor, boiler conveyor to the boiler ash conveyor, super heater conveyor to the boiler ash conveyor, boiler ash conveyor to the collecting conveyor, baghouse conveyor #1 to the collecting conveyor, baghouse conveyor #2 to the collecting conveyor, collecting conveyor to surge bin, surge bin to truck loadout via a wet conditioning screw conveyor. [District Rule 2201] Federally Enforceable Through Title V Permit
- PM10 emissions from each flyash transfer operation shall not exceed 0.000046 pounds per ton of flyash loadout. 2. [District Rule 2201] Federally Enforceable Through Title V Permit
- The flyash loadout shall not exceed 96 tons (dry) in any one day. [District Rule 2201] Federally Enforceable Through 3. Title V Permit
- The flyash loadout shall not exceed 18,000 tons (dry) in a rolling 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
- The moisture content in the flyash being loaded shall be at least 6% (by weight). The permittee shall keep records of the date and the amount of water injected (gallons) in a wet conditioning screw conveyor for each flyash loadout. [District Rule 2201] Federally Enforceable Through Title V Permit
- The permittee shall keep records of the date and flyash loadout (dry-tons). [District Rule 2201] Federally Enforceable Through Title V Permit
- The permittee shall keep records of cumulative flyash loadout (dry-tons) for each month. These records shall be used to demonstrate compliance with the flyash loadout limit for a rolling 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
- All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed the hourly rate as calculated using the equation  $E = 3.59xP^0.62$ ; P is less than or equal to 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 10. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4202, Section 4.0 (Amended December 17, 1992). A permit shield is granted from this requirements. [District Rule 2520, 13.21 Federally Enforceable Through Title V Permit

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

Facility Name: MERCED POWER, LLC Location:

30 W SANDY MUSH ROAD, EL NIDO, CA 07-10-5 Jan 29 2018 2 18PM ~ SRANK

**PERMIT UNIT:** N-4607-11-2

**EXPIRATION DATE: 10/31/2022** 

#### **EQUIPMENT DESCRIPTION:**

115 BHP CLARK PROTECTION PRODUCTS MODEL JU4H-UF34 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP

### PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules, 2. 2201, 4102, and 4801, 17 CCR 93115, and 40 CFR 60.4207] Federally Enforceable Through Title V Permit
- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60.4209(a)] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 3.23 g-NOx/bhp-hr, 0.90 g-CO/bhp-hr, or 0.33 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423 and 17 CCR 93115, and 40 CFR 60.4205(c)] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed 0.13 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 13 CCR 2423, and 17 CCR 93115, and 40 CFR 60.4205(c)] Federally Enforceable Through Title V Permit
- The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 60.4211(e)] Federally Enforceable Through Title V Permit
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [40 CFR 60.4211(a)] Federally Enforceable Through Title V Permit
- 10. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] 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.

Location: 30 W SANDY MUSH ROAD,EL NIDO, CA N-4607-11-2 Jan 29 2018 2 18PM – SRANK

- 11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201, Section 3.0 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rule 4801 and Merced County Rule 407. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

# ATTACHMENT B

Expired Title V Operating Permit

**EXPIRATION DATE: 10/31/2016** FACILITY: N-4607-0-1

### **FACILITY-WIDE REQUIREMENTS**

- The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
- A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

30 W SANDY MUSH ROAD, EL NIDO, CA Location:

- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

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

Facility Name: MERCED POWER, LLC
Location: 30 W SANDY MUSH ROAD, EL NIDO, CA

- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- 30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
- 31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
- 32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
- 33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
- 35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

Facility Name: MERCED POWER, LLC
Location: 30 W SANDY MUSH ROAD, EL NIDO, CA

- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. On December 31, 2011, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
- 43. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan, and comply with all the requirements of Program 1, 2, or 3 when mandated by the regulation. [40 CFR Part 68] Federally Enforceable Through Title V Permit

Facility Name: MERCED POWER, LLC

30 W SANDY MUSH ROAD, EL NIDO, CA

**PERMIT UNIT: N-4607-6-5** 

**EXPIRATION DATE: 10/31/2016** 

#### **EQUIPMENT DESCRIPTION:**

BIOMASS RECEIVING, STORAGE, TRANSFER, SIZING OPERATION WITH DISC SCREEN AND FUEL SIZER SERVED BY A WATER SPRAY DUST SUPPRESSION SYSTEM, FUEL STORAGE BUILDING, FUEL STORAGE AREA, AND CONVEYING EQUIPMENT

