



NOV - 8 2012

Ralph Braboy  
Bakersfield City Wastewater Treatment Plant #2  
6901 McCutchen Rd  
Bakersfield, CA 93313

**Re: Notice of Final Action - Title V Permit  
District Facility # S-2273  
Project # S-1112485**

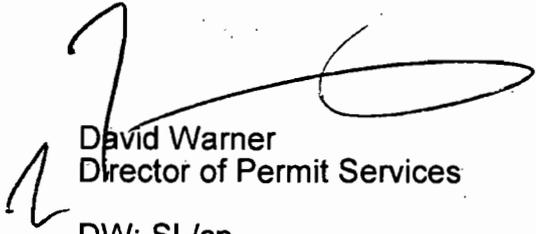
Dear Mr. Braboy:

The District has issued the Final Title V Permit for Bakersfield City Wastewater Treatment Plant #2. The preliminary decision for this project was made on September 11, 2012. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

Thank you for your cooperation in this matter. 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/cp

Attachments

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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

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

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



NOV - 8 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-2273  
Project # S-1112485**

Dear Mr. Rios:

The District has issued the Final Title V Permit for Bakersfield City Wastewater Treatment Plant #2. The preliminary decision for this project was made on September 11, 2012. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

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/cp

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NOV - 8 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-2273  
Project # S-1112485**

Dear Mr. Tollstrup:

The District has issued the Final Title V Permit for Bakersfield City Wastewater Treatment Plant #2. The preliminary decision for this project was made on September 11, 2012. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

I would like to thank you and your staff for working with us. 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/cp

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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 Treatment Plant #2 for its wastewater treatment plant at 1700 E Planz Rd in Bakersfield, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1112485, 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 #2**

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# **TITLE V APPLICATION REVIEW**

Project #: S-1112485  
Deemed Complete: June 16, 2011

Engineer: Stephen Leonard  
Date: October 31, 2012

Facility Number: S-2273  
Facility Name: Bakersfield City Wastewater Plant #2  
Mailing Address: 6901 McCutchen Rd  
Bakersfield, CA 93313

Contact Name: Ralph Braboy  
Phone: (661) 326-3249

Responsible Official: Louis Sun  
Title: Wastewater Manager

## **I. PROPOSAL**

Bakersfield City Wastewater Plant #2 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 #2 is located at 1700 East Planz 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-2273-0-0. 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-2273-0-1 – 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 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-2273-0-1 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. 700 BHP CATERPILLAR MODEL #G398 LPG-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-2273-1-3)
- b. 700 BHP CATERPILLAR MODEL #G398 LPG-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-2273-2-3)
  - Conditions 16 & 17 of the requirements for each of these permit units are based on District Rule 1070.
- c. 2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #3) (S-2273-6-3)
- d. 2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #4) (S-2273-7-3)
  - Condition 15 of the requirements for each of these permit units is based on District Rule 1070.
- e. 577 BHP WAUKESHA DIGESTER GAS-FIRED LEAN-BURN IC COGENERATION ENGINE (S-2273-9-3)
  - Conditions 27 & 28 of the requirements for this permit unit are based on District Rule 1070.
- f. 11.44 MMBTU/HR GROTH MODEL #8391 DIGESTER GAS FLARE (S-2273-10-2)
  - Condition 20 of the requirements for this permit unit 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. 2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #3) (S-2273-6-3)
- b. 2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #4) (S-2273-7-3)
  - Conditions 2, 9, 10, & 11 of the requirements for each of these permit units is based on District Rule 1081.
- c. 577 BHP WAUKESHA DIGESTER GAS-FIRED LEAN-BURN IC COGENERATION ENGINE (S-2273-9-3)
  - Conditions 15, 16, & 17 of the requirements for this permit unit are based on District Rule 1081.
- d. 892 BHP DEUTZ MODEL #TCG2016V16K 4-STROKE LEAN BURN DIGESTER GAS-FIRED IC COGENERATION ENGINE WITH TURBOCHARGER/INTERCOOLER, AIR TO FUEL RATIO CONTROLLER AND POSITIVE CRANKCASE VENTILATION (S-2273-15-1)
  - Conditions 16, 17, & 18 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. 2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #3) (S-2273-6-3)
- b. 2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #4) (S-2273-7-3)

Permit units S-2273-6 & '-7 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, 9, & 10 from the existing PTO have been included as conditions 4, 6, 7, 8, & 9 of the requirements for draft permit units S-2273-6-3 & '-7-3.

c. 577 BHP WAUKESHA DIGESTER GAS-FIRED LEAN-BURN IC COGENERATION ENGINE (S-2273-9-3)

Permit unit S-2273-9 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 7, 8, 10, & 22 from the existing PTO have been included as conditions 4, 5, 7, & 19 of the requirements for draft permit unit S-2273-9-3.

d. 11.44 MMBTU/HR GROTH MODEL #8391 DIGESTER GAS FLARE (S-2273-10-2)

Permit unit S-2273-10 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 7, 8, 9, & 10 from the existing PTO have been included as conditions 5, 16, 17, & 18 of the requirements for draft permit unit S-2273-10-2.

e. 892 BHP DEUTZ MODEL #TCG2016V16K 4-STROKE LEAN BURN DIGESTER GAS-FIRED IC COGENERATION ENGINE WITH TURBOCHARGER/INTERCOOLER, AIR TO FUEL RATIO CONTROLLER AND POSITIVE CRANKCASE VENTILATION (S-2273-15-1)

Permit unit S-2273-15 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 5, 6, & 19 from the existing PTO have been included as conditions 6, 7, & 20 of the requirements for draft permit unit S-2273-15-1. Condition 8 was omitted from the existing PTO but has been reinstated in the draft PTO.

