



**AUG 21 2014**

Mr. Ron Cook  
Badger Creek Limited  
34759 Lencioni Ave., Suite A  
Bakersfield, CA 93308

**Re: Notice of Revised Preliminary Decision – Title V Permit Renewal  
District Facility # S-1250  
Project # S-1133732**

Dear Mr. Cook:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Badger Creek Limited at 535 Fano Avenue, Bakersfield, California.

The public notice for this renewal was first issued on May 27, 2014. However, based on a comment received from CARB, the application review and proposed renewed permit have been revised to address the requirements of 40 CFR Part 64 (Compliance Assurance Monitoring) for VOC emissions. Due to these revisions, the District is reissuing the public notice and an additional 45-day EPA review period.

The notice of revised preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

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

Sincerely,

Arnaud Marjollet  
Director of Permit Services

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email  
cc: Gerardo C. Rios, EPA (w/enclosure) via email  
Seyed Sadredin

Executive Director/Air Pollution Control Officer

**SAN JOAQUIN VALLEY  
AIR POLLUTION CONTROL DISTRICT**

**Revised Title V Permit Renewal Evaluation  
Badger Creek Limited  
S-1250**

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# REVISED TITLE V PERMIT RENEWAL EVALUATION

## Gas Turbine Cogeneration Facility

**Engineer:** Jonah Aiyabei  
**Date:** August 18, 2014

**Facility Number:** S-1250  
**Facility Name:** Badger Creek Limited  
**Mailing Address:** 34759 Lencioni Ave., Suite A  
Bakersfield, CA 93308

**Contact Name:** Ron Cook  
**Phone:** (661) 393-6885

**Responsible Official:** Ron Cook  
**Title:** Plant Manager

**Project # :** S-1133732  
**Deemed Complete:** September 30, 2013

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## I. PROPOSAL

Badger Creek Limited was issued a Title V permit on October 22, 2004. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the last Title V permit renewal.

The public notice for this permit renewal was first issued on May 27, 2014. However, based on a comment received from CARB, the application review and proposed renewed permit have been revised to address the requirements of 40 CFR Part 64 (Compliance Assurance Monitoring) for VOC emissions. Due to these revisions, the District is reissuing the public notice and an additional 45-day EPA review period.

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

## II. FACILITY LOCATION

Badger Creek Limited is located at 535 Fano Avenue in Bakersfield.

### III. EQUIPMENT LISTING

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

### IV. GENERAL PERMIT TEMPLATE USAGE

The applicant has requested to utilize template No. SJV-UM-0-3, Facility-Wide Umbrella General Permit Template. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

### V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Renewed 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.

Conditions 1 through 40 of the requirements for permit unit S-1250-0-3.

### VI. FEDERALLY ENFORCEABLE REQUIREMENTS

#### A. Rules Updated

- District Rule 2020, Exemptions (amended August 18, 2011)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended April 21, 2011)

#### B. Rules Removed

No rules were removed.

**C. Rules Added**

- District Rule 2410, Prevention of Significant Deterioration, (adopted June 16, 2011)

**D. Rules Not Updated**

- District Rule 1070, Inspections (amended December 17, 1992)
- District Rule 1080, Stack Monitoring (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4202, Particulate Matter - Emission Rate (amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)
- District Rule 4703, Stationary Gas Turbines (amended September 20, 2007)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- 40 CFR 60 Subpart GG, Standards of Performance for Stationary Gas Turbines
- 40 CFR 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

**VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE**

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

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

**A. Rules Added**

No rules were added.

**B. Rules Not Updated**

District Rule 4102, Nuisance (as amended December 17, 1992)

**VIII. PERMIT REQUIREMENTS**

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

**A. District Rule 2020 - Exemptions**

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

**B. District Rule 2201 - New and Modified Stationary Source Review Rule**

District Rule 2201 has been amended since this facility's initial Title V permit was issued. This Title V permit renewal does not constitute a modification per section 3.26, defined as an action including at least one of the following items:

- 1) Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- 2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
- 3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.

- 4) Addition of any new emissions unit which is subject to District permitting requirements.
- 5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable at this time.

**C. District Rule 2401 – Prevention of Significant Deterioration**

This facility is a Prevention of Significant Deterioration (PSD) source, since the Potential to Emit for CO<sub>2e</sub> exceeds 100,000 short tons per year.

Rule 2401 requires that an owner or operator of a PSD source must obtain a PSD permit pursuant to this rule before beginning actual construction of a new major stationary source, a major modification, or a plantwide applicability limitation (PAL) major modification.

Since the current action does not include any construction or modification of the source, there are no applicable PSD requirements.

