



SEP 11 2012

Louis Sun  
Bakersfield City Wastewater #3  
6901 McCutchen Rd.  
Bakersfield, CA 93313

**Re: Notice of Final Action - Title V Permit  
District Facility # S-3103  
Project # S-1110969**

Dear Mr. Sun:

The District has issued the Final Title V Permit for Bakersfield City Wastewater #3. The preliminary decision for this project was made on July 6, 2012. No comments were received subsequent to the District preliminary decision. A revised version of the District's analysis is included with corrections to the Table of Contents page numbers and minor typographical corrections.

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

Sincerely,



David Warner  
Director of Permit Services

DW: SL/cm

Attachments



SEP 11 2012

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

**Re: Notice of Final Action - Title V Permit  
District Facility # S-3103  
Project # S-1110969**

Dear Mr. Rios:

The District has issued the Final Title V Permit for Bakersfield City Wastewater #3. The preliminary decision for this project was made on July 6, 2012. No comments were received subsequent to the District preliminary decision. A revised version of the District's analysis is included with corrections to the Table of Contents page numbers and minor typographical corrections.

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I would like to thank you and your staff for working with us. We appreciate your concurrence with this action. Should you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

David Warner  
Director of Permit Services

DW: SL/cm

Attachments



SEP 11 2012

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

**Re: Notice of Final Action - Title V Permit  
District Facility # S-3103  
Project # S-1110969**

Dear Mr. Tollstrup:

The District has issued the Final Title V Permit for Bakersfield City Wastewater #3. The preliminary decision for this project was made on July 6, 2012. No comments were received subsequent to the District preliminary decision. A revised version of the District's analysis is included with corrections to the Table of Contents page numbers and minor typographical corrections.

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Sincerely,



David Warner  
Director of Permit Services

DW: SL/cm

Attachments

Bakersfield Californian

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

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District has made its final decision to issue the initial Federally Mandated Operating Permit to Bakersfield City Wastewater #3 for its wastewater treatment plant located at 8101 Ashe Road in Bakersfield, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1110969, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. For additional information regarding this matter, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500, or contact David Warner, Director of Permit Services, in writing at SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.

# **SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT**

## **Bakersfield City Wastewater Plant #3**

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# TITLE V APPLICATION REVIEW

Project #: S-1110969  
Deemed Complete: April 26, 2011

Engineer: Stephen Leonard  
Date: April 11, 2012

Facility Number: S-3103  
Facility Name: Bakersfield City Wastewater Plant #3  
Mailing Address: 6901 McCutchen Rd  
Bakersfield, CA 93313

Contact Name: Louis Sun  
Phone: (661) 326-3723

Responsible Official: Louis Sun  
Title: Wastewater Manager

## I. PROPOSAL

Bakersfield City Wastewater Plant #3 is proposing that an initial Title V permit be issued for its existing wastewater treatment facility located in Bakersfield, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

## II. FACILITY LOCATION

Bakersfield City Wastewater Plant #3 is located at 8101 Ashe Road in Bakersfield, CA.

## III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories, which describe the insignificant activities or equipment at the facility not requiring a permit, is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

#### **IV. GENERAL PERMIT TEMPLATE USAGE**

The applicant is requesting to use the following model general permit templates:

##### **A. Facility-wide Umbrella General Permit Template SJV-UM-0-3**

The applicant has requested to utilize template #SJV-UM-03, Facility-wide Umbrella General Permit Template for unit S-3103-0-0. Based on the information submitted on the Template Qualification Form (Attachment D), the applicant qualifies for the use of this template.

#### **V. SCOPE OF EPA AND PUBLIC REVIEW**

Certain segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA or public review.

##### **a. S-3103-0-1 – Facility-Wide Requirements**

- Conditions 2 through 41 on the permit are based on the Facility-Wide Umbrella Template SJV-UM-0-3.

#### **VI. APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES**

##### **Rules Addressed by Facility-Wide Umbrella Template SJV-UM-0-3**

- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)

- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2020, Exemptions (amended December 20, 2007 – SIP approved amended August 18, 2011 – not SIP approved)

Recent amendments to this rule do not affect the federal applicability of this rule.

- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2520, Federally Mandated Operating Permits [sections 5.2, 9.1.1, 9.4, 9.5, 9.7, 9.8, 9.9, 9.13.1, 9.13.2, 9.16 and 10.0], (amended June 21, 2001)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 4601, Architectural Coatings (amended December 17, 2009)
- District Rule 8021, Construction, Demolition, Excavation and Other Earthmoving Activities (amended August 19, 2004)
- District Rule 8031, Bulk Materials (amended August 19, 2004)
- District Rule 8041, Carryout and Trackout (amended August 19, 2004)
- District Rule 8051, Open Areas (amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads (amended August 19, 2004)
- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas (amended September 16, 2004)
- 40 CFR Part 82, Subpart B and F, Stratospheric Ozone.
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos



## VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES

- District Rule 1070, Inspections (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended April 21, 2011)
- District Rule 2520, Federally Mandated Operating Permits (amended June 21, 2001 )
- District Rule 4201, Particulate Matter Concentration (Amended December 17, 1992)
- District Rule 4311, Flares (Amended 6/18/09)
- District Rule 4702, Internal Combustion Engines – Phase 2, (amended January 18, 2007 – SIP approved; amended August 18, 2011 – not SIP approved)
- 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Spark Ignition Internal Combustion Engines
- 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for Stationary Reciprocating Internal Combustion Engines (amended January 18, 2008)
- 40 CFR Part 64 – Compliance Assurance Monitoring (CAM)

## VIII. 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.

This facility is subject to the following rules that are not currently federally enforceable:

**1. Rule 4102 – Nuisance**

This rule is applicable to any source operation which emits or may emit air contaminants or other materials. This rule stipulates that a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property.

For this facility, condition 1 of the facility-wide requirements S-3103-0-1 is based on the rule listed above and is not Federally Enforceable through Title V.

**IX. COMPLIANCE**

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

**a. Facility Wide Requirements**

The applicant is proposing to use a general permit template to address federally applicable facility-wide requirements. Section IV of template SJV-UM-0-3 includes a demonstration of compliance for all applicable requirements. Template conditions have been added to the facility wide requirements as condition numbers 2 through 41 to assure compliance with these requirements.

**B. Requirements Not Addressed by Model General Permit Templates**

**1. District Rule 1070, Inspections**

The purpose of this rule is to explain the District's authority in determining compliance with the requirements of these rules and regulations.

Section 4.0 of Rule 1070 grants the District authority to require record keeping, to make inspections, and to conduct tests of air pollution sources.

- a. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-13-2)
- b. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-14-2)

- c. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-15-1)
  - d. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-16-1)
  - e. 0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-17-1)
  - f. 0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-18-1)
- Condition 6 of the requirements for each of these permit units is based on District Rule 1070.

## **2. District Rule 1081, Source Sampling**

This rule ensures that any source operation which emits or may emit air contaminants provides adequate and safe facilities for use in sampling to determine compliance. This rule also specifies methods and procedures for source testing, sample collection, and compliance determination.

- a. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-13-2)
  - b. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-14-2)
  - c. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-15-1)
  - d. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-16-1)
  - e. 0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-17-1)
  - f. 0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-18-1)
- Condition 5 of the requirements for each of these permit units is based on District Rule 1081.

- g. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER AND SULFATREAT FUEL GAS DRY SULFUR SCRUBBING SYSTEM SHARED WITH UNITS S-3103-13, '-14, '-15, '-16, '-17, '-18, '-20, AND '-21 (S-3103-19-1)
- Conditions 14, 15, & 16 of the requirements for this permit unit are based on District Rule 1081.
- h. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER (S-3103-20-1)
- Conditions 14, 15, & 16 of the requirements for this permit unit are based on District Rule 1081.

Section 5.0 lists the acceptable source test method standards if the test method is not already specified in the rule. The test methods for these units are not specified under other applicable rules.