#### **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 (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

- a. 11.44 MMBTU/HR GROTH MODEL #8391 DIGESTER GAS FLARE (S-2273-10-2)

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

- Condition 22 of the requirements for permit unit -10-2 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. 700 BHP CATERPILLAR MODEL #G398 LPG-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-2273-1-3)
- b. 700 BHP CATERPILLAR MODEL #G398 LPG-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-2273-2-3)
  - Condition 3 of the requirements for each of these permit units are based on District Rule 4201.
- c. 2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #3) (S-2273-6-3)

- d. 2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #4) (S-2273-7-3)
  - Condition 3 of the requirements for each of these permit units are based on District Rule 4201.
- e. 577 BHP WAUKESHA DIGESTER GAS-FIRED LEAN-BURN IC COGENERATION ENGINE (S-2273-9-3)
  - Condition 2 of the requirements for this permit unit is based on District Rule 4201.
- f. 11.44 MMBTU/HR GROTH MODEL #8391 DIGESTER GAS FLARE (S-2273-10-2)
  - Condition 21 of the requirements for this permit unit is based on District Rule 4201.
- g. 892 BHP DEUTZ MODEL #TCG2016V16K 4-STROKE LEAN BURN DIGESTER GAS-FIRED IC COGENERATION ENGINE WITH TURBOCHARGER/INTERCOOLER, AIR TO FUEL RATIO CONTROLLER AND POSITIVE CRANKCASE VENTILATION (S-2273-15-1)
  - Condition 3 of the requirements for this permit unit is based on District Rule 4201.

#### **6. District Rule 4311 - Flares**

- a. 11.44 MMBTU/HR GROTH MODEL #8391 DIGESTER GAS FLARE (S-2273-10-2)

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 2-4, 6, & 7 of the requirements for permit unit -10-2 assures compliance with these requirements.

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

- Condition 21 of the requirements for permit unit -10-2 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 the 8/18/11 amendments demonstrates compliance with the requirements of the SIP approved version of Rule 4702.

- a. 700 BHP CATERPILLAR MODEL #G398 LPG-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-2273-1-3)
- b. 700 BHP CATERPILLAR MODEL #G398 LPG-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (S-2273-2-3)

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 4 of permit units '-1-3 & -2-3 assures compliance with the requirements of Section 5.9.2
- Condition 8 of permit units '-1-3 & '-2-3 assures compliance with the requirements of Section 5.9.3.

- Condition 1 of permit units '-1-3 & '-2-3 assures compliance with the requirements of Section 5.9.4.

Section 6.2 contains recordkeeping requirements. This section outlines the information that should be gathered under sections 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 9 & 18 of permit units '-1-3 & '-2-3 assures compliance with the requirements of Section 6.2.3.
- c. 577 BHP WAUKESHA DIGESTER GAS-FIRED LEAN-BURN IC COGENERATION ENGINE (S-2273-9-3)
- d. 892 BHP DEUTZ MODEL #TCG2016V16K 4-STROKE LEAN BURN DIGESTER GAS-FIRED IC COGENERATION ENGINE WITH TURBOCHARGER/INTERCOOLER, AIR TO FUEL RATIO CONTROLLER AND POSITIVE CRANKCASE VENTILATION (S-2273-15-1)

Section 5.2 requires that the operator of a spark-ignited internal combustion engine rated at >50 bhp that is used exclusively in non-AO shall not operate it in such a manner that results in emissions exceeding the limits in Table 1. Per Table 1, spark ignited lean-burn engines greater than 100 bhp must meet the following limits, corrected to 15% O<sub>2</sub>: 65 ppmv-NO<sub>x</sub>, 2,000 ppmv-CO, and 750 ppmv-VOC.

- Condition 4 of permit unit '-9-3 and condition 8 of permit unit '-15-1 assures compliance with the requirements of Section 5.2

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 10 ppmv S, which equates to 0.63 gr-S/100 dscf (as H<sub>2</sub>S).

- Condition 5 of permit unit '-9-3, and condition 7 of permit '-15-1 assures compliance with the 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 two lean-burn engines at this facility are each rated at less than 1,000 bhp and do not include add-on exhaust controls. The lean-burn engines follow a previously 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. Although the latest amendment to Rule 4702 would allow these engines to forego the alternate monitoring requirements, removing those conditions would be considered a relaxation of monitoring and requires an Authority to Construct (ATC) application per District Policy ADM-1235.

- Conditions 8, 9, 10, & 11 of permit '-9-3, and conditions 9, 10, 11, & 12 of permit '-15-1 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 '-9-3, and '-15-1 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 6 & 20 of permit '-9-3, and conditions 5 & 21 of permit '-15-1 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.

- Monthly monitoring requirements for each engine assure compliance with the quarterly requirement of Section 5.8.9.

Section 5.10.1 requires that an operator of an 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. All combustion equipment at this facility utilizes "scrubbed" digester gas which maintains a total sulfur limit of 10 ppmv. Engines '-9 and '-15 each have permit conditions limiting fuel gas sulfur content as described above. Permits for boilers '-6 and '-7 contain an annual fuel gas sulfur content testing requirement, the results of which are used to satisfy the sulfur content requirements for these engines. Continued compliance is expected.

Section 6.2 contains recordkeeping requirements. This section outlines the operating parameter information that should be recorded under 6.2.1 and maintained under 6.2.2.

- Condition 18 of permit '-9-3 and condition 19 of permit '-15-1 assures compliance with the requirements of Section 6.2.1.
- Condition 29 of permit '-9-3 and condition 22 of permit '-15-1 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 '-9-3 and '-15-1.