### PERMIT UNIT REQUIREMENTS

- 1. The operator shall use self-unloading trucks, or truck tipper system to unload the fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Operating schedule shall not exceed 345 days per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. PM10 emissions from the unloading operation shall not exceed 0.0001 pounds per ton of fuel received. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The amount of the fuel received at this site shall not exceed 1,250 tons in any one day. The permittee shall keep records of the date and the amount of material received. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The fuel handling activities conducted by front-end loader(s) or other similar mobile equipment may include one or more of the following items: transfer the fuel from the receiving area to the fuel yard, receiving area to fuel storage building (or E/W drag-chain reclaim conveyors), the fuel yard to the fuel storage building (or E/W drag-chain reclaim conveyors), the fuel yard to N/S drag chain reclaim conveyors, and from receiving to N/S drag chain reclaim conveyors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The total combined amount of fuel processed through the receiving area to the fuel yard, receiving area to the fuel storage building, or receiving area to the N/S drag-chain reclaim conveyors, shall not exceed 1,250 tons in any one day. The records on fuel received at this site may be used to demonstrate compliance with this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The total combined amount of fuel processed through the fuel yard to the N/S drag-chain reclaim conveyors, or fuel yard to the E/W drag-chain reclaim conveyors, shall not exceed 480 tons in any one day. The records on fuel charged to the fluidized combustor may be used to demonstrate compliance with this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. PM10 emissions from each fuel handling activity shall not exceed 0.0011 pounds per ton of fuel handled. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The fuel conveying, screening, and sizing operation may include the following items: fuel transfer from N/S drag chain reclaim conveyors to duel collection conveyor (enclosed), E/W drag chain reclaim conveyors to duel collection conveyor (enclosed), duel collection conveyor to transfer conveyor (enclosed), transfer conveyor to weigh belt conveyor (enclosed), weigh belt conveyor to disc screen conveyor (enclosed), disc screening, oversized material transfer to storage (open), fuel sizing served by a wet suppression system, disc screen conveyor to incline belt conveyor (enclosed), incline belt conveyor to distribution drag-chain conveyor (enclosed), distribution drag-chain conveyor to the metering bins (enclosed) delivering fuel to the combustor. [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: MERCED POWER, LLC Location: 30 W SANDY MUSH ROAD, EL NIDO, CA

- 10. The amount of the fuel processed through each unit in the fuel conveying, screening, and sizing operation shall not exceed 480 tons in any one day. The records on fuel charged to the fluidized combustor may be used to demonstrate compliance with this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. PM10 emissions from the enclosed fuel transfer shall not exceed 0.000046 pounds per ton of fuel processed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. PM10 emissions from the open fuel transfer shall not exceed 0.0011 pounds per ton of fuel processed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. PM10 emissions from the disc screen shall not exceed 0.00074 pounds per ton of fuel processed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. PM10 emissions from the fuel sizer shall not exceed 0.0022 pounds per ton of fuel processed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 16. Particulate matter emissions shall not exceed the hourly rate as calculated using the equation  $E = 3.59xP^0.62$ ; P is less than or equal to 30 tons per hour or  $E = 17.31 \text{xP}^{0.16}$ ; P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 17. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4202, Section 4.0 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

30 W SANDY MUSH ROAD, EL NIDO, CA Location:

**PERMIT UNIT:** N-4607-7-3

**EXPIRATION DATE: 10/31/2016** 

#### **EQUIPMENT DESCRIPTION:**

LIMESTONE/SODIUM BICARBONATE RECEIVING, STORAGE, AND TRANSFER OPERATION WITH AN ENCLOSED STORAGE SILO SERVED BY A BIN VENT FILTER, ENCLOSED TRUCK UNLOADING SYSTEM, AND ENCLOSED TRANSFER SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Material removed from the bin vent filter shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The bin vent filter shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. There shall be no visible emissions from the transfer operation, for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 6. Visible emissions from the bin vent filter serving the storage silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 7. The maximum throughput of material loaded into the storage silo shall not exceed either of the following limits: 44 tons of in any one day and 1,600 tons in any year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. PM10 emissions from the silo loading operation shall not exceed 0.00034 lb-PM10 per ton of material loaded. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Records of daily and annual amounts of material processed at the receiving and storage operation (in tons) shall be maintained, retained on-site for a period of at least five years, and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 10. Particulate matter emissions shall not exceed the hourly rate as calculated using the equation E = 3.59xP^0.62; P is less than or equal to 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201, Section 3.0 (Amended December 17, 1992), and Rule 4202, Section 4.0 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: MERCED POWER, LLC Location: 30 W SANDY MUSH ROAD, EL NIDO, CA