**D. District Rule 2520 – Federally Mandated Operating Permits**

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

**E. 40 CFR Part 64 – Compliance Assurance Monitoring**

**§64.2 – Applicability**

This section requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

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

§64.3 - Monitoring Design Criteria

This section specifies the design criteria for the CAM system. Paragraph (a) (*General criteria*) requires that the CAM system be designed to obtain data for one or more appropriate indicators of emission control system performance and requires the owner to establish appropriate ranges or designated conditions for the selected indicators such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions.

Paragraph (b) (*Performance criteria*) requires the owner or operator to establish and maintain the following:

- Specifications to ensure that representative data are collected
- Verification procedures for startup of new monitoring equipment
- Quality assurance and control practices to ensure continuing validity of data
- Data collection frequency and procedures

Paragraph (c) (*Evaluation factors*) requires the owner or operator to take into account site specific factors in the design of the CAM system.

Paragraph (d) (*Special criteria for the use of continuous emission, opacity, or predictive monitoring systems*) requires the owner or operator to use a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), or a predictive emission monitoring system (PEMS) to satisfy CAM requirements, provided that these monitoring systems are required pursuant to other authority under the Clean Air Act or state or local law. This subsection also stipulates the following:

- The use of a CEMS, COMS, or PEMS that satisfies any of the following monitoring requirements shall be deemed to satisfy the general design criteria in paragraphs (a) and (b) of this section, provided that a COMS may be subject to the criteria for establishing indicator ranges under paragraph (a) of this section:
  - (i) Section 51.214 and appendix P of 40 CFR 51;
  - (ii) Section 60.13 and appendix B of 40 CFR 60;
  - (iii) Section 63.8 and any applicable performance specifications required pursuant to the applicable subpart of 40 CFR 63;
  - (iv) 40 CFR 75;
  - (v) Subpart H and appendix IX of 40 CFR 266; or



(vi) In the event that the monitoring system is not subject to any of the requirements listed above, comparable requirements and specifications established by the permitting authority.

- The owner or operator shall design the monitoring system subject to this paragraph (d) to:

(i) Allow for reporting of exceedances (or excursions if applicable to a COMS used to assure compliance with a particulate matter standard), consistent with any period for reporting of exceedances in an underlying requirement. If an underlying requirement does not contain a provision for establishing an averaging period for the reporting of exceedances or excursions, the criteria used to develop an averaging period specified in the data collection procedures required under paragraph (b) of this section shall apply; and

(ii) Provide an indicator range consistent with paragraph (a) of this section for a COMS used to assure compliance with a particulate matter standard. If an opacity standard applies to the pollutant-specific emissions unit, such limit may be used as the appropriate indicator range unless the opacity limit fails to meet the criteria in paragraph (a) of this section after considering the type of control device and other site-specific factors applicable to the pollutant-specific emissions unit.

#### §64.4 - Submittal Requirements

This section specifies submittal requirements for the owner or operator which ensure the CAM system will comply with the design criteria of §64.3.

#### §64.5 - Deadlines for Submittals

This section specifies required timing for submittals required under §64.4.

*Large pollutant-specific emissions units* (those with controlled emissions exceeding major source thresholds) are required to make the submittals as a part of the initial Title V permit application where the application has either not been filed or has not been deemed complete. Where the initial Title V permit has been issued without implementation of 40 CFR 64, the owner or operator must make the required submittals as a part of a subsequent application for any significant permit revision. If the required information is not submitted by either of these deadlines, it must be submitted as a part of the application for the Title V permit renewal.

For *other pollutant-specific emissions units*, the required submittal deadline is the application for Title V permit renewal.

S-1250-1-10: 48.5 MW COGENERATION SYSTEM WITH SCR INCLUDING STEWART & STEVENSON GE MODEL 5000 GAS-FIRED TURBINE, HEAT RECOVERY STEAM GENERATOR, AND INLET AIR ABSORPTION CHILLER AND HEAT EXCHANGER

This unit has emission limits and add-on controls (SCR & oxidation catalyst) for NO<sub>x</sub>, CO, and VOC.

NO<sub>x</sub> and CO:

This unit is exempt from CAM for NO<sub>x</sub> and CO because it has continuous emission monitors (CEMS) for these pollutants. The standard conditions that require the CEMs to be installed, calibrated, maintained, and require the data to be reported ensure that the equipment will remain exempt from CAM requirements for these pollutants.

VOC:

Post-control P.E = 128.9 lb/day x 365 days/yr = 47,048 lb/yr.

Since the post-control P.E. is greater than the major source threshold (20,000 lb/yr), the pre-control P.E. is also greater than the major source threshold; and the unit is subject to CAM for VOC.