- Condition 12 of permit '-9-3 and condition 13 of permit '-15-1 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 15 of permit '9-3, and condition 16 of permit '-15-1 assures compliance with the requirements of Section 6.4.

## 8. 40 CFR 60 Subpart A

District Rule 4311, Section 5.6, requires 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. The requirements of this section shall not apply to Coanda effect flares.

Bakersfield Wastewater Plant #2 operates a non-assisted, open flare < 5 psig and is, therefore, required to comply with the applicable provisions of 40 CFR 60.18 for flares.

### a. 11.44 MMBTU/HR GROTH MODEL #8391 DIGESTER GAS FLARE (S-2273-10-2)

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 1 for permit unit '-10-2 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 & condition 15 of the requirements for permit unit '-10-2 assures compliance with these requirements.

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 11-14 of the requirements for permit unit '-10-2 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 2-4 of the requirements for permit unit '-10-2 assures compliance with this requirement.

**9. 40 CFR Part 60, Subpart IIII, New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines**

There are no compression ignition IC engines at this facility. Therefore, this Subpart does not apply

**10. 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Spark Ignition Internal Combustion Engines**

Each spark ignited engine at this facility was manufactured and installed prior to July 1, 2007. The 892 bhp lean-burn SI engine S-2273-15 commenced construction after June 12, 2006. Therefore, only permit unit S-2273-15 is subject to this Subpart. § 60.4230(a)(6) states that the provisions of § 60.4236 of this subpart is applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006. 60.4236(b) states that, "After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010."

The engine associated with permit '-15-1 is a 2006 model year engine, installed after June 12, 2006 but before July 1, 2009. No other requirements of Subpart JJJJ are applicable to this engine.

**11. 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 two 700 bhp emergency engines at this facility (permit units S-2273-1-3 & '-2-3) and the 577 bhp lean-burn cogeneration engine (permit unit S-2273-9-3) are defined as being "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;

- One spark-ignited (SI) full-time lean-burn engine (S-2273-15-1) is defined as a "new" RICE since installation was after June 12, 2006. Therefore, this engine is subject to this Subpart and has been shown to meet the applicable requirements of Subpart JJJJ. Therefore, S-2273-15-1 has no further requirements or discussion under 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 units S-2273-1-3, '-2-3, & '-9-3 are existing stationary SI RICE >500 bhp located at an area source of HAP emissions; therefore, the full compliance date for this subpart is October 19, 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 requirements apply to existing stationary RICE located at area sources of HAP emissions:

Table 2d

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. (S-2273-1-3, '3-3)	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>	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

<sup>1</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

- Conditions 12, 14 & 15 of draft permits '1-3 & '2-3 assure 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.

Table 2d

For each . . .	You must meet the following requirements, except during periods of startup . . .	During periods of startup you must . . .
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE (S-2273-9-3)	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	N/A
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	N/A
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	N/A

<sup>1</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

- Conditions 23,25, & 26 of draft permit '9-3 assure compliance with this requirement.

**§ 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 4 & 8 of draft permits '-1-3 & '-2-3 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 10 of draft permits '-1-3 & '-2-3 and condition 10 of draft permit '-9-3 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.

- Condition 5 of draft permits '-1-3 & '-2-3 and 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 ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, <b>existing emergency and black start stationary RICE located at an area source of HAP</b> , existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, <b>existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP</b> , existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	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.

- Condition 4 of draft permits '-1-3 & '-2-3 and condition 3 of draft permit '-9-3 assures compliance with this requirement.

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

There are no notifications necessary for existing emergency engines (S-2273-1, '-2) or an existing stationary RICE that is not subject to any numerical emission standards (S-2273-9).

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

(a) You must submit each report in Table 7 of this subpart that applies to you.

- Condition 11 of draft permits '-1-3 & '-2-3 and condition 22 of draft permit '-9-3 assures compliance with this requirement.

**§ 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:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation ( i.e., process equipment) or the air pollution control and monitoring equipment.

(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.

- Condition 17 of draft permits '-1-3 & '-2-3 and condition 28 of draft permit '-9-3 assures compliance with this requirement.

(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.

- Condition 9 of draft permits '-1-3 & '-2-3 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).

- Conditions 9, 16, 17, & 18 of draft permits '-1-3 & '-2-3 and conditions 27, 28, & 29 of draft permit '-9-3 assures compliance with this requirement.

**12. 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 have a pre-control potential to emit that exceeds any 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-2273-0-1

EXPIRATION DATE: 12/31/2012

## FACILITY-WIDE REQUIREMENTS

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 #2  
Location: 1700 E PLANT, BAKERSFIELD, CA 93307  
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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 November 30, 2012, 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-2273-1-3

**EXPIRATION DATE:** 12/31/2012

**SECTION:** SE08 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

700 BHP CATERPILLAR MODEL #G398 LPG-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
2. This engine shall only be fired on PUC quality natural gas, LPG or propane. [District Rule 4702] 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. 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
5. 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 100 hours per calendar year. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. 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. An engine shall be considered to be an emergency standby engine if it is used to supply power while maintenance is performed or repairs are made to the primary power supply. [District Rule 4702] Federally Enforceable Through Title V Permit
7. 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
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. 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 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.

10. On and after October 19, 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
11. On and after October 19, 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
12. On and after October 19, 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
13. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. On and after October 19, 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
15. On and after October 19, 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
16. On and after October 19, 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] Federally Enforceable Through Title V Permit
17. On and after October 19, 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] Federally Enforceable Through Title V Permit
18. 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 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-2273-2-3

**EXPIRATION DATE:** 12/31/2012

**SECTION:** SE08 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

700 BHP CATERPILLAR MODEL #G398 LPG-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

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## 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
2. This engine shall only be fired on PUC quality natural gas, LPG or propane. [District Rule 4702] 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. 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
5. 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 100 hours per calendar year. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. 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. An engine shall be considered to be an emergency standby engine if it is used to supply power while maintenance is performed or repairs are made to the primary power supply. [District Rule 4702] Federally Enforceable Through Title V Permit
7. 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
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. 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 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.