**PERMIT UNIT: N-4607-8-7** 

**EXPIRATION DATE: 10/31/2016** 

#### **EQUIPMENT DESCRIPTION:**

185 MMBTU/HR ENERGY PRODUCTS OF IDAHO BIOMASS-FIRED BUBBLING FLUIDIZED BED COMBUSTOR WITH ONE 15 MMBTU/HR PROPANE-FIRED AUXILIARY BURNER POWERING A 13 MW STEAM TURBINE GENERATOR, SERVED BY A SELECTIVE NON-CATALYTIC REDUCTION SYSTEM WITH AN AUTOMATED AMMONIA INJECTION SYSTEM, A LIMESTONE/SODIUM BICARBONATE INJECTION SYSTEM, AND A GENERAL ELECTRIC BAGHOUSE

### PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Operating schedule shall not exceed 345 days per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The 3. gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
- The differential pressure gauge reading range shall be maintained between 2" and 8.5" water column. [District Rule 2201] Federally Enforceable Through Title V Permit
- Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 5. 2201] Federally Enforceable Through Title V Permit
- The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] 6. Federally Enforceable Through Title V Permit
- The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- Material removed from the baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The applicant shall install and maintain an operational ammonia volume flow-rate indicator for the selective noncatalytic reduction ammonia injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. No later than 30 days following restart of the facility, the applicant shall install, maintain, and operate an automated ammonia injection system in the selective non-catalytic reduction (SNCR) system. The automated mode may be overridden by the facility operator as necessary to maintain compliance with the emission limits listed within this permit. [District Rule 1080 and US EPA and SJVUAPCD Consent Decree Case No. 1:11-cv-00241-LJO-SMS, Section V.13.b, issued February 14, 2011] Federally Enforceable Through Title V Permit
- 12. No later than 90 days following restart of the facility, the applicant shall install, maintain, and operate a stack gas flow monitoring system. [District Rule 1080 and US EPA and SJVUAPCD Consent Decree Case No. 1:11-cv-00241-LJO-SMS, Section V.13.a, issued February 14, 2011] 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: MERCED POWER, LLC 30 W SANDY MUSH ROAD EL NIDO, CA Location:

- 13. The permittee shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NOx, SOx, CO, and O2 concentrations and mass emission rates and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. The CEMS systems shall also be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c) and 40 CFR 60.13. [District Rules 1080, 2201, and 4352] Federally Enforceable Through Title V Permit
- 14. The permittee shall install, maintain, and operate a continuous opacity monitor (COM) and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rules 1080 and 2201, and 40 CFR 64] Federally Enforceable Through Title V Permit
- 15. The permittee shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. [District Rule 1080 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 16. Upon notice by the District that the facility's CEMS system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 17. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 18. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 19. Permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 20. Within 90 days following restart of the facility, the CEM system shall be operated and maintained in accordance with the operation and maintenance procedures identified in the continuous emission monitoring system quality assurance/quality control plan. [District Rule 1080 and US EPA and SJVUAPCD Consent Decree Case No. 1:11-cv-00241-LJO-SMS, Section V.13.c, issued February 14, 2011] Federally Enforceable Through Title V Permit
- 21. The plant shall only be fueled by biomass materials listed in the following conditions. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 22. Allowed fuels: Almond Prunings, Apple Prunings, Apricot Prunings, Cherry Prunings, Citrus Prunings, Fig Prunings, Generic Orchard Prunings, Grape Prunings, Nectarine Prunings, Olive Prunings, Peach Prunings, Pecan Prunings, Pistachio Prunings, Plum Prunings, Walnut Prunings, (continued); [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 23. Allowed fuels: Cedar Bark, Forest Slash/Cull, Hog Fuel (Mill Residue), Sawdust, Construction Wood Waste, Landfill Derived Wood, Landscape Tree Trimmings, Pallet/Bins Wood, Urban Development Clearing Trees, (continued); [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 24. Allowed fuels: Grape Pomace, Olive Pomace, Raisin Pomace, Tomato Pomace, Cherry Pits, Nectarine Pits, Olive Pits, Peach Pits, Prune Pits, Almond Shells, Peanut Shells, Pecan Shells, Pistachio Shells, Walnut Shells, Cotton Stalks, Coffee Grounds, Cotton Gin Trash, Turkey (Wood) Shavings, Ditchbank or Canal Weeds, Tumbleweeds, Alfalfa Straw, Barley Straw, Bean Straw/Stalks, Corn Stalks, Milo Sorghum, Rice Straw, Wheat Straw, Char, or other fuels as approved by the District. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