**3. District Rule 2201, New and Modified Stationary Source Review Rule (District NSR Rule)**

- a. 1,199 BHP CATERPILLAR MODEL #3508TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-10-1)

Permit unit S-3103-10-0 was subject to the District NSR Rule upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Conditions 1, 2, 3, & 9 from the existing PTO have been included as conditions 1, 2, 3, & 7 of the requirements for permit unit -10-1.
- b. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-13-2)
- c. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-14-2)
- d. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-15-1)

- e. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-16-1)
- f. 0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-17-1)
- g. 0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-18-1)

Permit units S-3103-13-0 through '-18-0 were subject to the District NSR Rule upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Conditions 3, 4, & 5 from the existing PTOs have been included as conditions 1, 2, & 4 of the requirements for permit units '-13-2, '-14-2, '-15-1, '-16-1, '-17-1, & '-18-1.
- h. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER AND SULFATREAT FUEL GAS DRY SULFUR SCRUBBING SYSTEM SHARED WITH UNITS S-3103-13, '-14, '-15, '-16, '-17, '-18, '-20, AND '-21 (S-3103-19-1)
- i. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER (S-3103-20-1)

Permit units S-3103-19-0 & '-20-0 were subject to the District NSR Rule upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Conditions 5, 7, 8, 21, 22, 23, & 24 from existing PTO S-3103-19-0 have been included as conditions 2, 4, 6, 19, 20, 21, & 22, respectively, on draft permit '-19-1.
- Conditions 5, 7, & 8 from existing PTO S-3103-20-0 have been included as conditions 2, 4, & 6, respectively, on draft permit '-20-1.

- j. 2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-22-1)
- k. 2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-23-1)
- l. 2,206 BHP CATERPILLAR MODEL 3512C TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTERCOOLER POWERING AN EMERGENCY GENERATOR (S-3103-24-1)
- m. 1,502 BHP CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTERCOOLER POWERING AN EMERGENCY GENERATOR (S-3103-25-1)

Permit units S-3103-22-0, '-23-0, '-24-0 & '-25-0 were subject to the District NSR Rule upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Conditions 4, 6, 11, & 12 from the existing PTOs have been included as conditions 1, 3, 9, & 10 of the requirements for permit units '-22-1, '-23-1, '-24-1, & '-25-1.

#### **4. District Rule 2520, Federally Mandated Operating Permits**

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40CFR 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.

- a. VAREC DIGESTER GAS FLARE (S-3103-2-1)
- b. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER AND SULFATREAT FUEL GAS DRY SULFUR SCRUBBING SYSTEM SHARED WITH UNITS S-3103-13, '-14, '-15, '-16, '-17, '-18, '-20, AND '-21 (S-3103-19-1)

Section 9.4.2 requires that recordkeeping be performed if none is associated with a given emission limit to assure compliance.

- Condition 16 of the requirements for permit unit -2-1 assures compliance with this requirement.
- Conditions 23 & 24 of the requirements for permit unit -19-1 assures compliance with this requirement.

#### **5. District Rule 4201 – Particulate Matter Concentration**

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

- a. 1,199 BHP CATERPILLAR MODEL #3508TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-10-1)
- b. 2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-22-1)
- c. 2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-23-1)
- d. 2,206 BHP CATERPILLAR MODEL 3512C TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTERCOOLER POWERING AN EMERGENCY GENERATOR (S-3103-24-1)
- e. 1,502 BHP CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTERCOOLER POWERING AN EMERGENCY GENERATOR (S-3103-25-1)

From Project 1073298;

The expected grain loading for the diesel fired emergency generator IC engines (PM = 100% PM10):

$$\frac{0.03g}{hp \cdot hr} \times \frac{1hp \cdot hr}{2,542.5 Btu} \times \frac{10^6 Btu}{9,051 dscf} \times \frac{0.35 Btu_{out}}{1 Btu_{in}} \times \frac{15.43 grain}{g} = \frac{0.007 grain}{dscf}$$

$$GL = 0.007 \text{ grain/dscf} < 0.1 \text{ grain/dscf}$$

- Condition 2 of the requirements for permit unit '-10-1 assures compliance with this requirement.
  - Condition 8 of the requirements for permit units '-22-1, '-23-1, '-24-1, & '-25-1 assures compliance with this requirement.
- f. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-13-2)
  - g. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-14-2)
  - h. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-15-1)
  - i. 1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-16-1)
  - j. 0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-17-1)
  - k. 0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (S-3103-18-1)

From Project 1073298;

The expected grain loading for the gas fired process heaters (PM = 100% PM10):

$$\left( \frac{0.008 \text{ lb} - \text{PM}}{\text{MMBtu}} \times \frac{7,000 \text{ grain}}{\text{lb} - \text{PM}} \right) / \left( \frac{8,578 \text{ ft}^3}{\text{MMBtu}} \times 1.17 \right)$$

$$GL = 0.0056 \text{ grain/dscf} < 0.1 \text{ grain/dscf}$$

- Condition 3 of the requirements for permit units '-13-2, '-14-2, '-15-1, '-16-1, '-17-1, & '-18-1 assures compliance with this requirement.



- l. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER AND SULFATREAT FUEL GAS DRY SULFUR SCRUBBING SYSTEM SHARED WITH UNITS S-3103-13, '-14, '-15, '-16, '-17, '-18, '-20, AND '-21 (S-3103-19-1)
- m. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER (S-3103-20-1)

From Project 1073298;

The expected grain loading for the digester gas fired cogeneration IC engines (PM = 100% PM10):

$$\frac{0.04 \text{ g} - \text{PM}_{10}}{\text{bhp} - \text{hr}} \times \frac{1 \text{ bhp} - \text{hr}}{7,178.5 \text{ Btu}} \times \frac{10^6 \text{ Btu}}{9,039 \text{ dscf}} \times \frac{(20.9 - 17)}{20.9} \times \frac{15.43 \text{ grain}}{\text{g}} =$$

$$GL = 0.0018 \text{ grain/dscf} < 0.1 \text{ grain/dscf}$$

- Condition 5 of the requirements for permit units '-19-1 & '-20-1 assures compliance with this requirement.

## 6. District Rule 4311 - Flares

- a. VAREC DIGESTER GAS FLARE (S-3103-2-1)

Section 5.0 lists the requirements of this rule. Section 5.2 requires a flame to be constantly present while venting gases. The outlet shall be equipped with an automatic ignition system, or shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. 5.4 Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. 5.5 Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. 5.6 Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18.

- Conditions 1-5 of the requirements for permit unit -2-1 assures compliance with this requirement.

Section 6.2 requires records to be kept for at least 5 years.

- Condition 16 of the requirements for permit unit -2-1 assures compliance with this requirement.

## **7. Rule 4702 – Internal Combustion Engines – Phase 2**

The purpose of this rule is to limit the emissions of NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub> from internal combustion engines. The rule applies to any engine rated at 25 bhp or greater.

The SIP approved version of Rule 4702 is the version amended on 1/18/07. Rule 4702 was amended on 8/18/11, however, these amendments have not yet been approved into the SIP. The 8/19/11 amendments established more stringent NO<sub>x</sub> emission limits and impose fuel sulfur requirements for non-agricultural operation spark ignited IC engines. Compliance with these requirements is phased in beginning in 2014. Therefore, compliance with the currently applicable requirements of 8/18/11 amendments demonstrates compliance with the requirements of the SIP approved version of Rule 4702.

- a. 1,199 BHP CATERPILLAR MODEL #3508TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-10-1)
- b. 2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-22-1)
- c. 2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-3103-23-1)
- d. 2,206 BHP CATERPILLAR MODEL 3512C TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTER COOLER POWERING AN EMERGENCY GENERATOR (S-3103-24-1)
- e. 1,502 BHP CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTER COOLER POWERING AN EMERGENCY GENERATOR (S-3103-25-1)

Section 4.2 has an exemption for emergency standby engines from all sections of this rule except for the requirements of Sections 5.9 and 6.2.3, provided the engine is equipped with an operating nonresettable elapsed time meter. Section 3.15 defines an emergency standby engine.

Section 5.9 lists engine monitoring requirements, including those for emergency engines.

- Condition 5 of permit '-10-1 and condition 11 of permits '-22-1, '-23-1, '-24-1, & '-25-1 assures compliance with the requirements of Section 5.9.2
- Condition 8 of permit '-10-1 and condition 12 of permits '-22-1, '-23-1, '-24-1, & '-25-1 assures compliance with the requirements of Section 5.9.3
- Each engine is equipped with a nonresettable elapsed time meter.

Section 6.2 contains recordkeeping requirements. This section outlines the information that should be gathered under sections 6.2.1 and 6.2.3. Per Section 6.2.3, an operator claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: Total hours of operation, the type of fuel used, the purpose for operating the engine, all hours of non-emergency and emergency operation shall be reported, and other support documentation necessary to demonstrate claim to the exemption.