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10. On and after October 19, 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
11. On and after October 19, 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
12. On and after October 19, 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
13. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. On and after October 19, 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
15. On and after October 19, 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
16. On and after October 19, 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] Federally Enforceable Through Title V Permit
17. On and after October 19, 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] Federally Enforceable Through Title V Permit
18. 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 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-2273-6-3

EXPIRATION DATE: 12/31/2012

SECTION: SE08 TOWNSHIP: 30S RANGE: 28E

## EQUIPMENT DESCRIPTION:

2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #3)

## PERMIT UNIT REQUIREMENTS

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1. This unit shall be equipped with an operational non-resettable elapsed time meter. [District Rule 4307] Federally Enforceable Through Title V Permit
2. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to boiler. [District Rule 1081] 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. Only scrubbed digester gas and/or propane shall be used as fuel for the boiler. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
5. The boiler shall not operate more than 2,500 hours in any consecutive 12 month period. [District Rule 4307] Federally Enforceable Through Title V Permit
6. Sulfur (S) content of digester gas burned in this unit shall not exceed 10 ppmv. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
7. Total volume of waste gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of digester gas. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: NOx: 0.102 lb/MMBtu (83 ppmv @ 3% O<sub>2</sub>), SOx: 0.003 lb/MMBtu, PM<sub>10</sub>: 0.008 lb/MMBtu, CO: 27 ppmv @ 3% O<sub>2</sub>, or VOC: 0.011 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Compliance source testing for digester gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
10. The following test methods shall be used for fuel gas sulfur content: ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. The District shall be notified at least 30 days in advance of sulfur sampling. [District Rule 1081] Federally Enforceable Through Title V Permit
11. 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
12. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307] 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.

13. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307] Federally Enforceable Through Title V Permit
14. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307] Federally Enforceable Through Title V Permit
15. The permittee shall maintain monthly and annual records of the total combined volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
16. 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 4307] 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-2273-7-3

EXPIRATION DATE: 12/31/2012

SECTION: SE08 TOWNSHIP: 30S RANGE: 28E

## EQUIPMENT DESCRIPTION:

2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #4)

## PERMIT UNIT REQUIREMENTS

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1. This unit shall be equipped with an operational non-resettable elapsed time meter. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
2. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to boiler. [District Rule 1081] 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. Only scrubbed digester gas and/or propane shall be used as fuel for the boiler. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
5. The boiler shall not operate more than 2,500 hours in any consecutive 12 month period. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
6. Sulfur (S) content of digester gas burned in this unit shall not exceed 10 ppmv. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit
7. Total volume of waste gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of digester gas. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: NOx: 0.102 lb/MMBtu (83 ppmv @ 3% O<sub>2</sub>), SOx: 0.003 lb/MMBtu, PM<sub>10</sub>: 0.008 lb/MMBtu, CO: 27 ppmv @ 3% O<sub>2</sub>, or VOC: 0.011 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Compliance source testing for digester gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
10. The following test methods shall be used for fuel gas sulfur content: ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. The District shall be notified at least 30 days in advance of sulfur sampling. [District Rule 1081] Federally Enforceable Through Title V Permit
11. 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
12. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307] 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.

13. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307] Federally Enforceable Through Title V Permit
14. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307] Federally Enforceable Through Title V Permit
15. The permittee shall maintain monthly and annual records of the total combined volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
16. 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 4307] 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-2273-9-3

**EXPIRATION DATE:** 12/31/2012

**SECTION:** SE08 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

577 BHP WAUKESHA DIGESTER GAS-FIRED LEAN-BURN IC COGENERATION ENGINE

## 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. 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
4. Emission rates from the internal combustion engine shall not exceed any of the following; NO<sub>x</sub> (as NO<sub>2</sub>): 64 ppmv @ 15 % O<sub>2</sub>, PM<sub>10</sub>: 0.003 g/bhp-hr, CO: 232 ppmv @ 15 % O<sub>2</sub>, or VOC (as methane): 122 ppmv @ 15 % O<sub>2</sub>. [District Rule 2201 and 4702] Federally Enforceable Through Title V Permit
5. Total sulfur content of digester gas combusted in this unit shall not exceed 10 ppm. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
7. Total volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of waste gas. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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
9. 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.

10. 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
11. 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
12. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. 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
16. 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
17. 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
18. 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] Federally Enforceable Through Title V Permit
19. The permittee shall maintain monthly and annual records of the total, combined volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
21. On and after October 19, 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
22. On and after October 19, 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
24. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
25. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 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
26. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 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
27. On and after October 19, 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] Federally Enforceable Through Title V Permit
28. On and after October 19, 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] Federally Enforceable Through Title V Permit
29. 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 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-2273-10-2

