San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

OCT 05 2016

Mr. Gregory Pritchett
Chevron USA Inc
PO Box 1392
Bakersfield, CA 93302

Re: Notice of Preliminary Decision – Title V Permit Renewal
District Facility # S-1141
Project # 1153624

Dear Mr. Pritchett:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Chevron USA Inc in western Kern County, California.

The notice of 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. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

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

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

www.valleyair.org www.healthyairliving.com

Printed on recycled paper.

SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation
Chevron USA Inc
S-1141

TABLE OF CONTENTS

I. PROPOSAL 2
II. FACILITY LOCATION 2
III. EQUIPMENT LISTING 3
IV. GENERAL PERMIT TEMPLATE USAGE 3
V. SCOPE OF EPA AND PUBLIC REVIEW 3
VI. FEDERALLY ENFORCEABLE REQUIREMENTS 4
VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE 5
VIII. PERMIT REQUIREMENTS 6
IX. PERMIT SHIELD 8
X. PERMIT CONDITIONS 9
XI. ATTACHMENTS 9

A. DRAFT RENEWED TITLE V OPERATING PERMIT
B. PREVIOUS TITLE V OPERATING PERMIT
C. DETAILED FACILITY LIST

TITLE V PERMIT RENEWAL EVALUATION

Heavy Oil Production Operation

Engineer: Richard Edgehill
Date: October 4, 2016

Facility Number: S-1141
Facility Name: Chevron USA Inc
Mailing Address: P O Box 1392
Bakersfield, CA 93302

Contact Name: Greg Pritchett and Kris Rickards
Phone: (661) 654-7796 (KR)

Responsible Official: Arthur Lewis
Title: Aera Manager

Project # : S-1153624
Deemed Complete: August 26, 2015

I. PROPOSAL

Chevron USA Inc (Chevron) was issued a Title V permit which was renewed on January 17, 2012. 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 issuance of the renewed Title V permit (January 17, 2012).

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

Chevron USA Inc (Chevron) is located at the Heavy Oil Western Stationary source in Kern County, CA.

III. EQUIPMENT LISTING

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

IV. GENERAL PERMIT TEMPLATE USAGE

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

A. Template SJV-UM-0-3 Facility Wide Umbrella

The facility wide permit includes the conditions on template No. SJV-UM-0-3, Facility Wide Umbrella in addition to the following specific condition:

1. *{118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] N*

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 form model general permit template UM-3 and are not subject to further EPA or public review.

The UM-3 requirements are stated in Conditions 1 through 40 of the requirements for permit unit S-1141-0-6.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2020, Exemptions (amended December 18, 2014)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended February 18, 2016)
- District Rule 4702, Internal Combustion Engines – Phase 2 (Amended November 14, 2013)
- 40 CFR Part 82, Subpart B Stratospheric Ozone (June 25, 2013)
- 40 CFR Part 82, Subpart F Stratospheric Ozone (June 25, 2013)

B. Rules Removed

None

C. Rules Added

Following rules are that are applicable to operation of this facility has been adopted since issuance of the initial Title V permit.

- District Rule 2410, Prevention of Significant Deterioration (adopted June 16, 2011, effective November 26, 2012)

- 40 CFR Part 60, Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution (Adopted 8/16/2012)

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 1100, Equipment Breakdown (amended December 17,1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)

- District Rule 2520, Federally Mandated Operating Permits (amended June 21, 2001)
- District Rule 4001 New Source Performance Standards (Amended April 14, 1999)

40 CFR 60 Subpart IIII –Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (RICE)

- District Rule 4002 National Emissions Standards for Hazardous Air Pollutants (Amended May 20, 2004)

40 CFR 63 Subpart ZZZZ - – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)
- District Rule 4305, Boilers, Steam Generators and Process Heaters - Phase 2 (amended August 21, 2003)
- District Rule 4306, Boilers, Steam Generators and Process Heaters - Phase 3 (amended October 16, 2008)
- District Rule 4311, Flares, (amended June 16, 2009)
- District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters greater than 5.0 MMBtu/hr (adopted October 16, 2008)
- District Rule 4401, Steam Enhanced Crude Oil Production Wells (Amended June 16, 2011)
- District Rule 4623, Storage of Organic Liquids (Amended 5/19/05)
- District Rule 4601 Architectural Coatings (Amended December 17, 2009)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- 40 CFR Part 82, Subpart F, Stratospheric Ozone
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos (7/20/04)
- 40 CFR Part 64, Compliance Assurance Monitoring (10/22/97)
- 40 CFR Part 60 Appendix F (7/1/91)

\

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

None

B. Rules Not Updated

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

Condition 41 of permit unit -0-6 is based on District Rule 4102 and will therefore not be discussed any further.

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 or most recent renewal of the Title V permit.

A. District Rule 2020 - Exemptions

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any effect 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.

The Authorities to Construct listed in the following table were subject to the NSR Rule at the time the applicant applied for the Authority to Construct (ATC).

ATC	Equipment Description	Status	Required Title V Action
'-127-48 '-495-23	Add tanks -605 and '-606 to vapor control system	Commenced construction of '-605 and '-606	AA
'-317-15	**Operate with closed casing vents, revise equipment description, new fugitive emissions estimation**	**Will be implemented**	**MM**
'-354-6	**Transfer of Location of Emergency Generator**	**Direct convert**	**MM**
'-517-20, '-518-14, '-519-11 '-534-10	Split flow design change, new location, delete specific PSD conditions	Will be implemented	MM
'-605-0 '-606-0	New tanks	Commenced construction of '-605 and '-606	AA

Conditions from ATCs '-317-15 (Conditions #2- #10) and '-354-6 (Conditions #2 - #6) will be included in the Title V PTOs. The other ATCs listed in the above table will not be implemented before issuance of the renewed Title V PTOs (email correspondences/discussions from/with CUSA).