- Conditions 12, 13, & 14 of permit '-10-1 and conditions 13 and 14 of permits '-22-1, '-23-1, '-24-1, & '-25-1 assures compliance with the requirements of Section 6.2.3.
- f. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER AND SULFATREAT FUEL GAS DRY SULFUR SCRUBBING SYSTEM SHARED WITH UNITS S-3103-13, '-14, '-15, '-16, '-17, '-18, '-20, AND '-21 (S-3103-19-1)
- g. 1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER (S-3103-20-1)

Section 5.7 requires that on and after the compliance schedule specified in Section 7.5, operators of non-AO (agricultural operations) spark-ignited engines shall comply with one of the following requirements: Operate the engine exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases; or Limit gaseous fuel sulfur content to no more than five (5) grains of total Sulfur per one hundred (100) standard cubic feet.

The digester gas combusted in the lean-burn engines is scrubbed to provide a fuel gas with no more than 20 ppmv S, which equates to 1.26 gr-S/100 dscf (as H<sub>2</sub>S).

- Conditions 4 and 21 of permit '-19-1, and condition 4 of permit '-20-1 assures compliance with the future requirements of Section 5.7.

Section 5.8.1 requires that each engine with a rated brake horsepower of 1,000 bhp or greater and which is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition to operate more than 2,000 hours per calendar year, or with an external emission control device, either install, operate, and maintain continuous monitoring equipment for NO<sub>x</sub>, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO approved alternate monitoring. The monitoring system may be a continuous emission monitoring system (CEMS), a parametric emissions monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following: Periodic NO<sub>x</sub> and CO emission concentrations, engine exhaust oxygen concentration, air-to-fuel ratio, flow rate of reducing agents added to engine exhaust, catalyst inlet and exhaust temperature, catalyst inlet and exhaust oxygen concentration, or other operational characteristics.

The 1,175 lean-burn engines follow an approved alternate monitoring scheme taking monthly measurements of NO<sub>x</sub>, CO, and O<sub>2</sub> concentrations with a hand-held portable emissions analyzer.

- Conditions 7, 8, 9, and 10 of permits '-19-1, and '-20-1 assures compliance with the requirements of Section 5.8.1.

Section 5.8.6 requires that each engine install and operate a nonresettable elapsed time meter.

- Condition 1 of permits '-19-1, and '-20-1 assures compliance with the requirements of Section 5.8.6.

Section 5.8.7 & 5.8.8 requires that each engine implement the Inspection and Monitoring (I&M) plan, if any, submitted to and approved by the APCO.

- Conditions 17 and 18 of permits '-19-1, and '-20-1 assures compliance with the requirements of Section 5.8.7 & 5.8.8.

Section 5.8.9 requires that each engine use a portable NO<sub>x</sub> analyzer to take NO<sub>x</sub> emission readings to verify compliance with the emission

requirements of Section 5.2 or Section 8.0 during each calendar quarter in which a source test is not performed and the engine is operated.

- Condition 7 of permits '-19-1, and '-20-1 assures compliance with the requirements of Section 5.8.9.

Section 5.10.1 requires that each engine complying with Sections 5.7.2 or 5.7.5 shall perform an annual sulfur fuel analysis in accordance with the test methods in Section 6.4. The operator shall keep the records of the fuel analysis and shall provide it to the District upon request.

- Condition 21 of permit '-19-1 assures compliance with the requirements of Section 5.10.1.

Section 6.2 contains recordkeeping requirements. This section outlines the information that should be gathered under sections 6.2.1 and 6.2.3. Per Section 6.2.3, an operator claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: Total hours of operation, the type of fuel used, the purpose for operating the engine, all hours of non-emergency and emergency operation shall be reported, and other support documentation necessary to demonstrate claim to the exemption.

- Condition 17 of permits '-19-1 and '-20-1 assures compliance with the requirements of Section 6.2.1.
- Condition 25 of permit '-19-1 and condition 19 of permit '-20-1 assures compliance with the requirements of Section 6.2.2.

Section 6.3 requires compliance source testing with the NO<sub>x</sub>, CO and VOC emissions limits of Rule 4702. The January 18, 2007, amendment to Rule 4702 (SIP approved) included 24 month source testing requirements for lean-burn engines without external exhaust controls. The current August 18, 2011, amendment to Rule 4702 (not SIP approved to date) does not require 24 month source testing to demonstrate rule compliance for non-AO spark ignited lean-burn engines without external exhaust controls. The source testing requirements remain on permits '-19-1 and '-20-1.

- Condition 11 of permits '-19-1 '-20-1 assures compliance with the emissions requirements of Section 6.3.

Section 6.4 lists test methods approved for use in determining emission limits and fuel gas sulfur content for the IC engines.

- Conditions 14 and 23 of permit '-19-1, and condition 14 of permit '-20-1 assures compliance with the requirements of Section 6.4.

**8. California Code of Regulations (CCR), Title 17 (Public Health), Division 3 (Air Resources), Chapter 1 (Air Resources Board), Subchapter 7.5 (Air Toxic Control Measures), Measure 93115 (Stationary Diesel Engines)**

The requirements of the CCR Title 17 Measure 93115 are not Federally enforceable. They are, however, requirements that are enforced on a state and local level and the measure is cited in the rule reference section of permit conditions involving compression ignition IC engines.

Emergency Operating Requirements:

This regulation stipulates that no owner or operator shall operate any new or in-use stationary diesel-fueled compression ignition (CI) emergency standby engine, in response to the notification of an impending rotating outage, unless specific criteria are met.

This section applies to emergency standby IC engines that are permitted to operate during non-emergency conditions for the purpose of providing electrical power. However, District Rule 4702 states that emergency standby IC engines may only be operated during non-emergency conditions for the purposes of maintenance and testing. Therefore, this section does not apply and no further discussion is required.

This ATCM requires that no owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine (>50 bhp), that emits diesel PM at a rate greater than 0.01 g/bhp-hr and equal to or less than 0.15 g/bhp-hr, more than 50 hours per year for maintenance and testing purposes.

The ATCM also requires that in-use emergency standby engines are required to use only diesel fuels that meet the definition of CARB diesel at the time of purchase.

The ATCM also requires that no owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine for non-emergency use, including maintenance and testing, during the following periods: a) whenever there is a school sponsored activity, if the engine is located on school grounds, and b) between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds. This facility is not located near any schools so these requirements are not applicable.

The ATCM also requires that owner or operator of an emergency standby diesel-fueled CI engine shall keep a monthly log of usage that shall list and document the nature of use for each of the following:

- a. Emergency use hours of operation;
- b. Maintenance and testing hours of operation;
- c. Hours of operation for any emission testing;
- d. Initial start-up hours;
- e. If applicable, hours of operation to comply with the requirements of NFPA 25;
- f. Hours of operation for all uses other than those specified above; and
- g. The fuel used.

The owner or operator shall document fuel use through the retention of fuel purchase records that account for all fuel used in the engine and all fuel purchased for use in the engine, and, at a minimum, contain the following information for each individual fuel purchase transaction:

- I. Identification of the fuel purchased as either CARB Diesel;
- II. Amount of fuel purchased;
- III. Date when the fuel was purchased;
- IV. Signature of owner or operator or representative of owner or operator who received the fuel; and
- V. Signature of fuel provider indicating fuel was delivered.

The ATCM requirements have been incorporated into draft permits:

- S-3103-10-1 as conditions 4, 7, 9, 12, 13, & 14;
- S-3103-22-1, '-23-1, '-24-1, and '-25-1 as conditions 1, 2, 4, 9, 10, 13, & 14.

#### **9. 40 CFR 60 Subpart A**

##### **a. VAREC DIGESTER GAS FLARE (S-3103-2-1)**

NSPS Subpart A, Section 60.18 (c)(1) requires flares to be designed and to operate with no visible emissions, except for periods not to exceed 5 minutes during any 2 consecutive hours. Section 60.18 (f)(1) also requires that visible emissions determinations be made using EPA Method 22.

- Condition 23 for permit unit '-0-1 and condition 6 of permit '-2-1 assures compliance with this requirement.

Sections 60.18 (c)(3), 60.18 (c)(5), and 60.18 (f)(3-6) states that non-assisted flares shall have a diameter of 3 inches or greater, have a hydrogen content of 8.0 percent (by volume), or greater, and be designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity,  $V_{max}$ , as determined by the equation in this section. These sections also set a limit on the net heating value of the flared gas to be no less than 200 Btu/scf for non-assisted flares and 300 Btu/scf for air-assisted or steam-assisted flares. The method to be used to calculate net heating value is also specified.

- Conditions 8-10 of the requirements for permit unit '-2-1 assures compliance with this requirement.