**SECTION:** SE08 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

11.44 MMBTU/HR GROTH MODEL #8391 DIGESTER GAS FLARE

EXPIRATION DATE: 12/31/2012

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## PERMIT UNIT REQUIREMENTS

1. Flare shall operate with no visible emissions, except for periods not to exceed a total of 5 minutes during any two consecutive hours. [40 CFR 60 Subpart A] Federally Enforceable Through Title V Permit
2. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311 and 40 CFR 60 Subpart A] Federally Enforceable Through Title V Permit
3. 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 and 40 CFR 60 Subpart A] Federally Enforceable Through Title V Permit
4. Flare shall be equipped and operated with 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. [District Rule 4311 and 40 CFR 60 Subpart A] Federally Enforceable Through Title V Permit
5. Flare shall be equipped with an operational waste gas meter. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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
7. 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
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 Subpart A] Federally Enforceable Through Title V Permit
9. 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 Subpart A] Federally Enforceable Through Title V Permit
10. 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 Subpart A] Federally Enforceable Through Title V Permit
11. 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 Subpart A] Federally Enforceable Through Title V Permit
12. 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 Subpart A] 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. 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 Subpart A] Federally Enforceable Through Title V Permit
14. 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 Subpart A] Federally Enforceable Through Title V Permit
15. 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 Subpart A] Federally Enforceable Through Title V Permit
16. Waste gas burned in the flare shall not exceed 422,400 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Total volume of waste gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of waste gas. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emission rates shall not exceed any of the following: PM10: 0.0202 lb/MMBTU, SO<sub>x</sub> (as SO<sub>2</sub>): 10 ppmv, NO<sub>x</sub> (as NO<sub>2</sub>): 0.06 lb/MMBTU, VOC: 0.14 lb/MMBTU, or CO: 0.300 lb/MMBTU. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Visible emissions monitoring shall be conducted at least annually, using EPA Method 22. [40 CFR 60 Subpart A] Federally Enforceable Through Title V Permit
20. The permittee shall maintain daily records of cubic feet of waste gas burned in the flare and monthly and annual records of the total combined volume of waste gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
21. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
22. 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-2273-11-1

**EXPIRATION DATE:** 12/31/2012

**SECTION:** SE08 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**  
TWO WASTEWATER GRIT CHAMBERS

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## 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.

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2273-15-1

**EXPIRATION DATE:** 12/31/2012

**SECTION:** SE08 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

892 BHP DEUTZ MODEL #TCG2016V16K 4-STROKE LEAN BURN DIGESTER GAS-FIRED IC COGENERATION ENGINE WITH TURBOCHARGER/INTERCOOLER, AIR TO FUEL RATIO CONTROLLER AND POSITIVE CRANKCASE VENTILATION

## PERMIT UNIT REQUIREMENTS

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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. 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]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. 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] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Total volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of waste gas. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total sulfur content of digester gas combusted in this unit shall not exceed 10 ppm. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emissions from this IC engine shall not exceed any of the following limits: 50 ppmvd NO<sub>x</sub> @ 15% O<sub>2</sub>, 0.003 gram PM<sub>10</sub>/hp-hr, 300 ppmvd CO @ 15% O<sub>2</sub> or 57 ppmvd VOC @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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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] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
13. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
18. 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
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] Federally Enforceable Through Title V Permit
20. The permittee shall maintain monthly and annual records of the total, combined volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [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.

21. 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
22. 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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# Attachment A

## Detailed Permit Listing

**Detailed Facility Report**  
For Facility=2273 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

<b>BAKERSFIELD CITY WASTEWATER #2</b> <b>1700 E PLAZ</b> <b>BAKERSFIELD, CA 93307</b>	<b>FAC #</b> <b>STATUS:</b> <b>TELEPHONE:</b>	<b>S 2273</b> <b>A</b> <b>8813283716</b>	<b>TYPE:</b> <b>TOXIC ID:</b>	<b>TitleV</b> <b>60061</b>	<b>EXPIRE ON:</b> <b>AREA:</b> <b>INSP. DATE:</b>	<b>12/31/2012</b> <b>81 /</b> <b>09/12</b>
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2273-1-2	700 BHP	3020-10 D	1	479.00	479.00	A	700 BHP CATERPILLAR MODEL #G398 LPG-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-2273-2-2	700 BHP	3020-10 D	1	479.00	479.00	A	700 BHP CATERPILLAR MODEL #G398 LPG-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-2273-6-2	2 MMBTU/HR	3020-02 E	1	412.00	412.00	A	2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #3)
S-2273-7-2	2 MMBTU/HR	3020-02 E	1	412.00	412.00	A	2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #4)
S-2273-9-2	577 hp	3020-10 D	1	479.00	479.00	A	577 BHP WUKESHA DIGESTER GAS-FIRED IC COGENERATION ENGINE
S-2273-10-1	11.44 MMBTU/HR	3020-02 G	1	815.00	815.00	A	11.44 MMBTU/HR GROTH MODEL #8391 DIGESTER GAS FLARE
S-2273-11-0	400 Electric Hp	3020-01 F	1	607.00	607.00	A	TWO WASTEWATER GRIT CHAMBERS
S-2273-15-0	892 bhp	3020-10 E	1	602.00	602.00	A	892 BHP DEUTZ MODEL #TCG2016V16K 4-STROKE LEAN BURN DIGESTER GAS-FIRED IC COGENERATION ENGINE WITH TURBOCHARGER/INTERCOOLER, AIR TO FUEL RATIO CONTROLLER AND POSITIVE CRANKCASE VENTILATION

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: City of Bakersfield Wastewater Treatment Plant #2

FACILITY ID: S - 2273

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 bbl 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 org-anic 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



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT

  
**HEALTHY AIR LIVING™**

# Permit to Operate

**FACILITY:** S-2273

**EXPIRATION DATE:** 12/31/2012

**LEGAL OWNER OR OPERATOR:**  
**MAILING ADDRESS:**

BAKERSFIELD CITY WASTEWATER #2  
6901 MCCUTCHEN RD  
BAKERSFIELD, CA 93313

**FACILITY LOCATION:**

1700 E PLANZ  
BAKERSFIELD, CA 93307

**FACILITY DESCRIPTION:**

SEWERAGE SYSTEMS

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

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

**Seyed Sadredin**  
Executive Director / APCO

**David Warner**  
Director of Permit Services

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2273-1-2

**EXPIRATION DATE:** 12/31/2012

**SECTION:** SE08 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

700 BHP CATERPILLAR MODEL #G398 LPG-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. 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]
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. 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]
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 100 hours per calendar year. [District Rule 4702]
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 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]
11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2273-2-2