The applicant has stated that they intend to submit an Authority to Construct application within 6 months to reduce the pre-control P.E. for VOC emissions, based on source test results, to levels below the major source threshold. Failing this option, the applicant will be required to submit a CAM plan within 6 months. Thus, the monitoring design criteria of §64.3 and the submittal requirements of §64.4 and §64.5 will be satisfied by proposed condition 51 during this permit renewal.

## **IX. PERMIT SHIELD**

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

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

By submitting Model General Permit Template SJV-UM-0-3 qualification form, the applicant has requested that a permit shield be granted for all the

applicable requirements identified by the template. Therefore, the permit shields as granted in the template are included as conditions 39 and 40 of the facility-wide requirements (S-1250-0-3).

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

The applicant has not requested any permit shields for any requirements not addressed by model general permit templates.

**C. Obsolete Permit Shields From Existing Permit Requirements**

**District Rule 4703 – Stationary Gas Turbines**

A permit shield was previously granted under an older version of this rule (April 25, 2002 amendment). Since the rule was most recently amended in 2007, the existing permit shield is obsolete.

Condition 1 of permit unit S-1250-1-10 was revised to remove the obsolete permit shield.

**X. PERMIT CONDITIONS**

See Attachment A - Draft Renewed Title V Operating Permit.

**XI. ATTACHMENTS**

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility Report

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# ATTACHMENT A

Draft Renewed Title V Operating Permit

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# San Joaquin Valley Air Pollution Control District

FACILITY: S-1250-0-3

EXPIRATION DATE: 03/31/2014

## FACILITY-WIDE REQUIREMENTS

1. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. {4367} 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
7. {4368} 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
8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

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

22. {4383} 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
23. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. {4390} 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
30. {4391} 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
31. {4392} 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
32. {4393} 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
33. {4394} 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

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

34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. No air contaminant shall be released into the atmosphere that causes a public nuisance. [District Rule 4102]
42. The facility shall comply with all applicable requirements of Rule 4663 (9/20/07). [District Rule 4663]
43. On October 22, 2004, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, 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-1250-1-10

**EXPIRATION DATE:** 03/31/2014

**SECTION:** 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

48.5 MW COGENERATION SYSTEM WITH SCR INCLUDING STEWART & STEVENSON GE MODEL 5000 GAS-FIRED TURBINE, HEAT RECOVERY STEAM GENERATOR, AND INLET AIR ABSORPTION CHILLER AND HEAT EXCHANGER