Section 60.18 (c)(4)(i-iii) also requires the flare gas exit velocity to conform to the following limits:



<u>Flare Type</u>	<u>Flare Gas Min. Btu/scf</u>	<u>Exit Velocity (ft/sec)</u>	
		<u>Min</u>	<u>Max</u>
Air-assisted	300	----	< 55
Non-assisted	200	----	< 60
Steam-assisted	300	----	< 60
Non-assisted	>1,000	60	<400
Steam-assisted	>1,000	60	<400

- Conditions 12-15 of the requirements for permit unit '-2-1 assures compliance with this requirement.

Sections 60.18 (c)(2), 60.18 (d), 60.18 (e), and 60.18 (f)(2)

These sections of Subpart A require that flares be operated with a flame present at all times when emissions may be vented to them. The presence of the pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the flame presence.

- Conditions 1-3 of the requirements for permit unit '-2-1 assures compliance with this requirement.

**10. 40 CFR Part 60, Subpart III, New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines**

Section 60.4200(a)(2)(i) states that the provisions of this subpart apply to owners and operators of stationary compression ignition (CI) internal combustion engines that commence construction after July 11, 2005 where the engines are manufactured after April 1, 2006 and are not fire pump engines.

The 1,199 bhp emergency engine, permit unit S-3103-10, was installed prior to July 11, 2005 and is not subject to this subpart.

The remaining emergency engines, permit units S-3103-22, '-23, '-24, & '-25 were installed after July 11, 2005 with engines manufactured after April 1, 2006 and are not fire pump engines. Therefore, these engines are subject to this subpart.

Engine(s) must meet the appropriate Subpart III emission standards for new engines, based on the model year, size, and number of liters per cylinder.

- Each of the above engines is a Tier 2 certified RICE which is the appropriate emission standard for engines >1,207 bhp manufactured in 2007.

Engine(s) must be fired on 500 ppm sulfur content fuel or less, and fuel with a minimum centane index of 40 or a maximum aromatic content of 35 percent by volume. Starting in October 1, 2010, the maximum allowable sulfur fuel content will be lowered to 15 ppm.

- Condition 1 of draft permits '-22-1, '-23-1, '-24-1, & '-25-1 assures compliance with this requirement.

The operator/owner must install a non-resettable hour meter prior to startup of the engine(s).

- Condition 2 of draft permits '-22-1, '-23-1, '-24-1, & '-25-1 assures compliance with this requirement.

Emergency engine(s) may be operated for the purpose of maintenance and testing up to 100 hours per year. There is no limit on emergency use. The Air Toxic Control Measure for Stationary Compression Ignition Engines (Stationary ATCM) further limits engine maintenance and testing to 50 hours/year.

- Condition 4 of draft permits '-22-1, '-23-1, '-24-1, & '-25-1 assures compliance with this requirement.

The owner/operator must operate and maintain the engine(s) and any installed control devices according to the manufacturers written instructions.

- Condition 11 of draft permits '-22-1, '-23-1, '-24-1, & '-25-1 assures compliance with this requirement.

#### **11. 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Spark Ignition Internal Combustion Engines**

The digester gas engines (S-3103-19 & '-20) are spark ignited (SI), while the diesel emergency engines (S-3103-22, '-23, '-24, & '-25) are compression-ignited. The digester gas engines were manufactured after 1/01/2008. Therefore, Subpart JJJJ is applicable to the digester gas engines only.

The BACT requirements for these engines are more stringent than the NSPS limits, so the engines will be in compliance with this regulation.

- Condition 6 of draft permits '-19-1 & '-20-1 assures compliance with this requirement.

If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

- Conditions 11 and 17 of draft permits '-19-1 & '-20-1 assures compliance with this requirement.

**12. 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)**

**§ 63.6580 Purpose**

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

**§ 63.6585 Applicability**

Owners or Operators of a stationary RICE at a major or area source of HAP emissions are subject to this subpart, except if the stationary RICE is being tested at a stationary RICE test cell/stand. This facility is an area source of HAP emissions; therefore, this subpart applies. As such, each RICE at this facility is subject to this subpart.

**§ 63.6590 What part of my plant does this subpart cover?**

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

This facility is an area source of HAP emissions; therefore, this subpart applies.

(1) Existing stationary RICE

- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

The 1,199 bhp emergency engine at this facility (permit unit S-3103-10) is defined as an "existing RICE" since installation was prior to June 12, 2006.

(2) New stationary RICE

- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

Four emergency compression ignition (CI) engines at this facility (permit units S-3103-22, '-23, '-24, & '-25) and two spark-ignited (SI) full-time engines (S-3103-19 & '-20) are defined as "new" RICE since installation was after June 12, 2006. Therefore, these engines are not subject to this Subpart.

**§ 63.6595 When do I have to comply with this subpart?**

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

Permit unit S-3103-10 is an existing stationary CI RICE located at an area source of HAP emissions; therefore, the full compliance date for this subpart is May 3, 2013.

**§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you. Note: There are no Table 1b or Table 2b operating limitations for emergency engines.

**Table 2d to Subpart ZZZZ of Part 63 - Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions.**

As stated in §§63.6603 and 63.6640, the following table applies to existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirements, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;	N/A
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	N/A
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	N/A

- Conditions 17, 18 & 19 of draft permit '-10-1 assures compliance with this requirement.

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under

Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

**§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?**

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

- (1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;
- (2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;
- (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

- Conditions 5 & 8 of draft permit '-10-1 assures compliance with this requirement.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

- Condition 15 of draft permit '-10-1 assures compliance with this requirement.

**§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?**

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(f) Requirements for emergency stationary RICE.

(1) If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent

balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

- Conditions 8, 9, 10 & 11 of draft permit '10-1 assures compliance with this requirement.

**Table 6 to Subpart ZZZZ of Part 63 - Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices**

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE located at an area source of HAP	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

**§ 63.6645 What notifications must I submit and when?**

There are no notifications necessary for existing emergency engines.

**§ 63.6650 What reports must I submit and when?**

There are no report submittals necessary for existing emergency engines.



**§ 63.6655 What records must I keep?**

- (a) If you must comply with the emission and operating limitations, you must keep the records as follows:
- (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE:
- (2) An existing stationary emergency RICE.
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.
- (f) If you own or operate any of the stationary RICE in paragraph (f)(2) below, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
- (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.
- Conditions 12, 20 & 21 of draft permit '-10-1 assures compliance with this requirement.

**§ 63.6660 In what form and how long must I keep my records?**

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

Per the discussion above, the following conditions will be placed on the draft PTO for permit unit S-3103-10. These conditions have been added as conditions 4, 5, 9, 12, & 14 through 21:

- 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 63 Subpart ZZZZ]
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ]
- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702 and 17 CCR 93115 and 40 CFR 60 Subpart ZZZZ]
- 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. 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; 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ]
- 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 Rules 1070, 4702, 2520, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ]

- On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
- On and after May 3, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ]
- On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ]
- On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
- On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
- On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]
- On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

### 13. 40 CFR Part 64 – Compliance Assurance Monitoring (CAM)

To be subject to CAM for a particular pollutant, an emissions unit must meet all of the following criteria:

- The unit must have an emission limit for the pollutant,
- The unit must have add-on controls for the pollutant, and
- The pre-control potential to emit for the unit must exceed major source thresholds.

CAM is not triggered for any permit units. None of the units are equipped with add on control equipment and none of the units have emissions limits that exceed major source thresholds.

## X. 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

By using the model general permit templates listed in Section IV of this evaluation, the applicant has requested that a permit shield be issued for requirements addressed in the templates. The basis for each permit shield is discussed in the Permit Shield section of each template.

## XI. PERMIT CONDITIONS

See draft Title V Permit Unit Requirements beginning on the next page.

# San Joaquin Valley Air Pollution Control District

FACILITY: S-3103-0-1

EXPIRATION DATE: 01/31/2013

## FACILITY-WIDE REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. 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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. 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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
4. 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] Federally Enforceable Through Title V Permit
5. 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 Rules 2010 and 2020] Federally Enforceable Through Title V Permit
6. 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; 2080; and 2520] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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] Federally Enforceable Through Title V Permit
10. 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] 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: BAKERSFIELD CITY WASTEWATER #3  
Location: 8101 ASHE RD, BAKERSFIELD, CA 93313  
S-3103-0-1: Apr 17 2012 2:58PM -- LEONARDS

11. 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] Federally Enforceable Through Title V Permit
12. 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 District Rule 2520 (6/21/01). [District Rules 2520 and 1100] Federally Enforceable Through Title V Permit
13. 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] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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] Federally Enforceable Through Title V Permit
16. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520] Federally Enforceable Through Title V Permit
17. 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] Federally Enforceable Through Title V Permit
18. 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] Federally Enforceable Through Title V Permit
19. 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] Federally Enforceable Through Title V Permit
20. 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] Federally Enforceable Through Title V Permit
21. 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] Federally Enforceable Through Title V Permit
22. 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] Federally Enforceable Through Title V Permit
23. 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.