**EXPIRATION DATE:** 12/31/2012

**SECTION:** SE08 **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

700 BHP CATERPILLAR MODEL #G398 LPG-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## 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]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. 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]
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. 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]
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 100 hours per calendar year. [District Rule 4702]
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 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]
11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2273-6-2

**EXPIRATION DATE:** 12/31/2012

**SECTION:** 8SE **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #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. This unit shall be equipped with an operational non-resettable elapsed time meter. [District Rule 4307]
4. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to boiler. [District Rule 1081]
5. Only digester gas and/or propane shall be used as fuel for the boiler. [District Rule 2201]
6. The boiler shall not operate more than 2,500 hours in any consecutive 12 month period. [District Rule 4307]
7. Sulfur (S) content of digester gas burned in this unit shall not exceed 10 ppmv. [District Rule 2201]
8. Total volume of waste gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of digester gas. [District Rule 2201]
9. Emission rates shall not exceed any of the following: VOC: 0.011 lb/MMBtu, SOx: 0.003 lb/MMBtu, PM10: 0.008 lb/MMBtu, NOx: 0.102 lb/MMBtu (83 ppmv @ 3% O<sub>2</sub>), or CO: 27 ppmv @ 3% O<sub>2</sub>. [District Rule 2201]
10. District witnessed compliance testing for digester fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rules 1081, 2201]
11. The following test methods shall be used for fuel gas sulfur content: ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. The District shall be notified in advance of sulfur sampling. [District Rule 1081]
12. Official independent lab test results and field data for compliance with sulfur fuel gas testing shall be submitted to the District within 60 days after collection. [District Rule 2201]
13. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
14. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
15. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NO<sub>x</sub> analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. The permittee shall maintain monthly and annual records of the total combined volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [District Rule 1070]
17. 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 4307]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2273-7-2

**EXPIRATION DATE:** 12/31/2012

**SECTION:** 8SE **TOWNSHIP:** 30S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2 MMBTU/HR BURNHAM SERIES #4F-50 DIGESTER GAS-FIRED BOILER (BOILER #4)

## PERMIT UNIT REQUIREMENTS

---

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. This unit shall be equipped with an operational non-resettable elapsed time meter. [District Rule 4307]
4. Sampling facilities shall be provided to allow for fuel gas sampling at inlet to boiler. [District Rule 1081]
5. Only digester gas and/or propane shall be used as fuel for the boiler. [District Rule 2201]
6. The boiler shall not operate more than 2,500 hours in any consecutive 12 month period. [District Rule 4307]
7. Sulfur (S) content of digester gas burned in this unit shall not exceed 10 ppmv. [District Rule 2201]
8. Total volume of waste gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of digester gas. [District Rule 2201]
9. Emission rates shall not exceed any of the following: VOC: 0.011 lb/MMBtu, SOx: 0.003 lb/MMBtu, PM10: 0.008 lb/MMBtu, NOx: 0.102 lb/MMBtu (83 ppmv @ 3% O<sub>2</sub>), or CO: 27 ppmv @ 3% O<sub>2</sub>. [District Rule 2201]
10. District witnessed compliance testing for digester fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rules 1081, 2201]
11. The following test methods shall be used for fuel gas sulfur content: ASTM D3246 or double GC for H<sub>2</sub>S and mercaptans. The District shall be notified in advance of sulfur sampling. [District Rule 1081]
12. Official independent lab test results and field data for compliance with sulfur fuel gas testing shall be submitted to the District within 60 days after collection. [District Rule 2201]
13. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
14. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
15. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NO<sub>x</sub> analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

16. The permittee shall maintain monthly and annual records of the total combined volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [District Rule 1070]
17. 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 4307]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2273-9-2

EXPIRATION DATE: 12/31/2012

SECTION: SE08 TOWNSHIP: 30S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

577 BHP WAUKESHA DIGESTER GAS-FIRED IC COGENERATION ENGINE

## 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]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
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. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. Engine shall operate according to the manufacturer's specifications. [District Rule 4701]
6. Equipment shall include an operational rpm indicator. [District Rule 2201]
7. Emission rates from the internal combustion engine shall not exceed any of the following; NO<sub>x</sub> (as NO<sub>2</sub>): 64 ppmv @ 15 % O<sub>2</sub>, PM<sub>10</sub>: 0.003 g/bhp-hr, CO: 232 ppmv @ 15 % O<sub>2</sub>, or VOC (as methane): 122 ppmv @ 15 % O<sub>2</sub>. [District Rule 2201]
8. Total sulfur content of digester gas combusted in this unit shall not exceed 10 ppm. [District Rule 2201]
9. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702]
10. Total volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of waste gas. [District Rule 2201]
11. 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]

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

12. 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]
13. 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]
14. 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]
15. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted not less than once every 24 months. [District Rule 4702]
16. 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]
17. 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]
18. 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]
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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
21. 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]
22. The permittee shall maintain monthly and annual records of the total, combined volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [District Rule 2201]
23. 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]

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

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 4702]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2273-10-1