## PERMIT UNIT REQUIREMENTS

1. Compliance with permit conditions in the Title V permit shall be deemed compliance with following subsumed requirements: Rule 108 (San Joaquin), Rule 108.1 (San Joaquin), and Rule 407 (San Joaquin) as of the date of permit issuance. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2), (b), and (f); 60.333 (a) and (b); 60.334(a), (b)(2), (c)(1), (c)(2), and (c)(3); and 60.335(b), (c)(2), (c)(3), and (d); 40 CFR 60.7 (b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rule 1080 (as amended December 17, 1992), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and District Rule 1081 (as amended December 16, 1993) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 6.8 (c)] Federally Enforceable Through Title V Permit
3. Start up time shall be defined as a time during the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shut down shall be defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. The start up and shutdown time shall not to exceed two hours. [40 CFR Subpart A 60.2; District NSR Rule and District Rule 4703, 3.26 and 3.29] Federally Enforceable Through Title V Permit
4. Gas-fired turbine shall be equipped with combustor steam injection and an SCR system utilizing ammonia as the reducing agent for NOx controls. [District NSR Rule and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
5. Gas-fired turbine shall be equipped with CO reactor of sufficient catalyst volume to meet CO and VOC emissions limits. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
6. All gas turbine engine exhaust shall flow through catalyst bed. [40 CFR 60.7(c) and District NSR Rule] Federally Enforceable Through Title V Permit
7. Gas turbine combustor steam injection system shall be equipped with continuously recording steam-to-fuel injection rate monitoring system. [40 CFR 60.334(a); District Rule 2201; District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
8. Turbine lube oil reservoir shall be equipped with mist collectors with return line to the turbine lube oil reservoir. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. Turbine air/oil separator shall be equipped with a heat exchanger and an air/oil final separator with return lines to turbine lube oil reservoir. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Generator lube oil reservoir shall be equipped with a mist collector and two vent breathers with collection piping from generator bearings and return piping to generator lube oil reservoir. [District NSR Rule] Federally Enforceable Through Title V Permit
11. VOC emissions at gas turbine exhaust shall not exceed 5.37 lbs/hour and 128.9 lbs/day, except during periods of startup and shutdown as defined in this permit. The maximum VOC emission rate from turbine lube oil cooler/accumulating vents shall not exceed 1.9 lbs/day. [District NSR Rule] Federally Enforceable Through Title V Permit
12. The maximum VOC emissions concentration (as CH<sub>4</sub>) at turbine exhaust shall not exceed 5.33 ppmv dry at 15% O<sub>2</sub>, except during periods of startup and shutdown, and as defined in this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
13. The emission rate from the gas turbine exhaust shall not exceed the following: 79.0 lbs-PM<sub>10</sub>/day, 147.9 lbs-NO<sub>x</sub> /day (as NO<sub>2</sub>), 7.0 lbs-SO<sub>x</sub>/day (SO<sub>2</sub>), and 264.0 lbs-CO/day. [District NSR Rule and District Rule 4201.] Federally Enforceable Through Title V Permit
14. The owner or operator shall not operate the gas turbine under load conditions, excluding start up, shut down, or reduced load period, which results in the measured NO<sub>x</sub> emissions concentration exceeding 3.8 ppmv @ 15% O<sub>2</sub>. [40 CFR 60.332(a)(1), (a)(2) and District Rule 4703, 5.1.2] [District NSR Rule; 40 CFR 60.332(a)(1), (a)(2) and District Rule 4703, 5.1.2] Federally Enforceable Through Title V Permit
15. The owner or operator shall not operate the gas turbine under load conditions, excluding start up, shut down, or reduced load period, which results in the measured CO emissions concentration exceeding 11 ppmv @ 15% O<sub>2</sub>. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
16. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. Calculations done by the SJVUAPCD show that natural gas-fired turbine emissions do not exceed this standard. No monitoring of PM is required. [District Rule 4201] Federally Enforceable Through Title V Permit
17. Ammonia slip shall not exceed 20 ppmv, and daily compliance with ammonia slip limit shall be demonstrated by means of the calculation procedure set forth as follows:  $Slip = (a - (b \times c / 1,000,000)) \times 1,000,000 / b$ , Where a = ammonia injection rate (lb/hr)/17 (lb/lb-mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb. mol), and c = change in measured NO<sub>x</sub> concentration ppmv at stack O<sub>2</sub>. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Compliance with NO<sub>x</sub> (ppmv), CO (ppmv), VOC (hourly), and ammonia (ppmv) emissions limits shall be demonstrated by District witnessed sample collection by independent testing laboratory annually within 60 days prior to permit anniversary date. [District NSR Rule] Federally Enforceable Through Title V Permit
19. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081, 7.0 and District Rule 4703, 6.3] Federally Enforceable Through Title V Permit
20. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13 (h)] Federally Enforceable Through Title V Permit
21. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer except during periods of startup and shutdown as defined in this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Gas turbine engine shall be fired exclusively with PUC regulated quality natural gas. The fuel gas sulfur content shall not exceed 0.25 gr H<sub>2</sub>S/100 scf. [District NSR Rule and District Rule 4801] 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. The gas turbine steam injection rate shall be maintained at a steam-to-fuel ratio that results in compliance with emissions limits except during periods of startup, shutdown, and malfunction as defined in this permit. Only malfunctions as defined in 40 CFR Part 60 qualify for this exemption. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of three hours and one hour, respectively, per occurrence. [40 CFR Part 60, Subpart A; District NSR Rule; District Rule 4001] Federally Enforceable Through Title V Permit
24. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with U.S. EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [40 CFR Part 60; District Rule 4703; District Rule 1081, 3.0, 5.0, and 6.0]
25. Unfired heat recovery boiler shall be equipped with continuously recording NO<sub>x</sub> emissions monitors (CEMS) located ahead of SCR catalyst and continuously recording NO<sub>x</sub>, CO, and O<sub>2</sub> emissions monitors located in boiler exhaust stack. CEMS shall meet the performance specification requirements in 40 CFR Part 60, Appendix B, 40 CFR Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the U.S. EPA. CEMS data can be used to determine compliance with emission limits. Continuous emission monitoring for NO<sub>x</sub>, CO, and O<sub>2</sub> serving the exhaust gas stream shall conform to District Rule 1080. [District Rule 1080, 4.0 and 5.0; District NSR Rule, District Rule 4703; 40 CFR 60.13] Federally Enforceable Through Title V Permit
26. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080, 6.0 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
27. NO<sub>x</sub> concentrations from gas turbine exhaust shall be determined using U.S. EPA Method 7E or 20; O<sub>2</sub> concentration shall be determined using U.S. EPA Method 3, 3A, or 20. CO emissions shall be determined using U.S. EPA Method 10 or 10B. Source test results will be provided to the District annually. U.S. EPA approved alternate test methods may also be used to address the source testing requirement of this permit. [District Rule 1081; District Rule 2520, 9.3.1; District Rule 4703, 5.1, 6.3, & 6.4; 40 CFR Subpart GG 60.335(b) and (c); 40 CFR Subpart A 60.8] Federally Enforceable Through Title V Permit
28. CEMS results shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the U.S. EPA. [District Rule 1080, 7.2]
29. Except NO<sub>x</sub> and CO emission data obtained for compliance demonstration purposes, CEMS data shall be averaged in accordance with the requirements specified under 40 CFR Part 60.13. Compliance results for NO<sub>x</sub> and CO shall be averaged over a three-hour period. [District Rule 4703, 5.0 and 6.2, 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. On days of turbine engine startup/shutdown, permittee shall demonstrate compliance with NO<sub>x</sub> and CO daily emissions limits with CEMS data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstration shall be maintained and made available for District inspection for a period of five years. [District Rule 1080, 7.1; District NSR Rule; District Rule 2520, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
31. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation while the turbine is operating. NO<sub>x</sub> emissions in ppmv (corrected to 15% O<sub>2</sub>) and CO and O<sub>2</sub> concentrations must be recorded continuously (except as noted elsewhere) and data shall be reduced to 15-minute averages per 40 CFR Part 60.13 (e)(2). [District NSR Rule; 40 CFR 60.486 (b), (c), & (d)] 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.