24. 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] Federally Enforceable Through Title V Permit
25. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601] Federally Enforceable Through Title V Permit
26. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601(12/17/09). [District Rule 4601] Federally Enforceable Through Title V Permit
27. 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] Federally Enforceable Through Title V Permit
28. 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
29. 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
30. 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 Rule 8021 and 8011] Federally Enforceable Through Title V Permit
31. 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 Rule 8031 and 8011] Federally Enforceable Through Title V Permit
32. 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 Rule 8041 and 8011] Federally Enforceable Through Title V Permit
33. 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 Rule 8051 and 8011] Federally Enforceable Through Title V Permit
34. 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 Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
35. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements 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 Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
36. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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

37. 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] Federally Enforceable Through Title V Permit
38. 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] Federally Enforceable Through Title V Permit
39. 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] Federally Enforceable Through Title V Permit
40. 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] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100 (12/17/92); 2010 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070 (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] Federally Enforceable Through Title V Permit
42. On XXXXXXXX, 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

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-2-1

EQUIPMENT DESCRIPTION:  
VAREC DIGESTER GAS FLARE

EXPIRATION DATE: 01/31/2013

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## PERMIT UNIT REQUIREMENTS

1. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311 and 40CFR 60.18(c)(2)] Federally Enforceable Through Title V Permit
2. The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311 and 40CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
3. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311 and 40CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
4. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
5. Open flares in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311] Federally Enforceable Through Title V Permit
6. Visible emissions monitoring shall be conducted at least annually, using EPA Method 22. [40CFR 60.18(f)(1)] Federally Enforceable Through Title V Permit
7. {2334} The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [40CFR 60.18(d)] Federally Enforceable Through Title V Permit
8. A non-assisted flare shall have a diameter of 3 inches or greater, have a minimum hydrogen content of 8.0% by volume, and be designed for and operated with an exit velocity less than 122 ft/sec and less than the velocity  $V_{max}$ , as determined by the equation specified in paragraph 40 CFR 60.18 (c)(3)(i)(A). [40 CFR 60.18 (c)(3)(i)(A)] Federally Enforceable Through Title V Permit
9. {2336} The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)] Federally Enforceable Through Title V Permit
10. {2337} Air-assisted or steam-assisted flares shall only be used when the net heating value of the gas being combusted is 300 Btu/scf or greater. Non-assisted flares shall only be used when the net heating value of the gas being combusted is 200 Btu/scf or greater. [40 CFR 60.18 (c)(3)(ii)] Federally Enforceable Through Title V Permit
11. {2338} Steam-assisted and non-assisted flares shall be operated with an exit velocity less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)] Federally Enforceable Through Title V Permit
12. {2339} Steam-assisted and non-assisted flares may be operated with an exit velocity equal to or greater than 60 ft/sec, but less than 400 ft/sec, if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)] 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.

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13. {2340} Steam-assisted and non-assisted flares may be operated with an exit velocity less than the velocity  $V_{max}$ , as determined by the methods specified in 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)] Federally Enforceable Through Title V Permit
14. {2341} Air-assisted flares shall be operated with an exit velocity less than the velocity  $V_{max}$  as determined by the methods specified in 40 CFR 60.18 (f)(6). [40 CFR 60.18 (c)(5)] Federally Enforceable Through Title V Permit
15. {2342} The net heating value of the gas being combusted the flare shall be calculated pursuant to 40 CFR 60.18(f)(3) or by using EPA Method 18, ASTM D1946, and ASTM D2382 if published values are not available or cannot be calculated. [40 CFR 60.18 (f)(3)] Federally Enforceable Through Title V Permit
16. The permittee shall maintain, and make available for District inspection, all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520 and 4311] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-10-1

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

1,199 BHP CATERPILLAR MODEL #3508TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

1. The engine shall be equipped with a turbocharger and with an aftercooler or intercooler. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The engine shall be operated with the fuel injection timing retarded four degrees from the manufacturer's standard recommended timing. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201,4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702 and 40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702 and 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] 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
11. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract [District Rule 4702 and 40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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 and 40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115] Federally Enforceable Through Title V Permit
14. 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 Rules 1070, 4702, 2520, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. On and after May 3, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit
20. On and after May 3, 2013, the permittee shall maintain records of performance tests and performance evaluations as required in §63.10(b)(2)(viii) and records of required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit
21. On and after May 3, 2013, the permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63, Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-12-1

EXPIRATION DATE: 01/31/2013

**EQUIPMENT DESCRIPTION:**

ODOR CONTROL SYSTEM #1 ODOR CONTROL SYSTEM INCLUDING TWO BIOFILTER CELLS SERVING THE HEADWORKS, PRIMARY CLARIFIERS, SECONDARY CLARIFIERS, DAF THICKENERS, AERATION BASIN, AND OTHER MISCELLANEOUS SOURCES

## PERMIT UNIT REQUIREMENTS

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1. See facility wide permit for requirements applicable to this permit unit. [District Rule 2080] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-13-2

EXPIRATION DATE: 01/31/2013

**EQUIPMENT DESCRIPTION:**

1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #3)

DRAFT

## PERMIT UNIT REQUIREMENTS

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1. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308] Federally Enforceable Through Title V Permit
5. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081] Federally Enforceable Through Title V Permit
6. 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 1070] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley  
Air Pollution Control District

PERMIT UNIT: S-3103-14-2

EXPIRATION DATE: 01/31/2013

**EQUIPMENT DESCRIPTION:**

1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #4)

**PERMIT UNIT REQUIREMENTS**

1. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308] Federally Enforceable Through Title V Permit
5. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081] Federally Enforceable Through Title V Permit
6. 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 1070] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-15-1

EXPIRATION DATE: 01/31/2013

**EQUIPMENT DESCRIPTION:**

1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #5)

**DRAFT**

## PERMIT UNIT REQUIREMENTS

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1. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308] Federally Enforceable Through Title V Permit
5. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081] Federally Enforceable Through Title V Permit
6. 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 1070] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-16-1

EXPIRATION DATE: 01/31/2013

**EQUIPMENT DESCRIPTION:**

1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #6)

## PERMIT UNIT REQUIREMENTS

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1. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308] Federally Enforceable Through Title V Permit
5. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081] Federally Enforceable Through Title V Permit
6. 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 1070] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

PERMIT UNIT: S-3103-17-1

EXPIRATION DATE: 01/31/2013

**EQUIPMENT DESCRIPTION:**

0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #7)

**PERMIT UNIT REQUIREMENTS**

1. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308] Federally Enforceable Through Title V Permit
5. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081] Federally Enforceable Through Title V Permit
6. 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 1070] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-18-1

EXPIRATION DATE: 9/31/2013

**EQUIPMENT DESCRIPTION:**

0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #8)

## PERMIT UNIT REQUIREMENTS

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1. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308] Federally Enforceable Through Title V Permit
5. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081] Federally Enforceable Through Title V Permit
6. 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 1070] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-19-1

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER AND SULFATREAT FUEL GAS DRY SULFUR SCRUBBING SYSTEM SHARED WITH UNITS S-3103-13, '-14, '-15, '-16, '-17, '-18, '-20, AND '-21

## PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
2. Total annual operating hours of digester gas fired cogeneration engines S-3103-19 and S-3103-20 shall not exceed 17,196 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Engine shall operate according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Total sulfur content of digester gas combusted in this unit shall not exceed 20 ppmvd. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following; NO<sub>x</sub> (as NO<sub>2</sub>): 0.6 g/bhp-hr, PM<sub>10</sub>: 0.04 g/bhp-hr, CO: 2.5 g/bhp-hr, or VOC (as methane): 0.25 g/bhp-hr. [District Rule 2201 and CFR 40, Subpart JJJJ] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
8. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [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.

9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
10. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
11. Source testing to measure NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted at least once every 8,760 hours of operation or 24 months, whichever comes first. [District Rules 1081, 2201, and 4702 and 40 CFR 60, Subpart JJJJ] Federally Enforceable Through Title V Permit
12. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
14. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. 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
17. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702 and 40 CFR 60, Subpart JJJJ] Federally Enforceable Through Title V Permit
18. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
19. All vessel hatches and openings shall remain closed during operation of Sulfa treat H<sub>2</sub>S scrubber. [District Rule 2201, 4102] Federally Enforceable Through Title V Permit
20. No components (i.e., valves, flanges, etc.) associated with the Sulfa treat unit shall be the source of any leak greater than 10,000 ppmv (as methane) when measured at a distance no greater than 1 cm from the potential source per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Influent and effluent gas streams of Sulfa treat system shall be sampled at least monthly for H<sub>2</sub>S content of effluent gas to determine when recharging is required. [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.