EXPIRATION DATE: 12/31/2012

SECTION: 8SE TOWNSHIP: 30S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

11.44 MMBTU/HR GROTH MODEL #8391 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]
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. Flare shall operate with no visible emissions, except for periods not to exceed a total of 5 minutes during any two consecutive hours. [District Rule 4311, 40 CFR 60.18]
4. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311]
5. 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]
6. Flare shall be equipped and operated with 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. [District Rule 4311]
7. Flare shall be equipped with an operational waste gas meter. [District Rule 2201]
8. Emission rates shall not exceed any of the following: PM10: 0.0202 lb/MMBTU, SO<sub>x</sub> (as SO<sub>2</sub>): 10 ppmv, NO<sub>x</sub> (as NO<sub>2</sub>): 0.06 lb/MMBTU, VOC: 0.14 lb/MMBTU, or CO: 0.300 lb/MMBTU. [District Rule 2201]
9. Waste gas burned in the flare shall not exceed 422,400 scf/day. [District Rule 2201]
10. Total volume of waste gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of waste gas. [District Rule 2201]
11. The permittee shall maintain daily records of cubic feet of waste gas burned in the flare and monthly and annual records of the total combined volume of waste gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff 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-2273-11-0

**EXPIRATION DATE:** 12/31/2012

**EQUIPMENT DESCRIPTION:**  
TWO WASTEWATER GRIT CHAMBERS

## **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-2273-15-0

EXPIRATION DATE: 12/31/2012

## EQUIPMENT DESCRIPTION:

892 BHP DEUTZ MODEL #TCG2016V16K 4-STROKE LEAN BURN DIGESTER GAS-FIRED IC COGENERATION ENGINE WITH TURBOCHARGER/INTERCOOLER, AIR TO FUEL RATIO CONTROLLER AND POSITIVE CRANKCASE VENTILATION

## PERMIT UNIT REQUIREMENTS

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1. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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]
4. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702]
5. Total volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15 shall not exceed 312.89 MM Scf/yr. For the purpose of establishing this limit, 1 gallon of propane is equivalent to 148 scf of waste gas. [District Rule 2201]
6. Emissions from this IC engine shall not exceed any of the following limits: 50 ppmvd NO<sub>x</sub> @ 15% O<sub>2</sub>, 0.003 gram PM<sub>10</sub>/hp-hr, 300 ppmvd CO @ 15% O<sub>2</sub> or 57 ppmvd VOC @ 15% O<sub>2</sub>. [District Rules 2201, 4701, and 4702]
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]
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]

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]
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]
11. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted within 60 days of initial start-up. [District Rule 4702]
12. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted not less than once every 24 months. [District Rule 4702]
13. 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]
14. 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]
15. 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]
16. 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]
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
18. 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]
19. The permittee shall maintain monthly and annual records of the total, combined volume of digester gas and propane burned in permit units S-2273-6, '7, '9, '10 and '15. Records shall be kept for a period of 5 years and shall be made readily available to District staff upon request. [District Rule 2201]
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.

# Attachment D

## Template Qualification Form

Template SJV-UM-0-3

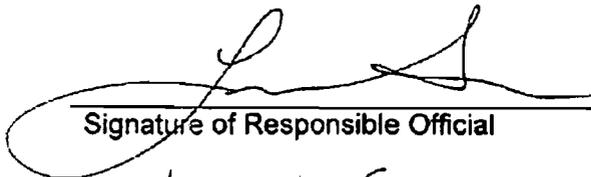
**Title V General Permit Template Qualification Form**  
**for**  
**Facility-wide Umbrella General Permit Template**

District facility ID # S-2273  
Plant 2

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

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

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

# Attachment E

## Comments Received

The District received comments from the applicant and from the EPA on the proposed initial Title V permits. A summary of the comments and the District response is below.

**Applicant Comments:**

1. There is no mention of the 892 Deutz Cogen (S-2273-15) in Section IX.B.1 in the Engineering Evaluation.

**District Response:**

Section IX.B.1 addresses Rule 1070, "Inspections". The Deutz engine was installed at a later date than the other existing engines at the facility. As such, it is subject to slightly different requirements than the others as a result of rule amendments prior to installation. The recordkeeping requirements for this engine are taken directly from District Rule 4702, "Internal Combustion Engines". Therefore, Rule 4702 is cited rather than Rule 1070 for authorization of enforcing the stated recordkeeping requirements.

2. There is no mention of the Caterpillar backup generators in Section IX.B.2 of the Engineering Evaluation.

**District Response:**

Section IX.B.2 addresses Rule 1081, "Source Sampling". The two emergency generators are not required to perform periodic emissions tests. During inspections, the engines may be subject to a visible emissions evaluation (VEE), but are not required to perform periodic exhaust sampling unless the VEE indicates the engine is not functioning properly. Therefore, Rule 1081 is not cited on these permits.

3. There is no mention of the Caterpillar backup generators in Section IX.B.3 of the Engineering Evaluation.

**District Response:**

Section IX.B.3 addresses Rule 2201, "New and Modified Stationary Source Review Rule". The two emergency generators were in existence prior to their being subject to District permits and have not been modified since receiving permits. Therefore, they were not subject to the provisions of Rule 2201 at the time of permitting and there is no reference to this rule on the permits.

4. Section IX.B.4 only references the Groth flare.

**District Response:**

Section IX.B.4 addresses Rule 2520, "Federally Mandated Operating Permits". The Groth flare is now subject to applicable requirements of 40 CFR 60 Subpart A which includes monitoring and recording visible emissions observations, but doesn't specifically describe recordkeeping requirements for the monitoring performed. Rule 2520, section 9.4.2 provides a mechanism where the District can require these records be maintained onsite and available for a period of 5 years in addition to the types of records explicitly required to be kept by Rule 4311, "Flares". Other equipment at your facility have recordkeeping requirements defined in Regulation IV prohibitory rules specific to the particular piece of equipment.

5. Typographical error with the paragraph numbering on Page 12 of the Engineering Evaluation.

**District Response:**

The error has been corrected.