C. District Rule 4702 – Internal Combustion Engines – Phase 2

Permit units S-1131-352 through '-355, '-609 authorize emergency standby IC engines subject to the rule. The current permits and facility wide PTO '-0-5 include the rule requirements. The draft PTOs include all of the current PTO conditions. 40 CFR 63 Subpart ZZZZ conditions were added to the S-1131-352 through '-355 draft PTOs.

D. 40 CFR Part 64 – CAM

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

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

Major Source Thresholds

Pollutant	lb/year	ton/year
NOx	20,000	10
SOx	140,000	70
PM10	140,000	70
CO	200,000	100
VOC	20,000	10

CAM was addressed in previous Title V Renewal Project S-1141, 1154423 (finalized January 17, 2012). No new permit units have been added to facility S-1141 since January 17, 2012 which are subject to CAM.

E. 40 CFR Part 82, Subpart B Stratospheric Ozone (June 25, 2013)
40 CFR Part 82, Subpart F Stratospheric Ozone (June 25, 2013)

These requirements are included in Draft PTO '-0-5 conditions #27 and #28 reflect the requirements.

F. 40 CFR Part 60, Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

Subpart OOOO could potentially apply to this facility's tanks. However, pursuant to section §60.5365(e), this subpart does not apply since the emissions from each of the tanks are estimated to be less than 6 tons per year. Therefore, the requirements of this subpart are not applicable to this facility.

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.

Conditions 39 and 40 on the proposed permit S-1141-0-6 are permit shields for the facility.

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 List

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley
Air Pollution Control District

FACILITY: S-1141-0-6 **EXPIRATION DATE:** 02/29/2016

DRAFT

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

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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 Rules 2520, 9.4.2; 4624; 4702, 6.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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), by using EPA Method 9. 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 Rules 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 Rules 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 Rules 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 Rules 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 Rules 8061 and 8011] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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 Rules 8071 and 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. {118} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

42. All permits for facilities S-1128, S-1129, S-1141, S-1549, and S-2592 are included in the Chevron USA Inc. Heavy Oil Western stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit

43. Facility shall comply with all applicable requirements regarding preparation and implementation of a risk management plan (RMP) by August 31, 1999, and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR 68] Federally Enforceable Through Title V Permit

44. The following units are subject to the facility's SLC plan: S-1141-392, S-1141-394, S-1141-396, S-1141-402, S-1141-516, S-1141-517, S-1141-529. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

45. The reporting periods of the Report of Required monitoring and Compliance Certification Report begin November 30 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due on the 30 days after the end of the reporting period. If the due date falls on a day that the SJVAPCD is closed, they will be due on the next business day. [District Rule 2520] Federally Enforceable Through Title V Permit

46. The following conditions which include category titles are only applicable to those permit units with conditions which reference the specific category title. [District Rule 2080] Federally Enforceable Through Title V Permit

47. Steam Generator General Condition: Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rule 4301, 5.2.2] Federally Enforceable Through Title V Permit

48. Steam Generator General Condition: Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

49. Steam Generator General Condition: Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit

50. Steam Generator General Condition: Start-up is defined as 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. Shutdown is 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. [District Rules 4306, 3.25 and 3.22; and 4320, 3.25 and 3.29] Federally Enforceable Through Title V Permit

51. Steam Generator General Condition: Duration of start-up or shutdown shall not exceed two hours each per occurrence. [District Rules 4305, 5.5; 4306, 5.3; and 4320, 5.6] Federally Enforceable Through Title V Permit

52. Steam Generator General Condition: Permittee shall maintain records of duration of each start-up and shutdown. [District Rules 4305, 6.1; 4306, 6.1.4; and 4320, 6.1.4] Federally Enforceable Through Title V Permit

53. Steam Generator General Condition: Annual tests results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx or CO limits of this permit, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx or CO emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.3.2; 4305, 6.3.2; 4306, 6.3.2; and 4320, 6.3.2] Federally Enforceable Through Title V Permit

54. Steam Generator General Condition: The following conditions must be met for representative unit(s) to be used to test for NOx or CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2; 4305, 6.3.2; and 4320 6.3.2] Federally Enforceable Through Title V Permit

55. Steam Generator General Condition: All units in a group for which representative units are source for NOx or CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.3.2; 4305, 6.3.2; 4306, 6.3.2 and 4320, 6.3.2] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

56. Steam Generator General Condition: All units in a group for which representative units are source tested for NOx or CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2; 4305, 6.3.2; 4306, 6.3.2; and 4320, 6.3.2] Federally Enforceable Through Title V Permit

57. Steam Generator General Condition: The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 2520, 9.3.2; 4305, 6.3.2; 4306, 6.3.2 and 4320, 6.3.2] Federally Enforceable Through Title V Permit

58. Steam Generator General Condition: Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

59. Steam Generator General Condition: Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

60. Steam Generator Fuel Monitoring Condition: When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

61. Steam Generator Fuel Monitoring Condition: When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using test methods specified in "Steam Generator - Source Testing Conditions". Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

62. Steam Generator Fuel Monitoring Condition: If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using "Steam Generator - Source Testing Conditions". [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