- 25. Urban wood waste (construction and landfill derived wood wastes) is approved as fuel provided the mixed urban wood waste fuel contains less than 1% by weight, of plastic, rubber, metals, roofing felt paper, and other non-wood contaminants (other than dirt or ash). No asbestos-containing materials are approved as fuel. [District Rule 4102] Federally Enforceable Through Title V Permit
- 26. If urban wood wastes have been burned during the 365 day period prior to October 31 of any year, fuel testing shall be conducted by December 31 of that year, as follows: equivalent of one truckload of mixed urban wood waste fuel prepared for combustion in the boiler shall be weighed, dumped, and all contaminants shall be sorted from the fuel, identified (plastic, rubber, metals, roofing felt paper, or other non-wood contaminants) and weighed. The report for this test shall be forwarded to the District by January 31 (one month after fuel testing deadline). [District Rule 4102] Federally Enforceable Through Title V Permit
- 27. The auxiliary burner shall be used during start-up to reach the solid fuel ignition temperature throughout the combustor before feeding any solid fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. "Startup" is the period of time during which the boiler is heated to operating temperature at steady state load from a lower temperature, not to exceed 96 hours. If curing of the refractory is required after furnace repair or modification, startup time may be extended to no longer than 192 hours. "Shutdown" is the period of time during which the boiler is allowed to cool from its operating temperature at steady state load to a lower temperature, not to exceed 12 hours. [District Rule 4352] Federally Enforceable Through Title V Permit
- 29. Emissions from the fluidized bed combustor unit, except during periods of startup and shutdown, shall not exceed any of the following limits: NOx - 14.8 lb/hr or 0.08 lb/MMBtu; SOx - 6.48 lb/hr or 0.035 lb/MMBtu; PM10 - 7.40 lb/hr or 0.04 lb/MMBtu; CO - 10.55 lb/hr or 72 ppmv @ 3% O2 (equivalent to 0.057 lb/MMBtu); and VOC - 0.93 lb/hr or 0.005 lb/MMBtu. NOx (as NO2) and CO emission limits are based on 24 hour rolling averages. SOx emission limits are based on 3 hour rolling averages. [District Rules 2201, 4352, and 4801]
- 30. The ammonia (NH3) emissions shall not exceed 85 ppmv @ 3% O2 (equivalent to 0.041 lb/MMBtu) over a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 31. Emissions from the auxiliary burner shall not exceed any of the following limits: NOx 0.202 lb/MMBtu; SOx 0.005 lb/MMBtu; PM10 - 0.006 lb/MMBtu; CO -0.038 lb/MMBtu; and VOC - 0.003 lb/MMBtu. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
- 32. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the ARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Source testing to measure the NOx, SOx, PM10, CO, VOC, and NH3 emission rates (lb/hr and lb/MMBtu or ppmvd @ 3% O2) for the fluidized bubbling bed combustor shall be conducted at least once every twelve months. [District Rules 1081 and 4352] Federally Enforceable Through Title V Permit
- 34. All emission measurements shall be made with the unit operating at conditions representative of normal operations. No compliance determination shall be established within two hours after a continuous period in which fuel flow to the unit is zero, or is shut off for 30 minutes or longer. [District Rule 4352] Federally Enforceable Through Title V Permit
- 35. Compliance demonstration (source testing) shall be witnessed or authorized by the District, and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