22. During recharging of the H<sub>2</sub>S scrubber, untreated vapors shall not be introduced into the fuel system or vented to the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The following test method shall be used for fuel gas sulfur content - ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
24. Record of H<sub>2</sub>S content of effluent gas shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520] Federally Enforceable Through Title V Permit
25. 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] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-20-1

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED LEAN-BURN IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
2. Total annual operating hours of digester gas fired cogeneration engines S-3103-19 and S-3103-20 shall not exceed 17,196 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Engine shall operate according to the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Total sulfur content of digester gas combusted in this unit shall not exceed 20 ppmvd. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following; NO<sub>x</sub> (as NO<sub>2</sub>): 0.6 g/bhp-hr, PM<sub>10</sub>: 0.04 g/bhp-hr, CO: 2.5 g/bhp-hr, or VOC (as methane): 0.25 g/bhp-hr. [District Rule 2201 and CFR 40, Subpart JJJJ] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
8. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [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.

9. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
10. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
11. Source testing to measure NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted at least once every 8,760 hours of operation or 24 months, whichever comes first. [District Rules 1081, 2201, and 4702 and 40 CFR 60, Subpart JJJJ] Federally Enforceable Through Title V Permit
12. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
14. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. 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
17. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702 and 40 CFR 60, Subpart JJJJ] Federally Enforceable Through Title V Permit
18. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
19. 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] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-22-1

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (AERATION BLOWER 1)

## PERMIT UNIT REQUIREMENTS

1. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. 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
6. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
7. 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] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
9. Emissions from this IC engine shall not exceed any of the following limits: 5.39 g-NOx/bhp-hr, 0.29 g-CO/bhp-hr, or 0.11 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed 0.026 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
11. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60, Subpart IIII] Federally Enforceable Through Title V Permit

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

12. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
13. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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
14. 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

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-23-1

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (AERATION BLOWER 2)

## PERMIT UNIT REQUIREMENTS

1. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. 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
6. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
7. 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] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
9. Emissions from this IC engine shall not exceed any of the following limits: 5.39 g-NOx/bhp-hr, 0.29 g-CO/bhp-hr, or 0.11 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed 0.026 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
11. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60, Subpart IIII,] Federally Enforceable Through Title V Permit

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

12. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
13. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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
14. 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

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-24-1

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

2,206 BHP CATERPILLAR MODEL 3512C TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTER COOLER POWERING AN EMERGENCY GENERATOR (AERATION BASIN 3)

## PERMIT UNIT REQUIREMENTS

1. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. 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
6. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
7. 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] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
9. Emissions from this IC engine shall not exceed any of the following limits: 4.97 g-NOx/bhp-hr, 0.45 g-CO/bhp-hr, or 0.11 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed 0.03 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
11. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60, Subpart IIII,] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
13. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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
14. 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

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-25-1

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

1,502 BHP CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTER COOLER POWERING AN EMERGENCY GENERATOR (HEAD WORKS)

## PERMIT UNIT REQUIREMENTS

1. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 40 CFR Part 60, Subpart IIII, and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. 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
6. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
7. 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] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
9. Emissions from this IC engine shall not exceed any of the following limits: 4.82 g-NOx/bhp-hr, 0.19 g-CO/bhp-hr, or 0.01 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed 0.023 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
11. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60, Subpart IIII,] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
13. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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
14. 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

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

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San Joaquin Valley  
Air Pollution Control District

PERMIT UNIT: S-3103-26-1

EXPIRATION DATE: 01/31/2013

EQUIPMENT DESCRIPTION:  
FERRIC CHLORIDE INJECTION SYSTEM SERVING DIGESTER TANKS

DRAFT

**PERMIT UNIT REQUIREMENTS**

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1. Ferric chloride injection system shall be operated according to manufacturers specifications. [District Rule 2080]  
Federally Enforceable Through Title V Permit

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

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San Joaquin Valley  
Air Pollution Control District

PERMIT UNIT: S-3103-27-1

EXPIRATION DATE: 9/31/2013

**EQUIPMENT DESCRIPTION:**

ODOR CONTROL SYSTEM #2 INCLUDING ONE BIOFILTER SERVING THE SLUDGE DEWATERING BUILDING AND SLUDGE CAKE LOADING STATION

**PERMIT UNIT REQUIREMENTS**

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1. See facility wide permit for requirements applicable to this permit unit. [District Rule 2080] Federally Enforceable Through Title V Permit

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

# Attachment A

## Detailed Permit Listing

**Detailed Facility Report**  
For Facility=3103 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

<b>BAKERSFIELD CITY WASTEWATER #3</b> 8101 ASHE RD BAKERSFIELD, CA 93313	FAC # STATUS: TELEPHONE:	S 3103 A 6613263258	TYPE: TOXIC ID:	TitleV	EXPIRE ON: AREA: INSP. DATE:	01/31/2013 81 / 01/13
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-3103-2-0	3.75 MMBTU/HR FLARE	3020-02 F	1	607.00	607.00	A	VAREC DIGESTER GAS FLARE
S-3103-10-0	1199 HP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,199 BHP CATERPILLAR MODEL #3508TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-3103-12-0	Miscellaneous	3020-06	1	105.00	105.00	A	ODOR CONTROL SYSTEM #1 ODOR CONTROL SYSTEM INCLUDING TWO BIOFILTER CELLS SERVING THE HEADWORKS, PRIMARY CLARIFIERS, SECONDARY CLARIFIERS, DAF THICKENERS, AERATION BASIN, AND OTHER MISCELLANEOUS SOURCES
S-3103-13-0	1.53 MMBtu/hr	3020-02 E	1	412.00	412.00	A	1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #3)
S-3103-14-0	1.53 MMBtu/hr	3020-02 E	1	412.00	412.00	A	1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #4)
S-3103-15-0	1.53 MMBtu/hr	3020-02 E	1	412.00	412.00	A	1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #5)
S-3103-16-0	1.53 MMBtu/hr	3020-02 E	1	412.00	412.00	A	1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #6)
S-3103-17-0	584 kBtu/hr	3020-02 C	1	197.00	197.00	A	0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #7)
S-3103-18-0	584 kBtu/hr	3020-02 C	1	197.00	197.00	A	0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #8)
S-3103-19-0	1,175 BHP	3020-10 F	1	749.00	749.00	A	1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER AND SULFATREAT FUEL GAS DRY SULFUR SCRUBBING SYSTEM SHARED WITH UNITS S-3103-13, '-14, '-15, '-16, '-17, '-18, '-20, AND '-21
S-3103-20-0	1,175 BHP	3020-10 F	1	749.00	749.00	A	1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER
S-3103-22-0	2,937 bhp	3020-10 F	1	749.00	749.00	A	2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (AERATION BLOWER 1)
S-3103-23-0	2,937 Bhp	3020-10 F	1	749.00	749.00	A	2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (AERATION BLOWER 2)
S-3103-24-0	2,206 Bhp engine	3020-10 F	1	749.00	749.00	A	2,206 BHP CATERPILLAR MODEL 3512C TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTER COOLER POWERING AN EMERGENCY GENERATOR (AERATION BASIN 3)

**Detailed Facility Report**  
For Facility=3103 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-3103-25-0	1,502 Bhp engine	3020-10 F	1	749.00	749.00	A	1,502 BHP CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTER COOLER POWERING AN EMERGENCY GENERATOR (HEAD WORKS )
S-3103-26-0	Miscellaneous	3020-06	1	105.00	105.00	A	FERRIC CHLORIDE INJECTION SYSTEM SERVING DIGESTER TANKS
S-3103-27-0	Miscellaneous	3020-06	1	105.00	105.00	A	ODOR CONTROL SYSTEM #2 INCLUDING ONE BIOFILTER SERVING THE SLUDGE DEWATERING BUILDING AND SLUDGE CAKE LOADING STATION

Number of Facilities Reported: 1

## **Attachment B**

# **Insignificant Activities or Equipment**

**San Joaquin Valley  
Unified Air Pollution Control District  
Title V Application - INSIGNIFICANT ACTIVITIES**

COMPANY NAME: BAKERSFIELD CITY WASTEWATER #3	FACILITY ID: S - 3103
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Check the box next to the exemption category from Rule 2020 which describes any insignificant activity or equipment at your facility not requiring a permit.