63. Steam Generator Fuel Monitoring Condition: If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by methods specified in "Steam Generator - Source Testing Conditions". [District Rules 2520, 9.3.2; 4305, 6.2.1 and 4320, 6.2.1] Federally Enforceable Through Title V Permit

64. Steam Generator Fuel Monitoring Condition: Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

65. Steam Generator Fuel Monitoring Condition: Compliance with SOx emission limits shall be demonstrated by fuel gas sulfur contents analysis at the time of NOx testing, except for units fired on natural gas purchased from a PUC regulated utility or operated with flue gas scrubber. [District Rule 1081] Federally Enforceable Through Title V Permit

66. Steam Generator Source Testing Condition: All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2; 4306, 5.5.2; and 4320, 5.8.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

67. Steam Generator Source Testing Condition: The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1; 4306, 5.5.1; and 4320, 5.8.1] Federally Enforceable Through Title V Permit

68. Steam Generator Source Testing Condition: For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5; 4306, 5.5.5; and 4320, 5.8.5] Federally Enforceable Through Title V Permit

69. Steam Generator Source Testing Condition: The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

70. Steam Generator Source Testing Condition: Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1; 4306, 6.3.1; and 4320, 6.3.1] Federally Enforceable Through Title V Permit

71. Steam Generator Source Testing Condition: Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

72. Steam Generator Source Testing Condition: Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

73. Steam Generator Source Testing Condition: Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods or as approved by APCO. [District Rules 1081, and 2201] Federally Enforceable Through Title V Permit

74. Steam Generator Source Testing Condition: The following test methods shall be used (or other methods as approved by the District): NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; SOx (lb/MMBtu) - EPA Method 6, 6C, 8 or ARB Method 100; Stack Gas Oxygen - EPA Method 3 or 3A or ARB Method 100; Stack Gas Velocity (ft/min) - EPA Method 2; Stack Gas Volume Flow (cfm) - EPA Method 19; Stack Gas Moisture Content (%) - EPA Method 4; Fuel Gas Sulfur Content - EPA Method 11 or EPA Method 15 or ASTM D6288, D1072, D3031, D4084, D3246, or grab sample analysis by double GC; Fuel Gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588; PM10 (lb/scf) - EPA Methods 5 (front half), 201A, and/or 202, CARB Method 5, or any combination of these PM10 methods. [District Rules 4305, 6.2; 4306, 6.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit

75. Steam Generator Periodic Monitoring Condition: The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.2] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

76. Steam Generator Periodic Monitoring Condition: If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.2] Federally Enforceable Through Title V Permit

77. Steam Generator Periodic Monitoring Condition: All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4.2 and 5.5.4; 4306, 5.4.2 and 5.5.4; and 4320, 5.7.2 and 5.8.4] Federally Enforceable Through Title V Permit

78. Steam Generator Periodic Monitoring Condition: The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.2] Federally Enforceable Through Title V Permit

79. Heavy Oil Tank Inspection and Maintenance: Flanges shall be monitored with portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit

80. Heavy Oil Tank Inspection and Maintenance: All other components such as diaphragms, dump arms, instruments, meters shall be monitored at all points of possible emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

81. Heavy Oil Tank Inspection and Maintenance: In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit

82. Heavy Oil Tank Inspection and Maintenance: Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (Feb 1999). [District Rule 2201] Federally Enforceable Through Title V Permit

83. Heavy Oil Tank Inspection and Maintenance: Valves shall be monitored with portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

84. Heavy Oil Tank Inspection and Maintenance: All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2050, 9.3.2] Federally Enforceable Through Title V Permit

85. Heavy Oil Tank Inspection and Maintenance: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

86. Heavy Oil Tank Inspection and Maintenance: A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

87. Heavy Oil Tank Inspection and Maintenance: An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

88. Heavy Oil Tank Inspection and Maintenance: Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 18 or 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 18 or 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

89. Heavy Oil Tank Insection and Maintenance: Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

90. Heavy Oil Tank Inspection and Maintenance: If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

91. Heavy Oil Tank Inspection and Maintenance: A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

92. Heavy Oil Tank Cleaning Condition: Operator shall notify the District in writing at least 72 hours prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following information: (1) The PTO number and physical location of the tank being degassed, (2) The date and time that tank degassing and cleaning activities will begin, (3) The degassing method, as allowed in this permit, to be used, and (4) The method to be used to clean the tank, including any solvents to be used. [District Rule 2080] Federally Enforceable Through Title V Permit

93. Heavy Oil Tank Cleaning Condition: To facilitate connection to an external APCO-approved vapor recovery system a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit

94. Heavy Oil Tank Cleaning Condition: During degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system that is leak-free and achieves at least 95% control of inlet VOC emissions. [District Rule 2080] Federally Enforceable Through Title V Permit

95. Heavy Oil Tank Cleaning Condition: Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

96. Heavy Oil Tank Cleaning Condition: When storing organic liquid of TVP less than 0.5 psia, prior to returning the tank to normal operation, the tank vapor control system shall either be reactivated and the pressure/relief valves closed, or the tank shall be filled to the maximum possible level with water, inert gas, or a liquid with a TVP less than 0.5 psia and the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall then be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

97. Heavy Oil Tank Cleaning Condition: Prior to opening the tank to allow tank cleaning, one of the following degassing procedures must be followed: 1) Exhaust VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 2) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight; 4) For free-water knockout tanks, the operator may degas the tank vapor space by restricting the outflow of water and floating off the oilpad, such that at least 90 percent of the tank volume is displaced; or 5) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained. [District Rule 2080] Federally Enforceable Through Title V Permit