6. The equipment descriptions were incorrectly modified on the 700 BHP propane fired emergency generator engines S-2273-1-3 and '-2-3 to include non-selective catalytic reduction and positive crankcase ventilation.

**District Response:**

Non-selective catalytic reduction and positive crankcase ventilation was erroneously added to the equipment description of each permit and has been removed. The term "rich-burn" will remain in the equipment description as relevant to categorizing the engine's mode of operation.

7. Condition 11 of permits S-2273-1-3 and '-2-3 requires these gas-fired emergency engines to be in full compliance with 40 CFR 63 Subpart ZZZZ by October 13, 2013. It is presumed that compliance with the other conditions listed on the permit will ensure compliance with condition 11.

**District Response:**

Because the applicable requirements of 40 CFR 63, Subpart ZZZZ for these two engines are listed elsewhere on the permit, compliance with the listed conditions will ensure compliance 40 CFR 63, Subpart ZZZZ by the October 13, 2013, deadline.

8. Condition 4 of draft permits S-2273-6-3 and '-7-3 added the word "scrubbed" to describe the digester gas fuel. The H<sub>2</sub>S content limit of condition 6 makes this addition unnecessary.

**District Response:**

Wastewater Treatment Plant #2 utilizes a dry fuel gas sulfur scrubbing system which is not described in detail on any existing permits. The approved digester gas sulfur limit of 10 ppmv total sulfur is not possible without the use of the scrubber. The District finds the inclusion of the term "scrubbed" to be representative of the normal method of operation for treatment of digester gas prior to combustion.

9. Condition #6 on draft permit S-2273-10-2 states that 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. Explain the implications of the condition.

**District Response:**

Condition #6 states the requirement from District Rule 4311, Section 5.6 that open flares comply with requirements for comparable flares described in 40 CFR 60.18. The requirements from 40 CFR 60.18 that apply to this flare are listed as conditions elsewhere on the permit. Compliance with the conditions referencing "40 CFR Subpart A" will ensure compliance with 40 CFR 60.18 and District Rule 4311, Section 5.6.

**EPA Comments:**

1. The Facility Report lists four IC engines: two of them are identified as LPG-fired emergency engines and two as digester gas-fired cogeneration engines. The sections in the permit for the two engines identified as emergency engines appear to contain the requirements from the RICE NESHAP for emergency use engines. The section for permit unit S-2273-9-3 also appears to contain the requirements from the RICE NESHAP for emergency use engines although it is not identified as an emergency use engine in the permit or application review. The section for permit unit S-2273-15-1 does not have any conditions based on the RICE NESHAP.

**District Response:**

The two LPG-fired emergency RICE, S-2273-1 & '-2 have the correct application of Table 2d.5 maintenance monitoring intervals in the Engineering Evaluation and draft permit. This same interval was inadvertently applied to non-emergency lean-burn cogeneration RICE S-2273-9. The correct interval for RICE '-9 from Table 2.d.11 is: oil & oil filter replaced every 1,440 hours; belts & hoses inspected every 1,440 hours, spark plugs inspected every 1,000 hours. This has been corrected in the Application Review and draft Permit to Operate.

S-2273-15 is a "new" SI non-emergency digester gas-fired RICE by definition in 40 CFR 63 Subpart ZZZZ. As such, the only requirement applicable to this

engine, pursuant to §63.6590(c), is that it comply with any applicable requirements of 40 CFR 60 Subpart JJJJ. 40 CFR 60 Subpart JJJJ has no applicable requirements for this particular engine.

2. In the section for permit unit S-2273-9-3, emission limits from District Rules and the RICE NESHAP appear to have been streamlined. This should be discussed in the Application review.

**District Response:**

There are no applicable emission limit requirements from 40 CFR 63 Subpart ZZZZ for this existing, non-emergency, digester gas-fired RICE. Emission limits previously approved through the District's NSR rule are listed and enforceable. Reference to 40 CFR 63 Subpart ZZZZ has been removed from condition 4 of the draft permit.

3. The section for permit unit S-2273-10-2, the digester gas flare, identifies 40 CFR part 60, subpart A as the basis for several conditions. Is this flare used to comply with a subpart of part 60 or is it District policy that all flares are subject to part 60 subpart A?

**District Response:**

District Rule 4311, Flares, Section 5.6 requires, "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. The requirements of this section shall not apply to Coanda effect flares." The flare permitted as S-2273-10-2 meets these criteria; open flare, non-assisted, < 5 psig, therefore, applicable requirements of 40 CFR 60.18 are applied to the permit, as required by District Rule 4311, Section 5.6.

4. The permit should cite paragraphs from the federal regulations rather than an entire subpart. For example, the basis for Condition #1 for permit unit S-2273-2-3 should be 40 CFR 63.6625(f) rather than simply 40 CFR part 63, subpart ZZZZ. The resulting permit will be more enforceable, easier to understand, and easier to modify should the underlying regulation change.

**District Response:**

The District does not believe it is necessary for conditions that enforce NESHAP Subpart ZZZZ for IC engines (or other regulations) to cite the specific section of the regulation on which the condition is based. Please note that in our application review, we identify the specific sections of Subpart ZZZZ that are applicable and identify the conditions that were subsequently imposed. As such, the conditions themselves enforce the applicable requirements of the regulation, with or without referencing the specific rule sections. Reiterating the specific

sections of Subpart ZZZZ in the permit conditions is an unnecessary step that provides no additional benefit to the regulated source or to the District, but does add length and potential error to the permit. Additionally, we have found that when listing specific District or NSPS/NESHAP regulation section numbers in permits, that when those regulations are subsequently amended, the section numbers referenced in permits can become incorrect due to renumbering of the section numbers in the regulation. As such, it has become our practice to omit such section numbers from condition rule references.