Exemption Category	Rule 2020 Citation	√	Exemption Category	Rule 2020 Citation	√
Structure or incinerator assoc. with a structure designed as a dwelling for 4 families or less	4.1		Containers used to store refined lubricating oils	6.6.8	
Locomotives, airplanes, and watercraft used to transport passengers or freight	4.4		Unvented pressure vessels used exclusively to store liquified gases or assoc with exempt equipment	6.6.9 or 6.13	
Natural gas or LPG-fired boilers or other indirect heat transfer units of 5 MMBtu/hr or less	6.1.1	√	Portable tanks used exclusively to store produced fluids for ≤ six months	6.6.10	
Piston-type i.c.engine with maximum continuous rating of 50 braking horsepower (bhp) or less	6.1.2		Mobile transport tanks on delivery vehicles of VOCs	6.6.11	
Gas turbine engines with maximum heat input rating of 3 MMBtu/hr or less	6.1.3		Loading racks used for the transfer of less than 4,000 gal/day of unheated organic material with initial boiling point ≥ 302 F or of fuel oil with specific gravity ≥ 0.8251	6.7.1.1	
Space heating equipment other than boilers	6.1.4		Loading racks used for the transfer of asphalt, crude or residual oil stored in exempt tanks, or crude oil with specific gravity ≥ 0.8762	6.7.1.2	
Cooling towers with a circulation rate less than 10,000 gal/min, and that are not used for cooling of process water, or water from barometric jets or condensers++	6.2		Equipment used exclusively for the transfer of refined lubricating oil	6.7.2	
Use of less than 2 gal/day of graphic arts materials	6.3		Equipment used to apply architectural coatings	6.8.1	
Equipment at retail establishments used to prepare food for human consumption	6.4.1		Unheated, non-conveyorized cleaning equipment with < 10 ft <sup>2</sup> open area; using solvents with initial boiling point ≥ 248 F; and < 25 gal/yr. evaporative losses	6.9	
Ovens at bakeries with total daily production less than 1,000 pounds and exempt by sec. 6.1.1	6.4.3		Brazing, soldering, or welding equipment	6.10	
Equipment used exclusively for extruding or compression molding of rubber or plastics, where no plastisizer or blowing agent is used	6.5		Equipment used to compress natural gas	6.11	
Containers used to store clean produced water	6.6.1		Fugitive emissions sources assoc. with exempt equipment	6.12	
Containers ≤ 100 bbl used to store oil with specific gravity ≥ 0.8762	6.6.2		Pits and Ponds as defined in Rule 1020	6.15	
Containers ≤ 100 hbl installed prior to 6/1/89 used to store oil with specific gravity ≥ 0.8762	6.6.3		On-site roadmix manufacturing and the application of roadmix as a road base material	6.17	
Containers with a capacity ≤ 250 gallons used to store organic material where the actual storage temperature < 150 F	6.6.4		Emissions less than 2 lb/day from units not included above	6.19	
Containers used to store unheated organic material with an initial boiling point ≥ 302 F	6.6.5		Venting PUC quality natural gas from for sole purpose of pipeline and compressor repair and or maintenance	7.2	
Containers used to store fuel oils or non-air-blown asphalt with specific gravity ≥ 0.9042	6.6.6		Non-structural repairs & maintenance to permitted equipment	7.3	
Containers used to store petroleum distillates used as motor fuel with specific gravity ≥ 0.8251	6.6.7		Detonation of explosives ≤ 100 lb/day and 1,000 lb/year	7.4	

No insignificant activities (Check this box if no equipment in the above categories exist at your facility.)

## Attachment C

# Current District PTOs and ATCs



San Joaquin Valley  
Air Pollution Control District

**PERMIT UNIT:** S-3103-2-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**  
VAREC DIGESTER GAS FLARE

**PERMIT UNIT REQUIREMENTS**

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-10-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

1,199 BHP CATERPILLAR MODEL #3508TA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. The engine shall be equipped with a turbocharger and with an aftercooler or intercooler. [District Rule 2201]
2. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
3. The engine shall be operated with the fuel injection timing retarded four degrees from the manufacturer's standard recommended timing. [District Rule 2201]
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
6. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
9. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]
10. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
11. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
12. 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]
13. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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]
15. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115]
16. 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]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-12-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

ODOR CONTROL SYSTEM #1 ODOR CONTROL SYSTEM INCLUDING TWO BIOFILTER CELLS SERVING THE HEADWORKS, PRIMARY CLARIFIERS, SECONDARY CLARIFIERS, DAF THICKENERS, AERATION BASIN, AND OTHER MISCELLANEOUS SOURCES

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-13-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #3)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201]
4. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201]
5. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308]
6. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081]
7. 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 1070]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-14-0

EXPIRATION DATE: 01/31/2013

**EQUIPMENT DESCRIPTION:**

1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #4)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201]
4. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201]
5. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308]
6. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081]
7. 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 1070]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-15-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #5)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201]
4. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201]
5. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308]
6. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081]
7. 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 1070]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-16-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

1.53 MMBTU/HR WALKER BOILER SIZE 6 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #6)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201]
4. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201]
5. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308]
6. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081]
7. 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 1070]

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-17-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #7)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201]
4. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201]
5. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308]
6. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081]
7. 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 1070]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-18-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

0.584 MMBTU/HR WALKER BOILER SIZE 3 NATURAL GAS/DIGESTER GAS FIRED PROCESS HEATER (DIGESTER #8)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Only digester gas or natural gas shall be used as fuel for this process heater. [District Rule 2201]
4. Hydrogen sulfide (H<sub>2</sub>S) content of fuel gas shall not exceed 20 ppmv. [District Rule 2201]
5. Emission rates shall not exceed any of the following: NO<sub>x</sub>: 30 ppmv @ 3% O<sub>2</sub> or 0.036 lb/MMBtu, or CO: 100 ppmv @ 3% O<sub>2</sub>. [District Rules 2201 and 4308]
6. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to process heater. [District Rule 1081]
7. 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 1070]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-19-0

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER AND SULFATREAT FUEL GAS DRY SULFUR SCRUBBING SYSTEM SHARED WITH UNITS S-3103-13, '-14, '-15, '-16, '-17, '-18, '-20, AND '-21

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
5. Total annual operating hours of digester gas fired cogeneration engines S-3103-19 and S-3103-20 shall not exceed 17,196 hours per calendar year. [District Rule 2201]
6. Engine shall operate according to the manufacturer's specifications. [District Rule 4701]
7. Total sulfur content of digester gas combusted in this unit shall not exceed 20 ppmvd. [District Rule 2201]
8. Emission rates shall not exceed any of the following; NO<sub>x</sub> (as NO<sub>2</sub>): 0.6 g/bhp-hr, PM<sub>10</sub>: 0.04 g/bhp-hr, CO: 2.5 g/bhp-hr, or VOC (as methane): 0.25 g/bhp-hr. [District Rule 2201]
9. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
10. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702]
13. Source testing to measure NO<sub>x</sub>, CO, and VOC emissions from this unit while firing digester gas shall be conducted not less than once every 24 months. [District Rule 4702]
14. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702]
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702]
16. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702]
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
19. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702]
20. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
21. All vessel hatches and openings shall remain closed during operation of Sulfa treat H<sub>2</sub>S scrubber. [District NSR Rule, 4102] Federally Enforceable Through Title V Permit
22. No components (i.e., valves, flanges, etc.) associated with the Sulfa treat unit shall be the source of any leak greater than 10,000 ppmv (as methane) when measured at a distance no greater than 1 cm from the potential source per EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Influent and effluent gas streams of Sulfa treat system shall be sampled at least monthly for H<sub>2</sub>S content of effluent gas to determine when recharging is required. [District NSR Rule] Federally Enforceable Through Title V Permit
24. During recharging of the H<sub>2</sub>S scrubber, untreated vapors shall not be introduced into the fuel system or vented to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
25. The following test method shall be used for fuel gas sulfur content - ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

26. Record of H<sub>2</sub>S content of effluent gas shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. 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]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-20-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

1,175 BHP JENBACHER MODEL JMS316 DIGESTER GAS-FIRED IC ENGINE COGENERATION SYSTEM WITH TURBOCHARGER AND AIR TO FUEL RATIO CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
5. Total annual operating hours of digester gas fired cogeneration engines S-3103-19 and S-3103-20 shall not exceed 17,196 hours per calendar year. [District Rule 2201]
6. Engine shall operate according to the manufacturer's specifications. [District Rule 4701]
7. Total sulfur content of digester gas combusted in this unit shall not exceed 20 ppmvd. [District Rule 2201]
8. Emission rates shall not exceed any of the following; NO<sub>x</sub> (as NO<sub>2</sub>): 0.6 g/bhp-hr, PM<sub>10</sub>: 0.04 g/bhp-hr, CO: 2.5 g/bhp-hr, or VOC (as methane): 0.25 g/bhp-hr. [District Rule 2201]
9. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
10. If either the NO<sub>x</sub> or CO concentrations corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]