30 W SANDY MUSH ROAD, EL NIDO, CA Location:

- 36. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100; NOx (lb/MMBtu) EPA Method 19; SOx EPA Method 6 or ARB Method 100; PM10 EPA Method 5 (front half and back half) or 201 and 202a; CO (ppmv) EPA Method 10 or ARB Method 100; CO2 EPA Method 3 or ARB Method 100; VOC EPA Method 18 or 25 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; ammonia BAAQMD ST-1B; Stack Gas Flow Rate EPA Method 2; Moisture Content EPA Method 4; Fuel Heating Value ASTM Method D2015-96 or E711-87. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing, and written approval received from the District, prior to the submission of the source test plan. [District Rules 1081, 4001, and 4352] Federally Enforceable Through Title V Permit
- 37. Permittee shall project and use the proper mix of fuels to ensure that actual emissions from this boiler are offset with creditable biomass on a quarterly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
- 38. Open-burning emission factors used to determine the quantity of offsets generated by the diversion of biomass from open-burning are listed in the attachment "Open Burn Emission Factors" (District policy SSP-2005). [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. If quarterly actual NOx emissions from this boiler are greater than 5,000 lbs (e.g. 1/4 offset threshold), the emission reduction credit from creditable biomass fuel shall be calculated for NOx using the following formula: Pq = x \* [sum of j=1 to n for (Bj) \* (EFj) \* (HBFj) \* (QDFjq)] where: Pq= Pollutant offset credit in lb/qtr = sum of NOx emissions from ag waste credit < 15 miles + NOx emissions > 15 miles from facility; q = calendar quarter; x = 0.5 for biomass originating > 15 miles and 0.769 for < 15 miles; j = each creditable biomass type; B = tons of biomass type (j) used per quarter; EF = emission factor for particular biomass (from SSP-2005); HBFj = Historical Burn Fraction fraction of biomass type (j) that has been demonstrated to have historically been open field burned (a District approved HBF factor must be used); QDFjq = Quarterly Distribution Factor fraction of burning of biomass (j) which occurs in calendar quarter (q). [District Rule 2201] Federally Enforceable Through Title V Permit
- 40. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals; data and magnitude of excess emissions; nature and cause of excess emission (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventive measures adopted; applicable time and date of each period during which a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred, and reports on opacity monitors giving the number of three minute periods during which the average opacity exceeded the standard for each hour of operation. The average may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time exempted shall be considered before determining the excess averages of opacity. [District Rule 1080 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 41. Permittee shall maintain accurate records of continuous emissions monitoring (CEM) results, dates of occurrences and duration of start-up, shutdown, malfunction, performance testing, evaluations, calibrations, checks, adjustments, and maintenance, and daily records of propane fuel usage. [District Rules 1080 and 2201] Federally Enforceable Through Title V Permit
- 42. Daily records for each load of creditable biomass received shall be maintained which include the geographic origin (for applicability of distance offset ratio), date, weigh ticket number, supplier name, fuel type, tons received, the distance offset ratio for the load of biomass, and the amount of offset credit (in pounds of NOx) attributable to each load of biomass. Records shall include certifications that any creditable biomass for which offset credit is claimed has historically been open burned in the San Joaquin Valley air basin. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. Any fuel which is not combusted in the boiler within 12 months of delivery to the site shall not have any value for emission credits purposes. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. Permittee shall submit to the District a quarterly report accounting for the tonnage of agricultural waste eliminated from open field burning and used as plant fuel. [District Rule 2201] Federally Enforceable Through Title V Permit

- 45. Quarterly report of agricultural waste eliminated from open field burning (to offset NOx emissions) used as fuel at facility shall document the following: historical burn fraction (HBF) and quarterly distribution factor (QDF) for each biomass fuel used to calculate credit; creditable ag waste fuel receipt quantities; if fuel originates > 15 miles from facility, offset credit ratios; emission factors used; and summary of the resultant emissions offsets provided using the calculation above. The report shall be submitted to the District within 30 days of the end of the quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 46. The owner/operator shall maintain an operating log that includes the type and quantity of fuel used and the hhv of each fuel as determined by District Rule 4352, section 6.4 (as amended 10/19/95), or as certified by a third party fuel supplier. [District Rule 4352] Federally Enforceable Through Title V Permit
- 47. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 48. All records shall be maintained for a period of at least five years and made available for District, ARB, or EPA inspection upon request. [District Rules 1070 and 4352] Federally Enforceable Through Title V Permit
- 49. No owner or operator of an affected facility that combusts wood, or wood with other fuels, except coal, shall cause to be discharged from that affected facility any gases that contain particulate matter in excess of the following emission limits: (1) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility has an annual capacity factor greater than 30 percent (0.30) for wood. (2) 86 ng/J (0.20 lb/million Btu) heat input if (i) The affected facility has an annual capacity factor of 30 percent (0.30) or less for wood, (ii) Is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for wood, and (iii) Has a maximum heat input capacity of 73 MW (250 million Btu/hour) or less. [40 CFR 60.43b(c)] Federally Enforceable Through Title V Permit
- 50. No owner or operator of an affected facility that combusts municipal-type solid waste or mixtures of municipal-type solid waste with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of the following emission limits: (1) 43 ng/J (0.10 lb/million Btu) heat input, (i) If the affected facility combusts only municipal-type solid waste, or (ii) If the affected facility combusts municipal-type solid waste and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less. (2) 86 ng/J (0.20 lb/million Btu) heat input if the affected facility combusts municipal-type solid waste or municipal-type solid waste and other fuels; and (i) Has an annual capacity factor for municipal-type solid waste and other fuels of 30 percent (0.30) or less, (ii) Has a maximum heat input capacity of 73 MW (250 million Btu/hour) or less, (iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) for municipal-type solid waste, or municipal-type solid waste and other fuels, and (iv) Construction of the affected facility commenced after June 19, 1984, but before November 25, 1986. [40 CFR 60.43b(d)] Federally Enforceable Through Title V Permit
- 51. No owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43b(f)] Federally Enforceable Through Title V Permit
- 52. The particulate matter emission standards and opacity limits under 40 CFR 60.43b apply at all times except during periods of startup, shutdown, or malfunction. [40 CFR 60.46b(a)] Federally Enforceable Through Title V Permit
- 53. The owner or operator of an affected facility subject to the opacity standard under 40 CFR 60.43b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system [40 CFR 60.48b(a) and 40 CFR 64] Federally Enforceable Through Title V Permit
- 54. The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for each fuel combusted for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR 60.49b(d)(1)] Federally Enforceable Through Title V Permit
- 55. The owner or operator shall maintain records of opacity. [40 CFR 60.49b(f) and 40 CFR 64] 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: MERCED POWER, LLC