32. Records shall be maintained and shall contain the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080; emission measurements; and daily actual local startup and stop time, length and reason for reduced load periods, daily and total hours of operation and quantity of fuel used. [District Rule 1080, 4.0 and 7.3; District NSR Rule; District Rule 4703; 40 CFR 60.332(a), (b); 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
33. Compliance with the requirements for fuel gas sulfur content and PUC regulated quality gas shall be by fuel gas sample analysis by independent testing laboratory taken at time of annual stack gas sampling. [District NSR Rule]
34. Operators of CEMS shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken, and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEMS was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. For clarification, operator shall use the same averaging periods as written into the permit for demonstrating compliance. [60.7(c); District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
35. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMS within 96 hours of occurrence. The APCO shall be notified within eight hours after the detection of a breakdown of CEMS monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment greater than 4 hours in duration. [40 CFR 60.334(c); District Rule 1080, 9.0 and 10.0; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
36. Gas temperature at SCR catalyst section inlet shall be monitored by an operational temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
37. The operator shall monitor and record exhaust gas temperature at oxidation catalyst inlet. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Ammonia injection grid shall be equipped with operational ammonia flow meter and injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
39. The requirements of 40 CFR 72.6 (b) (Acid Rain Provisions) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Any lube oil cooler/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested to demonstrate compliance with VOC hourly emissions limit. Official test results/field data shall be submitted within 60 days of testing. [District NSR Rule] Federally Enforceable Through Title V Permit
41. Maximum heat input rating of General Electric LM-5000 gas-fired turbine engine, S/N 474-144, shall not exceed 457.8 MMBtu/hr and nominal generator output shall not exceed 48.5 MW. [District NSR Rule] Federally Enforceable Through Title V Permit
42. Unfired heat recovery steam generator shall not be designed for supplementary firing. [District NSR Rule] Federally Enforceable Through Title V Permit
43. Gas turbine engine shall be equipped with continuously recording fuel gas flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
44. Installed SCR unit shall provide space for additional catalyst if source operation cannot achieve sampling limits. [District NSR Rule] Federally Enforceable Through Title V Permit
45. Steam produced at this facility for use in oil production operations shall affect only wells connected to well vent vapor recovery systems approved by District. [District NSR Rule] Federally Enforceable Through Title V Permit
46. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080 and District Rule 2520] 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.

47. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
48. Audits of monitors shall be conducted semi-annually by independent laboratory in accordance with EPA guidelines, witnessed by District, and reports shall be submitted to District within 30 days of such audit. [District NSR] Federally Enforceable Through Title V Permit
49. A written record of the compliance demonstrations for NOx and CO daily emissions limits, as required in the condition above, shall be maintained and made available for District inspection for a period of two years. [District NSR Rule]
50. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
51. Within 6 months of this renewed Title V permit being issued, the permittee shall apply for, and fully implement, an Authority to Construct to reduce the pre-control potential to emit for VOC emissions to a level not greater than the major source threshold; or submit a Compliance Assurance Monitoring plan for VOC emissions pursuant to the requirements of 40 CFR Part 64. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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

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# ATTACHMENT B

Previous Title V Operating Permit

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# Permit to Operate

**FACILITY:** S-1250

**EXPIRATION DATE:** 03/31/2014

**LEGAL OWNER OR OPERATOR:**

BADGER CREEK LIMITED

**MAILING ADDRESS:**

34759 LENCIONI AVE, SUITE A  
BAKERSFIELD, CA 93308

**FACILITY LOCATION:**

HEAVY OIL CENTRAL  
OILFIELD RD, CA

**FACILITY DESCRIPTION:**

GAS TURBINE ENGINE COGENERATION SYSTEM

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

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

**Seyed Sadredin**

Executive Director / APCO

**Arnaud Marjollet**

Director of Permit Services

# San Joaquin Valley Air Pollution Control District

FACILITY: S-1250-0-2

EXPIRATION DATE: 03/31/2014

## FACILITY-WIDE REQUIREMENTS

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1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: BADGER CREEK LIMITED

Location: HEAVY OIL CENTRAL, OILFIELD RD, CA

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. No air contaminant shall be released into the atmosphere that causes a public nuisance. [District Rule 4102]
42. The facility shall comply with all applicable requirements of Rule 4663 (9/20/07). [District Rule 4663]
43. On October 22, 2004, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, 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.

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1250-1-9

EXPIRATION DATE: 03/31/2014

SECTION: 23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

48.5 MW COGENERATION SYSTEM WITH SCR INCLUDING STEWART & STEVENSON GE MODEL 5000 GAS-FIRED TURBINE, HEAT RECOVERY STEAM GENERATOR, AND INLET AIR ABSORPTION CHILLER AND HEAT EXCHANGER