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

11. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
12. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702]
13. Source testing to measure NO<sub>x</sub>, CO, and VOC emissions from this unit while firing digester gas shall be conducted not less than once every 24 months. [District Rule 4702]
14. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702]
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702]
16. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702]
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
19. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702]
20. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
21. 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]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-22-0

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (AERATION BLOWER 1)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]
6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
7. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
8. 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]
9. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]
10. 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]
11. Emissions from this IC engine shall not exceed any of the following limits: 5.39 g-NOx/bhp-hr, 0.29 g-CO/bhp-hr, or 0.11 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
12. Emissions from this IC engine shall not exceed 0.026 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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15. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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]
16. 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]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-23-0

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

2,937 BHP CATERPILLAR MODEL 3516C TA TIER 2 CERTIFIED DIESEL FIRED EMERGENCY STANDBY IC ENGINE  
POWERING AN ELECTRICAL GENERATOR (AERATION BLOWER 2)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]
5. This engine shall be equipped with an operational non-resettable clapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]
6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
7. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
8. 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]
9. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]
10. 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]
11. Emissions from this IC engine shall not exceed any of the following limits: 5.39 g-NOx/bhp-hr, 0.29 g-CO/bhp-hr, or 0.11 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
12. Emissions from this IC engine shall not exceed 0.026 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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15. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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]
16. 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]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-24-0

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

2,206 BHP CATERPILLAR MODEL 3512C TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTER COOLER POWERING AN EMERGENCY GENERATOR (AERATION BASIN 3)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]
6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
7. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
8. 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]
9. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]
10. 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]
11. Emissions from this IC engine shall not exceed any of the following limits: 4.97 g-NOx/bhp-hr, 0.45 g-CO/bhp-hr, or 0.11 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
12. Emissions from this IC engine shall not exceed 0.03 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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15. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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]
16. 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]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3103-25-0

EXPIRATION DATE: 01/31/2013

## EQUIPMENT DESCRIPTION:

1,502 BHP CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL FIRED IC ENGINE WITH TURBOCHARGER AND AFTER COOLER POWERING AN EMERGENCY GENERATOR (HEAD WORKS )

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]
6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
7. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
8. 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]
9. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]
10. 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]
11. Emissions from this IC engine shall not exceed any of the following limits: 4.82 g-NOx/bhp-hr, 0.19 g-CO/bhp-hr, or 0.01 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
12. Emissions from this IC engine shall not exceed 0.023 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]
13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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]
16. 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]

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

**San Joaquin Valley  
Air Pollution Control District**

**PERMIT UNIT:** S-3103-26-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

FERRIC CHLORIDE INJECTION SYSTEM SERVING DIGESTER TANKS

**PERMIT UNIT REQUIREMENTS**

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Ferric chloride injection system shall be operated according to manufacturers specifications. [District Rule 4101]

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-3103-27-0

**EXPIRATION DATE:** 01/31/2013

**EQUIPMENT DESCRIPTION:**

ODOR CONTROL SYSTEM #2 INCLUDING ONE BIOFILTER SERVING THE SLUDGE DEWATERING BUILDING AND SLUDGE CAKE LOADING STATION

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

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



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-3103-28-0

**ISSUANCE DATE:** 03/25/2009

**LEGAL OWNER OR OPERATOR:** BAKERSFIELD CITY WASTEWATER #3  
**MAILING ADDRESS:** 6901 MCCUTCHEN RD.  
BAKERSFIELD, CA 93313

**LOCATION:** 8101 ASHE RD  
BAKERSFIELD, CA 93313

**EQUIPMENT DESCRIPTION:**  
16.5 MMBTU/HR FLARE INDUSTRIES ENCLOSED EMERGENCY FLARE (REPLACING PREVIOUSLY APPROVED S-3103-21-0)

### CONDITIONS

1. This ATC cancels and replaces ATC S-3103-21-0. [District Rule]
2. Within 90 days after startup of the equipment authorized by this Authority to Construct, Permit to Operate S-3103-2 shall be surrendered to the District and the associated equipment shall be removed or rendered inoperable. [District Rule 2201]
3. This flare shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the flare for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District Rules 2201 and 4311]
4. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]
5. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]
6. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-3103-28-0 : Apr 11 2012 11:18AM - LEONARDS : Joint Inspection Required with GOUCHD

7. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]
8. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311]
9. If the flare uses a flow-sensing automatic ignition system and does not use a continuous flame pilot, the flare shall use purge gas for purging. [District Rule 4311]
10. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311]
11. Operation of flare for other than maintenance and testing shall be limited to unforeseen electrical power outages or emergencies (as defined below) that results in the inability to dispose of the vapors in devices approved for that purpose. Emergency is defined as an unforeseeable failure or malfunction of operating equipment that 1) is not due to neglect or disregard of air pollution laws or rules; 2) is not intentional or the result of negligence; 3) is not due to improper maintenance; 4) does not constitute a nuisance; and 5) results in the use of equipment exempted from offsets by Rule 2201 to prevent or ameliorate an unsafe situation. [District Rule 2201]
12. The owner or operator shall notify the District of any emergency use of the flare within one hour after confirmation that an actual flaring event has occurred, unless the owner or operator demonstrates to the District's satisfaction that a longer notification period was necessary. However, in the event that confirmation of an actual flaring event cannot be made, then the owner or operator shall notify the District no more than 3 hours after an alarm indicates that a flaring event may have occurred, unless the owner or operator demonstrates to the District's satisfaction that a longer notification period was necessary. [District Rule 1070]
13. The permittee shall report to the District in writing within ten days following the emergency use of the flare. The report shall include 1) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; 2) a specific statement of the reason or cause for the occurrence; 3) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future; and 4) an estimate of the emissions caused by the emergency use, specifically including duration of flare operation and amount of gas burned. [District Rules 1070 and 4311]
14. For purposes of flare maintenance and testing, emissions rates shall not exceed any of the following: 0.06 lb-NO<sub>x</sub>/MMBtu; 0.006 lb-SO<sub>x</sub> (as SO<sub>2</sub>)/MMBtu; 0.020 lb-PM<sub>10</sub>/MMBtu, 0.25 lb-CO/MMBtu; or 0.068 lb-VOC/MMBtu. [District Rule 2201]
15. Hydrogen sulfide (H<sub>2</sub>S) content of digester gas combusted shall not exceed 20 ppmv. [District Rule 2201]
16. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to flare. [District Rule 1081]
17. Initial source testing to measure NO<sub>x</sub> and VOC emissions from this unit while flaring digester gas is required to demonstrate compliance with best available control technology (BACT) requirements. Testing shall be conducted within 60 days of initial start-up. [District Rule 2201]
18. The results of the source test shall be submitted to the District within 45 days thereafter. [District Rules 1081, 2201]
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
20. VOC emissions for source test purposes, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case Method 25a may be used, and analysis of halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422 "Determination of Volatile organic Compounds in Emission from Stationary Sources". [District Rule 4311]
21. NO<sub>x</sub> and O<sub>2</sub> concentrations shall be determined by using EPA Method 3A, EPA Method 7E, or ARB 100 [District Rule 4311]
22. NO<sub>x</sub> emissions for source test purposes, in pounds per million Btu, shall be determined by using EPA Method 19 [District Rule 4311]

23. 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, the purpose of the operation (e.g., weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring (e.g. maintenance schedule as recommended by the manufacturer). [District Rules 1070, 2201, and 4311]
24. 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 1070]

# Attachment D

## Template Qualification Form

**Template SJV-UM-0-3**


**Title V General Permit Template Qualification Form**  
**for**  
**Facility-wide Umbrella General Permit Template**

District facility ID # S-3103  
Plant 3

To use this template, remove this sheet and attach to application. The conditions outlined in this template will be placed on your Title V permit.

Any facility may use this facility-wide template as part of its Title V application.

Based on information and belief formed after reasonable inquiry: 1) the information on this form is true and correct and 2) the facility certifies compliance with this template's permit conditions.

  
\_\_\_\_\_  
Signature of Responsible Official  
Louis Sun  
\_\_\_\_\_  
Name of Responsible Official (Please Print)

3/19/2012  
\_\_\_\_\_  
Date