- 56. The owner or operator shall submit deviation reports to report any opacity exceedance that occurred during the reporting period. [40 CFR 60.49b(h) and 40 CFR 64] Federally Enforceable Through Title V Permit
- 57. The owner of operator may submit electronic quarterly reports for opacity in lieu of submitting the written reports. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format. [40 CFR 60.49b(v) and 40 CFR 64] Federally Enforceable Through Title V Permit
- 58. The reporting period for the reports required is each 6 month period. All reports shall be submitted to the San Joaquin Valley Air Pollution Control District and shall be postmarked by the 30th doing the end of the reporting period. The owner or operator shall submit excess emission reports for any excess emissions that occurred during the reporting period. [40 CFR 60.49b(w)] Federally Enforceable Through Title V Permit
- 59. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 1080, sections 4.0, 6.5, 7.2, 7.3, and 8.0 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 1081, sections 3.1, 5.0, and 7.0 (Amended December 16, 1993). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 61. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4352, sections 5.1, 5.5, 6.2, 6.3, and 6.4 (Amended May 18, 2006). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 62. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of 40 CFR 60 Subpart Db, sections 60.43b(c), 60.43b(d), 60.43b(f), 60.46b(a), 60.48b(a), 60.49b(d)(1), 60.49b(f), 60.49b(h), 60.49b(v), and 60.49b(w). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 63. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rule 4801 and Merced County Rule 407. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 64. The heat input rating of this unit is less than 250 MMBtu/hr. Therefore, the requirements of 40 CFR 60 Subparts D and Da do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 65. This unit commenced commercial operation before November 15, 1990 and did not, as of November 15, 1990, and does not currently, serve a generator with a nameplate capacity of greater than 25 MWe. Therefore, the requirements of 40 CFR Part 72, Subpart A, do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 66. By the applicable due date specified in 40 CFR 63, Subpart JJJJJJ 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)]
- 67. By the applicable due date specified in 40 CFR 63, Subpart JJJJJJ, 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)]
- 68. Permittee shall submit Notification of Compliance Status reports by the applicable due date specified in 40 CFR 63, Subpart JJJJJJ. [40 CFR 63.11225(a)(4)]

**PERMIT UNIT: N-4607-9-1** 

**EXPIRATION DATE: 10/31/2016** 

#### **EQUIPMENT DESCRIPTION:**

12,500 GALLON PER MINUTE MECHANICAL/INDUCED DRAFT COOLING TOWER WITH 2 CELLS SERVED BY DRIFT ELIMINATORS

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. Operating schedule shall not exceed 345 days per year. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
- 5. Drift eliminator drift rate shall not exceed 0.005%. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. PM10 emission rate shall not exceed 7.5 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 7. Compliance with the PM10 daily emission limit shall demonstrated as follows: PM10 lb/day = (water recirculation rate) x (total dissolved solids concentration in the blowdown water) x (design drift rate). [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory every calendar quarter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201, Section 3.0 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

Facility Name: MERCED POWER, LLC Location: 30 W SANDY MUSH ROAD, EL NIDO, CA

**PERMIT UNIT:** N-4607-10-4

**EXPIRATION DATE: 10/31/2016** 

#### **EQUIPMENT DESCRIPTION:**

FLY ASH HANDLING, AND LOADOUT OPERATION CONSISTING OF ROTARY FEEDERS, ENCLOSED SCREW/CHAIN CONVEYORS, A SURGE BIN, AND A WET CONDITIONING SCREW CONVEYOR