## PERMIT UNIT REQUIREMENTS

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1. Compliance with permit conditions in the Title V permit shall be deemed compliance with following subsumed requirements: Rule 108 (San Joaquin), Rule 108.1 (San Joaquin), and Rule 407 (San Joaquin) as of the date of permit issuance. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2), (b), and (f); 60.333 (a) and (b); 60.334(a), (b)(2), (c)(1), (c)(2), and (c)(3); and 60.335(b), (c)(2), (c)(3), and (d); 40 CFR 60.7 (b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rule 1080 (as amended December 17, 1992), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and District Rule 1081 (as amended December 16, 1993) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 6.8 (c)] Federally Enforceable Through Title V Permit
3. Start up time shall be defined as a time during the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shut down shall be defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. The start up and shutdown time shall not to exceed two hours. [40 CFR Subpart A 60.2; District NSR Rule and District Rule 4703, 3.26 and 3.29] Federally Enforceable Through Title V Permit
4. Gas-fired turbine shall be equipped with combustor steam injection and an SCR system utilizing ammonia as the reducing agent for NOx controls. [District NSR Rule and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
5. Gas-fired turbine shall be equipped with CO reactor of sufficient catalyst volume to meet CO and VOC emissions limits. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
6. All gas turbine engine exhaust shall flow through catalyst bed. [40 CFR 60.7(c) and District NSR Rule] Federally Enforceable Through Title V Permit
7. Gas turbine combustor steam injection system shall be equipped with continuously recording steam-to-fuel injection rate monitoring system. [40 CFR 60.334(a); District Rule 2201; District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
8. Turbine lube oil reservoir shall be equipped with mist collectors with return line to the turbine lube oil reservoir. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. Turbine air/oil separator shall be equipped with a heat exchanger and an air/oil final separator with return lines to turbine lube oil reservoir. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Generator lube oil reservoir shall be equipped with a mist collector and two vent breathers with collection piping from generator bearings and return piping to generator lube oil reservoir. [District NSR Rule] Federally Enforceable Through Title V Permit
11. VOC emissions at gas turbine exhaust shall not exceed 5.37 lbs/hour and 128.9 lbs/day, except during periods of startup and shutdown as defined in this permit. The maximum VOC emission rate from turbine lube oil cooler/accumulating vents shall not exceed 1.9 lbs/day. [District NSR Rule] Federally Enforceable Through Title V Permit
12. The maximum VOC emissions concentration (as CH<sub>4</sub>) at turbine exhaust shall not exceed 5.33 ppmv dry at 15% O<sub>2</sub>, except during periods of startup and shutdown, and as defined in this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
13. The emission rate from the gas turbine exhaust shall not exceed the following: 79.0 lbs-PM<sub>10</sub>/day, 147.9 lbs-NO<sub>x</sub> /day (as NO<sub>2</sub>), 7.0 lbs-SO<sub>x</sub>/day (SO<sub>2</sub>), and 264.0 lbs-CO/day. [District NSR Rule and District Rule 4201.] Federally Enforceable Through Title V Permit
14. The owner or operator shall not operate the gas turbine under load conditions, excluding start up, shut down, or reduced load period, which results in the measured NO<sub>x</sub> emissions concentration exceeding 3.8 ppmv @ 15% O<sub>2</sub>. [40 CFR 60.332(a)(1), (a)(2) and District Rule 4703, 5.1.2] [District NSR Rule; 40 CFR 60.332(a)(1), (a)(2) and District Rule 4703, 5.1.2] Federally Enforceable Through Title V Permit
15. The owner or operator shall not operate the gas turbine under load conditions, excluding start up, shut down, or reduced load period, which results in the measured CO emissions concentration exceeding 11 ppmv @ 15% O<sub>2</sub>. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
16. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. Calculations done by the SJVUAPCD show that natural gas-fired turbine emissions do not exceed this standard. No monitoring of PM is required. [District Rule 4201] Federally Enforceable Through Title V Permit
17. Ammonia slip shall not exceed 20 ppmv, and daily compliance with ammonia slip limit shall be demonstrated by means of the calculation procedure set forth as follows:  $Slip = (a - (b \cdot c / 1,000,000)) \times 1,000,000 / b$ , Where a = ammonia injection rate (lb/hr)/17 (lb/lb-mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb. mol), and c = change in measured NO<sub>x</sub> concentration ppmv at stack O<sub>2</sub>. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Compliance with NO<sub>x</sub> (ppmv), CO (ppmv), VOC (hourly), and ammonia (ppmv) emissions limits shall be demonstrated by District witnessed sample collection by independent testing laboratory annually within 60 days prior to permit anniversary date. [District NSR Rule] Federally Enforceable Through Title V Permit
19. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081, 7.0 and District Rule 4703, 6.3] Federally Enforceable Through Title V Permit
20. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13 (h)] Federally Enforceable Through Title V Permit
21. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer except during periods of startup and shutdown as defined in this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Gas turbine engine shall be fired exclusively with PUC regulated quality natural gas. The fuel gas sulfur content shall not exceed 0.25 gr H<sub>2</sub>S/100 scf. [District NSR Rule and District Rule 4801] 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. The gas turbine steam injection rate shall be maintained at a steam-to-fuel ratio that results in compliance with emissions limits except during periods of startup, shutdown, and malfunction as defined in this permit. Only malfunctions as defined in 40 CFR Part 60 qualify for this exemption. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of three hours and one hour, respectively, per occurrence. [40 CFR Part 60, Subpart A; District NSR Rule; District Rule 4001] Federally Enforceable Through Title V Permit
24. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with U.S. EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [40 CFR Part 60; District Rule 4703; District Rule 1081, 3.0, 5.0, and 6.0]
25. Unfired heat recovery boiler shall be equipped with continuously recording NO<sub>x</sub> emissions monitors (CEMS) located ahead of SCR catalyst and continuously recording NO<sub>x</sub>, CO, and O<sub>2</sub> emissions monitors located in boiler exhaust stack. CEMS shall meet the performance specification requirements in 40 CFR Part 60, Appendix B, 40 CFR Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the U.S. EPA. CEMS data can be used to determine compliance with emission limits. Continuous emission monitoring for NO<sub>x</sub>, CO, and O<sub>2</sub> serving the exhaust gas stream shall conform to District Rule 1080. [District Rule 1080, 4.0 and 5.0; District NSR Rule, District Rule 4703; 40 CFR 60.13] Federally Enforceable Through Title V Permit
26. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080, 6.0 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
27. NO<sub>x</sub> concentrations from gas turbine exhaust shall be determined using U.S. EPA Method 7E or 20; O<sub>2</sub> concentration shall be determined using U.S. EPA Method 3, 3A, or 20. CO emissions shall be determined using U.S. EPA Method 10 or 10B. Source test results will be provided to the District annually. U.S. EPA approved alternate test methods may also be used to address the source testing requirement of this permit. [District Rule 1081; District Rule 2520, 9.3.1; District Rule 4703, 5.1, 6.3, & 6.4; 40 CFR Subpart GG 60.335(b) and (c); 40 CFR Subpart A 60.8] Federally Enforceable Through Title V Permit
28. CEMS results shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the U.S. EPA. [District Rule 1080, 7.2]
29. Except NO<sub>x</sub> and CO emission data obtained for compliance demonstration purposes, CEMS data shall be averaged in accordance with the requirements specified under 40 CFR Part 60.13. Compliance results for NO<sub>x</sub> and CO shall be averaged over a three-hour period. [District Rule 4703, 5.0 and 6.2, 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. On days of turbine engine startup/shutdown, permittee shall demonstrate compliance with NO<sub>x</sub> and CO daily emissions limits with CEMS data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstration shall be maintained and made available for District inspection for a period of five years. [District Rule 1080, 7.1; District NSR Rule; District Rule 2520, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
31. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation while the turbine is operating. NO<sub>x</sub> emissions in ppmv (corrected to 15% O<sub>2</sub>) and CO and O<sub>2</sub> concentrations must be recorded continuously (except as noted elsewhere) and data shall be reduced to 15-minute averages per 40 CFR Part 60.13 (e)(2). [District NSR Rule; 40 CFR 60.486 (b), (c), & (d)] 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.