## PERMIT UNIT REQUIREMENTS

- 1. The enclosed conveyors include: economizer conveyor to boiler ash conveyor, multiclone conveyor #1 to the boiler ash conveyor, multiclone conveyor #2 to the boiler ash conveyor, boiler conveyor to the boiler ash conveyor, super heater conveyor to the boiler ash conveyor, boiler ash conveyor to the collecting conveyor, baghouse conveyor #1 to the collecting conveyor, baghouse conveyor #2 to the collecting conveyor, collecting conveyor to surge bin, surge bin to truck loadout via a wet conditioning screw conveyor. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. PM10 emissions from each flyash transfer operation shall not exceed 0.000046 pounds per ton of flyash loadout. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. The flyash loadout shall not exceed 96 tons (dry) in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. The flyash loadout shall not exceed 18,000 tons (dry) in a rolling 12 consecutive month period. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. The moisture content in the flyash being loaded shall be at least 6% (by weight). The permittee shall keep records of the date and the amount of water injected (gallons) in a wet conditioning screw conveyor for each flyash loadout. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. The permittee shall keep records of the date and flyash loadout (dry-tons). [District NSR Rule] Federally Enforceable Through Title V Permit
- 7. The permittee shall keep records of cumulative flyash loadout (dry-tons) for each month. These records shall be used to demonstrate compliance with the flyash loadout limit for a rolling 12 consecutive month period. [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 9. Particulate matter emissions shall not exceed the hourly rate as calculated using the equation E = 3.59xP^0.62; P is less than or equal to 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 10. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4202, Section 4.0 (Amended December 17, 1992). A permit shield is granted from this requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

Facility Name: MERCED POWER, LLC

**PERMIT UNIT: N-4607-11-1** 

**EXPIRATION DATE:** 10/31/2016

#### **EQUIPMENT DESCRIPTION:**

115 BHP CLARK PROTECTION PRODUCTS MODEL JU4H-UF34 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP

### PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District NSR Rule, 4102, 4801, 17 CCR 93115, and 40 CFR 60,4207] Federally Enforceable Through Title V Permit
- 3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60.4209(a)] Federally Enforceable Through Title V Permit
- 4. Emissions from this IC engine shall not exceed any of the following limits: 3.23 g-NOx/bhp-hr, 0.90 g-CO/bhp-hr, or 0.33 g-VOC/bhp-hr. [District NSR Rule, 13 CCR 2423 and 17 CCR 93115, and 40 CFR 60.4205(c)] Federally Enforceable Through Title V Permit
- 5. Emissions from this IC engine shall not exceed 0.13 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District NSR Rule and 4102, 13 CCR 2423 and 17 CCR 93115, and 40 CFR 60.4205(c)] Federally Enforceable Through Title V Permit
- 6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 7. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 60.4211(e)] Federally Enforceable Through Title V Permit
- 9. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [40 CFR 60.4211(a)] Federally Enforceable Through Title V Permit
- 10. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] 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: MERCED POWER, LLC

- 11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201, Section 3.0 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rule 4801 and Merced County Rule 407. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

## ATTACHMENT C

**Detailed Facility Report** 

**Detailed Facility Report**For Facility=4607 and excluding Deleted Permits

NORTHERN SJVUAPCD

Sorted by Facility Name and Permit Number

MERCED POWER, LLC 30 W SANDY MUSH ROAD	LLC H ROAD		FAC# STATUS:	ENC	N 4607 A		TYPE: TitleV EXPIRE ON: 10/31 TOXIC ID; 70166 AREA: 7 / 1	10/31/2016 7 / 08/18
PERMIT NUMBER	PERMIT NUMBER FEE DESCRIPTION	FEE RULE	ΣĽ	FEE	FEE	PERMIT		
N-4607-6-5	electrical generation components	66-666	***	0.00	0.00	⋖	BIOMASS RECEIVING, STORAGE, TRANSFER, SIZING OPERATION WITH DISC SCREEN AND FUEL SIZER SERVED BY A WATER SPRAY DUST SUPPRESSION SYSTEM, FUEL STORAGE BUILDING, FUEL STORAGE AREA, AND CONVEYING EQUIPMENT	TION SPRAY IEL
N-4607-7-3	Electrical Generation Component	66-666	· <del></del>	00.0	0.00	∢	LIMESTONE/SODIUM BICARBONATE RECEIVING, STORAGE, AND TRANSFER OPERATION WITH AN ENCLOSED STORAGE SILO SERVED BY A BIN VENT FILTER, ENCLOSED TRUCK UNLOADING SYSTEM, AND ENCLOSED TRANSFER SYSTEM	AND SERVED EM, AND
N-4607-8-7	13,000 kW electrical generation	3020-08A E	~	5,591.00	5,591.00	∢	185 MMBTU/HR ENERGY PRODUCTS OF IDAHO BIOMASS-FIRED BUBBLING FLUIDIZED BED COMBUSTOR WITH ONE 15 MMBTU/HR PROPANE-FIRED AUXILIARY BURNER POWERING A 13 MW STEAM TURBINE GENERATOR, SERVED BY A SELECTIVE NON-CATALYTIC REDUCTION SYSTEM WITH AN AUTOMATED AMMONIA INJECTION SYSTEM, A LIMESTONE/SODIUM BICARBONATE INJECTION SYSTEM, A LIMESTONE/SODIUM BICARBONATE INJECTION SYSTEM, AND A GENERAL ELECTRIC BAGHOUSE	ED U/HR TEAM TEAM TION YSTEM,
N-4607-9-1	Electrical Generation Component	66-666	o <del>re</del> i	00.00	0.00	⋖	12,500 GALLON PER MINUTE MECHANICAL/INDUCED DRAFT COOLING TOWER WITH 2 CELLS SERVED BY DRIFT ELIMINATORS	COOLING

Number of Facilities Reported: 1

115 BHP CLARK PROTECTION PRODUCTS MODEL JU4H-UF34 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE PUMP

⋖

129.00

129.00

3020-10 B

115 bhp

N-4607-11-1

FLY ASH HANDLING, AND LOADOUT OPERATION CONSISTING OF ROTARY FEEDERS, ENCLOSED SCREW/CHAIN CONVEYORS, A SURGE BIN, AND A WET CONDITIONING SCREW CONVEYOR

⋖

0.00

0.00

66-666

Electrical Generation Component

N-4607-10-4

## ATTACHMENT D

Facility Comments/District Responses

#### DISTRICT'S RESPONSES TO FACILITY COMMENTS

In response to the comments received on December 5, 2017 letter and email from Mr. David Kandohla of, Merced Power LLC, District has come to following conclusions. Following are the responses to comments made by facility after reviewing the draft renewed Title V permits.

Facility Comment - Title V Renewal Evaluation: Item II -Facility Location: Please correct the facility location as 30 West Sandy Mush Road in Merced.

**District Response** – The District has corrected facility location.

**Facility Comment** - Draft Renewed Title V Operating Permit- Facility: N-4607-0-2; N-4607-6-6; N-4607-7-4; N-4607-8-8; N-4607-9-2: N-4607- I 0-5: and N-4607-11-2: **Change Expiration Date from 10/31/2016 to 10/31/2021.** 

**District Response** – Correct expiration date will reflect on final renewed permit.

Facility Comment - Draft Renewed Title V Operating Permit - Facility: N-4607-8-8: Modify Condition 25 as originally requested on the Title V Renewal Application (Refer to the attached Proposed Modification to the Current Permit Operate Conditions which was submitted with the Renewal Application)

#### **Current Condition 25:**

Urban woodwaste (construction and landfill derived wood wastes) is approved as fuel provided the mixed urban wood waste fuel contains less than 1% by weight, of plastic, rubber, metals, roofing felt paper, and other non-wood contaminants (other than dirt or ash). No asbestoscontaining materials are approved as fuel. [District Rule 4102]

#### **Proposed Condition 25:**

Biomass fuel shall contain Less than 1% by weight of plastic, rubber, metals, roofing felt paper, and other non-wood foreign materials (other than dirt, rocks and ash). No asbestos-containing materials are approved as fuel. [District Rule 4102]

**Justification:** To provide a limit for non-wood foreign materials for both urban wood fuel and Ag wood fuel.

**District Response** – The proposed condition language cannot be revised through Title V permitting action. An Authority to Construct application is needed to determine approval of the proposed language. This has been discussed with Mr. Kevin Briscoe on January 31, 2018.

Facility Comment - Draft Renewed Title V Operating Permit - Facility: N-4607-8-8: Modify Condition 26 as originally requested on the Title V Renewal Application (Refer to the attached Proposed Modification to the Current Permit Operate Conditions which was submitted with the Renewal Application)

#### **Current Condition 26:**

If urban wood wastes have been burned during the 365 day period prior to October 31, of any year, fuel testing shall be conducted by December 31 of that year, as follows: equivalent of one truckload or mixed urban wood waste fuel prepared for combustion in the boiler shall be weighed. dumped, and all contaminants shall be sorted from the fuel, identified (plastic. rubber, metals, roofing felt paper, or other non-wood contaminants) and weighted The report for this test shall be forwarded to the District by January 31 (one month after fuel testing deadline). [District Rule 4102]

#### **Proposed Condition 26:**

Biomass fuel to be burned shall be tested once a month as follows: a 10-gal container of fuel prepared for combustion in the boiler shall be collected at the reclaimer conveyor, weighed, dumped, and all foreign materials shall be sorted from the fuel, identified (plastic, rubber, metals, roofing felt paper, or other non-wood materials) and weighed. The report for these tests shall be submitted to the District with the quarterly compliance report. [District Rule 4102]

**Justification:** To improve the foreign materials monitoring of fuel to be burned by conducting tests more frequently.

**District Response** – The proposed condition language cannot be revised through Title V permitting action. An Authority to Construct application is needed to determine approval of the proposed language. This has been discussed with Mr. Kevin Briscoe on January 31, 2018.