32. Records shall be maintained and shall contain the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080; emission measurements; and daily actual local startup and stop time, length and reason for reduced load periods, daily and total hours of operation and quantity of fuel used. [District Rule 1080, 4.0 and 7.3; District NSR Rule; District Rule 4703; 40 CFR 60.332(a), (b); 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
33. Compliance with the requirements for fuel gas sulfur content and PUC regulated quality gas shall be by fuel gas sample analysis by independent testing laboratory taken at time of annual stack gas sampling. [District NSR Rule]
34. Operators of CEMS shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken, and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEMS was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. For clarification, operator shall use the same averaging periods as written into the permit for demonstrating compliance. [60.7(c); District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
35. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMS within 96 hours of occurrence. The APCO shall be notified within eight hours after the detection of a breakdown of CEMS monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment greater than 4 hours in duration. [40 CFR 60.334(c); District Rule 1080, 9.0 and 10.0; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
36. Gas temperature at SCR catalyst section inlet shall be monitored by an operational temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
37. The operator shall monitor and record exhaust gas temperature at oxidation catalyst inlet. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Ammonia injection grid shall be equipped with operational ammonia flow meter and injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
39. The requirements of 40 CFR 72.6 (b) (Acid Rain Provisions) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Any lube oil cooler/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested to demonstrate compliance with VOC hourly emissions limit. Official test results/field data shall be submitted within 60 days of testing. [District NSR Rule] Federally Enforceable Through Title V Permit
41. Maximum heat input rating of General Electric LM-5000 gas-fired turbine engine, S/N 474-144, shall not exceed 457.8 MMBtu/hr and nominal generator output shall not exceed 48.5 MW. [District NSR Rule] Federally Enforceable Through Title V Permit
42. Unfired heat recovery steam generator shall not be designed for supplementary firing. [District NSR Rule] Federally Enforceable Through Title V Permit
43. Gas turbine engine shall be equipped with continuously recording fuel gas flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
44. Installed SCR unit shall provide space for additional catalyst if source operation cannot achieve sampling limits. [District NSR Rule] Federally Enforceable Through Title V Permit
45. Steam produced at this facility for use in oil production operations shall affect only wells connected to well vent vapor recovery systems approved by District. [District NSR Rule] Federally Enforceable Through Title V Permit
46. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080 and District Rule 2520] 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.

47. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
48. Audits of monitors shall be conducted semi-annually by independent laboratory in accordance with EPA guidelines, witnessed by District, and reports shall be submitted to District within 30 days of such audit. [District NSR] Federally Enforceable Through Title V Permit
49. A written record of the compliance demonstrations for NOx and CO daily emissions limits, as required in the condition above, shall be maintained and made available for District inspection for a period of two years. [District NSR Rule]
50. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



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# ATTACHMENT C

Detailed Facility Report

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**Detailed Facility Report**  
For Facility=1250 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

<b>BADGER CREEK LIMITED</b>	FAC #	<b>S 1250</b>	TYPE:	<b>TitleV</b>	EXPIRE ON:	<b>03/31/2019</b>
<b>HEAVY OIL CENTRAL</b>	STATUS:	<b>A</b>	TOXIC ID:	<b>50012</b>	AREA:	<b>5 /</b>
<b>OILFIELD RD, CA</b>	TELEPHONE:	<b>8053936885</b>			INSP. DATE:	<b>05/14</b>

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1250-1-9	48 MW cogeneration	3020-08A G	1	10,215.00	10,215.00	A	48.5 MW COGENERATION SYSTEM WITH SCR INCLUDING STEWART & STEVENSON GE MODEL 5000 GAS-FIRED TURBINE, HEAT RECOVERY STEAM GENERATOR, AND INLET AIR ABSORPTION CHILLER AND HEAT EXCHANGER

Number of Facilities Reported: 1