98. Heavy Oil Tank Cleaning Condition: Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

99. Heavy Oil Tank Cleaning Condition: Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

100. Heavy Oil Tank Cleaning Condition: Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

101. Heavy Oil Tank Cleaning Condition: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

102. Heavy Oil Tank Cleaning Condition: While performing tank cleaning activities, operators may use the following cleaning agents: clean (produced) water, diesel, solvents with an initial boiling point of greater than 302øF, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit

103. Heavy Oil Tank Cleaning Condition: Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

104. Heavy Oil Tank Testing Condition: Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit

105. Heavy Oil Tank Testing Condition: Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or representative tank as provided in District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.1.1] Federally Enforceable Through Title V Permit

106. Heavy Oil Tank Testing Condition: Operator shall conduct quarterly sampling from the tank vapor recovery system to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If fluids sampled are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. Such sampling is deemed representative of all components downstream of the equipment served by the vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

107. Heavy Oil Tank Testing Condition: VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit

108. Heavy Oil Tank Testing Condition: The API gravity of crude oil or petroleum distillate shall be determined by using ASTM method D 287-92 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D-4057-95 "Standard Practices for manual Sampling of Petroleum and Petroleum Products". [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit

109. Heavy Oil Tank Testing Condition: For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory " Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

110. Heavy Oil Tank Testing Condition: Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623, 6.2.1.1] Federally Enforceable Through Title V Permit

111. Heavy Oil Tank Testing Condition: The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit

112. Heavy Oil Tank Testing Condition: The permittee shall keep accurate records of vapor VOC concentration, API gravity, true vapor pressure, storage temperature and types of liquids stored. [District Rule 2201 and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

113. Casing Collection System Conditions: The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4401, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

114. Casing Collection System Condition: An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: 1) The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or 2) The steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system. [District Rule 4401, 5.1] Federally Enforceable Through Title V Permit

115. Casing Collection System Conditions: Permittee shall install and maintain an APCO-approved VOC collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401, 5.1] Federally Enforceable Through Title V Permit

116. Casing Collection System Conditions: During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit

117. Casing Collection System Conditions: The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit

118. Casing Collection System Conditions: Permittee shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit

119. Casing Collection System Conditions: By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit

120. Casing Collection System Conditions: In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401, 6.6] Federally Enforceable Through Title V Permit

121. Casing Collection System Conditions: A gas leak is defined as the detection of a concentration of total organic compounds, above background (measured in accordance with EPA Method 21) that exceeds the following values: 1) A major gas leak is a detection of greater than 10,000 ppmv as methane; and 2) A minor gas leak is a detection of 400 to 10,000 ppmv as methane for pressure relief devices (PRDs) and 2,000 to 10,000 for components other than PRDs. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit

122. Casing Collection System Conditions: A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

123. Casing Collection System Conditions: During District compliance inspection, the following conditions shall be used to determination of a violation: 1) Existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere; 2) Existence of a component with a major liquid leak; 3) Existence of a component with a gas leak greater than 50,000 ppmv; or 4) Existence of a component leak consisting of a minor liquid or gas leak, or a gas leak greater than 10,000 ppmv up to 50,000 ppmv, in excess of the allowable number of leaks specified in Table 2 of Rule 4401. [District Rule 4401, 5.2.2] Federally Enforceable Through Title V Permit

124. Casing Collection System Conditions: Permittee shall keep all hatches closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit

125. Casing Collection System Conditions: Except for pipes and unsafe-to-monitor components, permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.1 & 5.4.2] Federally Enforceable Through Title V Permit

126. Casing Collection System Conditions: Permittee shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401, 5.4.5] Federally Enforceable Through Title V Permit

127. Casing Collection System Conditions: Permittee shall inspect audio-visually (by hearing and by sight) for leaks all accessible operating pumps, compressors, and pressure relief devices (PRDs) in service at least once each calendar week. [District Rule 4401, 5.4.3.1] Federally Enforceable Through Title V Permit

128. Casing Collection System Conditions: Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.3.2] Federally Enforceable Through Title V Permit

129. Casing Collection System Conditions: Permittee shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. Permittee shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. [District Rule 4401, 5.4.4.1] Federally Enforceable Through Title V Permit

130. Casing Collection System Condition: Permittee shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. [District Rule 4401, 5.4.4.2] Federally Enforceable Through Title V Permit

131. Casing Collection System Conditions: Except for PRDs, permittee shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401, 5.4.4.3] Federally Enforceable Through Title V Permit

132. Casing Collection System Conditions: Permittee shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. The following information shall be included on the tag: 1) the date and time of leak detection; 2) the date and time of leak measurement; 3) leak concentration in ppmv for a gaseous leak; 4) description of whether it is a major liquid leak or a minor liquid leak; and 5) whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

133. Casing Collection System Conditions: Permittee shall keep the tag affixed to the component until all of the following conditions have been met: 1) the leaking component has been repaired or replaced, and 2) the component has been re-inspected using the test methods described in this permit; and 3) the component is found to be in compliance with the requirements of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit

134. Casing Collection System Conditions: Permittee shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit

135. Casing Collection System Conditions: Except for leaking critical components or leaking essential components, if the operator has minimized a leak but the leak still exceeds the applicable leak limits, the operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) repair or replace the leaking component; 2) vent the leaking component to a VOC collection and control system; or 3) remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit

136. Casing Collection System Conditions: The leak rate, measured after leak minimization has been performed, shall be used to determine the applicable repair period specified in Table 3 of Rule 4401 and the time of initial leak detection shall be the start of the repair period specified in Table 3 of Rule 4401. [District Rule 4401, 5.5.5] Federally Enforceable Through Title V Permit

137. Casing Collection System Conditions: If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] Federally Enforceable Through Title V Permit

138. Casing Collection System Conditions: Permittee shall maintain an inspection log in which, at a minimum, all of the following information shall be recorded for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type; 2) The location, type, and name or description of each leaking component and description of any unit where the leaking component is found; 3) The date of leak detection and the method of leak detection; 4) For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of leaking components; 6) The identity and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number; and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4] Federally Enforceable Through Title V Permit

139. Casing Collection System Conditions: Permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

140. Casing Collection System Conditions: Annual control efficiency compliance tests shall be performed by source testers certified by the California Air Resource Board (CARB) on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine, or in a smokeless flare. [District Rule 4401, 6.2.1 & 6.2.2] Federally Enforceable Through Title V Permit

141. Casing Collection System Conditions: The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit

142. Casing Collection System Conditions: VOC content shall be determined using ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by ARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit

143. Casing Collection System Conditions: VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.4] Federally Enforceable Through Title V Permit

144. Casing Collection System Conditions: Permittee shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. Permittee shall maintain at the facility the copies of the training records of the training program. [District Rule 4401, 6.1.6 & 6.5] Federally Enforceable Through Title V Permit

145. Casing Collection System Conditions: Unless the source testing requirement is waived by the District, permittee shall maintain source test records which show that the control efficiency requirements of the VOC collection and control system have been satisfied. [District Rule 4401, 6.1.3] Federally Enforceable Through Title V Permit

146. Casing Collection System Conditions: Permittee shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit

147. Casing Collection System Conditions: Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit

148. Emergency Standby IC Engine Condition: Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

149. Emergency Standby IC Engine Condition: This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.9.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit

150. Emergency Standby IC Engine Condition: This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.9.2] Federally Enforceable Through Title V Permit

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

151. Emergency Standby IC Engine Condition: Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit

152. Emergency Standby IC Engine Condition: During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.9.3] Federally Enforceable Through Title V Permit

153. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4702, 6.2.3 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

154. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-19-29

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: 21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STRUTHERS STEAM GENERATOR 21S SG#7 (SN 80-37391-2, NB 983, DIS 20629-81) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. {468} The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source, the unit is located west of Interstate Highway 5 in Kern County. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2) 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.0028 lb/MMBtu or CO: 37 ppmvd @ 3% O2. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit

DRAFT

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

12. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-26-38 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR STRUTHERS THERMOFLOOD NATURAL GAS/TEOR GAS/TVC VAPORS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE 4231 ULTRA-LOW NOX BURNER, FGR, A THERMOX O2 CONTROLLER, VAPOR PIPING FROM TEOR SYSTEM, VAPOR PIPING FROM TVC SYSTEMS, AND A SULFA SCRUB HYDROGEN SULFIDE (H2S) SYSTEM (COMMON TO -31, -549, -550, -551, -552, -553, -555, -556, -557 AND -558) (#48, DIS #20660-81, NATIONAL BOARD #1041)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary permit changes and/or retrofits required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rule 4320] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. The VOC content of the fluid stream handled by the Sulfa-Scrub system shall be less than ten (10) percent by weight, as determined by ASTM Methods D-1945, E-260-73, E-168-67, or E-169-63. Test samples shall be taken from sampling ports immediately upstream and downstream of the Sulfa-Scrub system. VOC content shall be determined quarterly, and if compliance with the VOC content limit is demonstrated for eight consecutive quarters, the testing frequency may be changed to annual. Testing frequency shall revert to quarterly if an annual test is failed. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually in accordance with EPA Method 21, with an instrument calibrated with methane. Components located in unsafe areas shall be inspected and repaired at the next process turnaround (the shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

11. Except for components that are part of a critical process unit as defined in this permit, leaking components (having a gas leak >10,000 ppmv measured as methane) shall be repaired to a leak-free condition within 15 days of discovery. [District Rule 2201] Federally Enforceable Through Title V Permit

12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit

14. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit

15. For each steam generator site downstream of H2S scavenger vessel, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a weekly basis utilizing gas detection tubes calibrated for existing sulfur species or other District approved fuel sulfur detection method(s) or device(s). [District Rule 1070] Federally Enforceable Through Title V Permit

16. Fuel H2S, and total sulfur shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, double GC for H2S and mercaptans or ASTM D6228. [District Rule 4320] Federally Enforceable Through Title V Permit

17. Each fuel source shall be tested semi-annually for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which semi-annual testing may resume. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

20. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.4.2 , 4305, 6.2.1 and 4320] Federally Enforceable Through Title V Permit

21. Emissions from the steam generator shall not exceed any of the following limits: 1.94 lb-SOx/MMBtu, 0.096 lb-PM10/MMBtu, or 0.005 lb-VOC/MMBtu. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit

22. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, 4320, and 4406] Federally Enforceable Through Title V Permit

23. During start-up and shutdown periods, emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

25. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6, 4306, 5.3 and 4320] Federally Enforceable Through Title V Permit

26. Start-up is defined as 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. Shutdown is 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. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit

27. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320] Federally Enforceable Through Title V Permit

29. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1 and 4320] Federally Enforceable Through Title V Permit

30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

31. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4 , 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

32. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

34. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; and Stack gas moisture content - EPA Method 4. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

35. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1 and 4320] Federally Enforceable Through Title V Permit

36. {518} All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

37. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320] Federally Enforceable Through Title V Permit

38. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320] Federally Enforceable Through Title V Permit

39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

40. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit

41. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit

42. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

43. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source, this unit is located west of Interstate Highway 5 in Kern County. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

44. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

46. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-31-39

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: 22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR #59 (DIS# 20639-81, NATIONAL BOARD #1352), WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER AND FGR PERMITTED TO OPERATE WITH EITHER AN AIR-FUEL MIXING ROD OR A MULTI-PORT (AKA GATLING GUN) PRIMARY MIXER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary permit changes and/or retrofits required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rule 4320] Federally Enforceable Through Title V Permit
5. {518} All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. {519} Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. {520} The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
8. {521} Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Fuel H2S, and total sulfur shall be determined semi-annually using the following test methods H2S: ASTM D6228; and total sulfur: ASTM D1072; ASTM D3246, double GC for H2S and mercaptans or ASTM D6228. [District Rule 4320] Federally Enforceable Through Title V Permit
10. Each fuel source shall be tested semi-annually for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which semi-annual testing may resume. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit

12. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.4.2 , 4305, 6.2.1 and 4320] Federally Enforceable Through Title V Permit

14. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source because this permit unit has not been modified per 40 CFR 60. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source, this permit unit is located west of Interstate Highway 5 in Kern County. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

18. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District 1081 and 2201] Federally Enforceable Through Title V Permit

19. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. During a start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rule 4306] Federally Enforceable Through Title V Permit

21. Permittee shall maintain daily records of the duration of each start-up and shutdown, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit

22. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Start-up is defined as 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. Shutdown is 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. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit

24. Emission rates shall not exceed: PM10: 144.0 lb/day or 52,560 lb/year, SOx: 2910 lb/day or 1,062,150 lb/year, NOx (as NO2): 54.0 lb/day or 9855 lb/year, VOC: 9.0 lb/day or 3285 lb/year, CO: 40.5 lb/day or 14,783 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. Emission rates shall not exceed any of the following: PM10: 0.096 lb/MMBtu, SOx (as SO2): 1.94 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District Rule 2201, and 4406] Federally Enforceable Through Title V Permit

26. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 37 ppmv @ 3% O2. [District Rule 2201, 4305, 4306, 4406 and 4320] Federally Enforceable Through Title V Permit

27. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320] Federally Enforceable Through Title V Permit

28. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

29. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

30. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

31. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

32. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

34. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

35. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; and Stack gas moisture content - EPA Method 4. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

36. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

38. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

40. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

42. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

43. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-38-34

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MM BTU/HR C. E. NATCO NATURAL GAS FIRED SG #79 (SN T-6155901-11, NB 9815, DIS 20664-77) WITH NORTH AMERICAN BURNER, FGR, AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. This generator is permitted to operate at the following locations: Sections 8 and NE21 of Township 32S, Range 23E and Sections SW23 and NW27 of Township 31S, Range 22E. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.014 lb-PM10/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

14. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520 and 4406] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

20. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

21. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
28. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
31. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

40. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-43-27

EXPIRATION DATE: 02/29/2016

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED STRUTHERS STEAM GENERATOR (SG #87, N.B. 998) WITH NORTH AMERICAN GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, AND FLUE GAS RECIRCULATION (FGR)

DRAFT

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 9.3.2 and 4406] Federally Enforceable Through Title V Permit
7. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. This generator is permitted to operate at the following locations: Sections 8 and 21 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
12. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rule 2201, 4305 and 4320] Federally Enforceable Through Title V Permit
13. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR gas incinerated in this unit. [District Rule 2201 and 4406] Federally Enforceable Through Title V Permit
14. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
15. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM-10: 0.073 lb/MMBtu, NOx as NO2: 15 ppmv @ 3% 02 or 0.018 lb/MMBtu, VOC: 0.0056 lb/MMBtu, or CO: 37 ppmv @ 3% O2 or 0.027 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
19. Emissions shall not exceed any of the following: 54 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
20. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadway constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
21. During start-up and shutdown periods, emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
22. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
23. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
24. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
25. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
26. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

35. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

36. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

37. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

38. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

40. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

41. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

42. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-44-34

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED STRUTHERS STEAM GENERATOR #106 (DIS 41757-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW NOX BURNER, O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: SE/4 Section 35, and SW/4 Section 36, T29S R21E; all of Section 31, T29S R22E; all of Section 1 T30S R21E; all of Sections 19 and 20, and the SW/4 Section 6, T30S, R22E; and NE/4 Section 22, T31S R22E (MDBM). [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit units: PTO S-1141-250, PTO S-1141-479, PTO S-1141-495 and PTO S-1128-116. [District Rules 2201, 4406, and 4320; and CH&SC 41700] Federally Enforceable Through Title V Permit
3. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320; and CH&SC 41700] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
5. Except during startup and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu/hr, and 25 ppmvd CO @ 3%O2 or 0.0185 lb-CO/MMBtu/hr. [District Rules 2201; 4301, 5.2; 4305, 5.1; 4306, 5.1; and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10 0.005 lb/MMBtu; or VOC 0.003 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During startup and shutdown periods, emissions from the steam generators shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including startup and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/year, 27.8 lb-CO/day, and 10,129 lb-CO/year [District Rule 2201] Federally Enforceable Through Title V Permit
9. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

10. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. {534} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

15. Steam generator firebox convection section and all flue gas ductwork shall have no detectible leaks. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned and permit number(s) of systems providing gas for incineration. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

17. Permittee shall maintain no less than 0.45 miles of asphalt-paved roadway. The 0.45 miles of asphalt-paved roadways are separate from roadways associated with other steam injection and oil production well projects. [District Rules 2201] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

20. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

21. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-45-34

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #107 (DIS 41762-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW NOX BURNER, O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: SE/4 Section 35, and SW/4 Section 36, T29S R21E; all of Section 31, T29S R22E; all of Section 1 T30S R21E; all of Sections 19 and 20, and the SW/4 Section 6, T30S, R22E; and NE/4 Section 22, T31S R22E (MDBM). [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit units: PTO S-1141-250, PTO S-1141-479, PTO S-1141-495 and PTO S-1128-116. [District Rules 2201, and 4320; and CH&SC 41700] Federally Enforceable Through Title V Permit
3. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 220, 4320, and 4406; and CH&SC 41700] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division in writing of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
5. Except during startup and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu-hr, or 25 ppmvd CO @ 3%O2 or 0.0185 lb-CO/MMBtu-hr. [District Rules 2201; 4305; 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10 0.005 lb/MMBtu or VOC 0.003 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During startup and shutdown periods, emissions from the steam generators shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including startup and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/year, 27.8 lb-CO/day, and 10,129 lb-CO/year [District Rule 2201] Federally Enforceable Through Title V Permit
9. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Steam generator shall be equipped with an operational gas volume flowmeter that measures each fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

12. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District Rules 2201, 4320, and 4406] Federally Enforceable Through Title V Permit

13. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned and permit number(s) of systems providing gas for incineration. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

14. Steam generator firebox convection section and all flue gas ductwork shall have no detectible leaks. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Records required by this permit shall be retained at the facility for a period of no less than 5 years and shall be made readily available for District inspection upon request. [District Rules 2201, 2520, 9.4.2, and 4306, 6.1] Federally Enforceable Through Title V Permit

16. This unit is not authorized to burn liquid or solid fuel. [District Rule 2010] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

20. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

21. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
25. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
26. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
27. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
28. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
29. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
30. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
31. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
32. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
33. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
34. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
35. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
36. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-46-37

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #103 (DIS 41754-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520 and 4406] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with an operational gas flowmeter that measures the total combined volume of fuel gas sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
3. This generator is permitted to operate at the following locations: Section 31, T29S, R22E, SW/4 Section 6, T30S, R22E, SW/4 Section 36, T29S, R21E, Section 1, T30S, R21E, SE/4 Section 35, T29S, R21E, Sections 17, 21, 22, 26, 27 of T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0181 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.2 lb-CO/day, and 10,940 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Permittee shall maintain no less than 0.45 miles of paved roadway in the Midway-Sunset Oil Field. The 0.45 miles of roadways are separate from roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

11. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

18. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, in the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-47-29

EXPIRATION DATE: 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #95 (SN 80-37387-4, NB 967, DIS 12810-85) WITH FLUE GAS RECIRCULATION (FGR), NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND AN O2 ANALYZER/CONTROLLER

DRAFT

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. {521} Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
7. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
8. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

9. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8 or ARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD or double GC performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

10. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD or Double GC performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2, 4305, 6.2.1 and 4320] Federally Enforceable Through Title V Permit

12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

13. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. This generator is permitted to operate at the following locations: Sections 17, 21, 22, 26, and 27 of Township 31S, Range 22E and Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit

19. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter, and flue gas oxygen monitor. [District Rule 2201, 4305 and 4320] Federally Enforceable Through Title V Permit

21. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as S): 0.001 lb/MMBTU, NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBTU, VOC: 0.003 lb/MMBtu or CO: 14.0 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

22. Source testing to measure NOx and CO emissions shall be conducted within 60 days of recommencing operation of this unit. [District Rule 4305 and 4320] Federally Enforceable Through Title V Permit

23. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months. [District Rule 2520, 9.3.2, 4305 and 4320] Federally Enforceable Through Title V Permit

24. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.3.2, 4305 and 4320] Federally Enforceable Through Title V Permit

25. If permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.3.2, 4305 and 4320] Federally Enforceable Through Title V Permit

26. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

29. Records required by this permit shall be retained at the facility for a period of no less than 5 years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

30. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, PM10 - EPA Method 5, and gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305 and 4320] Federally Enforceable Through Title V Permit

31. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

32. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

34. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

35. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

36. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

37. The unit shall only be fired on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

38. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

40. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

41. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

42. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

44. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

45. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

46. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

47. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

48. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

49. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

50. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

51. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

52. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

53. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

54. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

55. This Authority to Construct shall be implemented according to the date proposed in the District Approved Rule 4320 Emission Control Plan. [District Rule 4320] Federally Enforceable Through Title V Permit

56. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. Permittee shall maintain records of duration of each start-up and shutdown that exceeds two hours. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

57. Start-up is defined as 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. Shutdown is 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. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

58. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3Aor ARB Method 100, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H2S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

59. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

60. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

61. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-48-28

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #96 (SN 80-37387-7, NB 970, DIS 12811-85) WITH FLUE GAS RECIRCULATION (FGR), NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. This generator is permitted to operate at the following locations: Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 9.3.2, and 4406] Federally Enforceable Through Title V Permit
8. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as total sulfur): 0.001 lb/MMBtu, NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.003 lb/MMBtu and CO: 1.4 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

13. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. The unit shall only be fired on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

16. As required by PSD permit number SJ 78-17 when firing on oil, all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

17. As required by PSD permit number SJ 78-17 when firing on oil, the EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

18. As required by PSD permit number SJ 78-17 when firing on oil, the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. As required by PSD permit number SJ 78-17 when firing on oil, in the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. As required by PSD permit number SJ 78-17 when firing on oil, the provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. As required by PSD permit number SJ 78-17 when firing on oil, the owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. As required by PSD permit number SJ 78-17 when firing on oil, the sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. As required by PSD permit number SJ 78-17 when firing on oil, the amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. As required by PSD permit number SJ 78-17 when firing on oil, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. As required by PSD permit number SJ 78-17 when firing on oil, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. As required by PSD permit number SJ 78-17 when firing on oil, performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

34. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-49-28

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #97 (SN 80-37387-15, DIS 12810-85) NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. This generator is permitted to operate at the following locations: Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

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

9. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as total sulfur): 0.001 lb/MMBtu, NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.003 lb/MMBtu and CO: 1.4 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
13. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. The unit shall only be fired on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
16. As required by PSD permit number SJ 78-17 when firing on oil, all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
17. As required by PSD permit number SJ 78-17 when firing on oil, the EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
18. As required by PSD permit number SJ 78-17 when firing on oil, the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. As required by PSD permit number SJ 78-17 when firing on oil, in the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. As required by PSD permit number SJ 78-17 when firing on oil, the provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. As required by PSD permit number SJ 78-17 when firing on oil, the owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. As required by PSD permit number SJ 78-17 when firing on oil, the sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. As required by PSD permit number SJ 78-17 when firing on oil, the amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. As required by PSD permit number SJ 78-17 when firing on oil, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. As required by PSD permit number SJ 78-17 when firing on oil, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. As required by PSD permit number SJ 78-17 when firing on oil, performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

34. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-50-26 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

DRAFT

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR SMITH MOON STEEL NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR #98 (SN 77-37182-12, NB 810, DIS 20654-78) WITH A NORTH AMERICAN BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. This generator is permitted to operate at the following locations: Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

9. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as total sulfur): 0.001 lb/MMBtu, NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.003 lb/MMBtu and CO: 1.4 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

12. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

14. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

15. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

16. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

17. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

18. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

20. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

32. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

33. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

34. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-51-28

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C. E. NATCO NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR #99 (SN T-6718101-08, NB 130, DIS 20640-79) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201, and 4301. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as S): 0.00285 lb/MMBTU, VOC: 0.003 lb/MMBtu or CO: 25 ppmvd @ 3% O2. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods NOx emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu. [District Rule 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. Emissions of NOx shall not exceed 54.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

DRAFT

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

12. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

14. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

15. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

16. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

17. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

18. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-52-36 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

DRAFT

EQUIPMENT DESCRIPTION:
DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #100 (SN 81-37469-2, NB 1056, DIS 39545-88) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR AND TVC SYSTEMS

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. {518} All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. {521} Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
10. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

11. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or ARB Method 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2 and 4305, 6.2.1] Federally Enforceable Through Title V Permit

14. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

15. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. {534} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

19. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

20. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Permit unit shall include TEOR/TVC/natural gas-fired steam generator with North American burner, O2 controller, FGR, SO2 scrubber shared with S-1141-53, '-55, '-60, and '-61 and vapor piping from TEOR operations. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter, TEOR gas volume flowmeter, TVC gas flowmeter, and flue gas oxygen monitor. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit
23. Permittee shall maintain with the permit a current listing of all TEOR and TVC systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit
24. Upon recommencing operation, testing for TEOR/TVC gas sulfur content shall be conducted no less than monthly. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Permittee shall maintain daily records of volume of fuel gas burned and TEOR/TVC gas incinerated, monthly TEOR/TVC and fuel gas sulfur content, and monthly Btu content of TEOR/TVC and fuel gas. Such records shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
26. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Scrubber sprays and/or nozzles shall be maintained as required to achieve compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Dissolved and suspended solids and condensed organics shall not exceed 20% of the scrubbing stream. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
32. Scrubber shall be equipped with recirculation liquor pH indicator and pump discharge pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
33. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall have no detectible leaks. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Scrubber recirculation liquor pH shall be maintained between 6.2 and 7.5. [District NSR Rule] Federally Enforceable Through Title V Permit
35. Scrubber recirculation liquor pH shall be maintained only with soda ash unless District approval is granted for substitution. [District NSR Rule] Federally Enforceable Through Title V Permit
36. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as S): 0.040 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu or CO: 1.4 ppmv @ 3% O2. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit
37. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
38. If the unit is operated with the scrubber, compliance source testing for SOx shall be conducted not less than once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

40. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.3.2 and 4305]

41. Upon recommencing operation, if permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

42. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

43. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

44. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

45. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

46. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, PM10 - EPA Method 5, SOx (lb/MMBtu) - ARB Method 100 and EPA method 19, and gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305] Federally Enforceable Through Title V Permit

47. Testing to measure TEOR/TVC gas sulfur content shall be conducted using ASTM D3246 oxidation combustion microcoulometric or double GC for H2S and mercaptans. [District Rule 1801] Federally Enforceable Through Title V Permit

48. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District NSR Rule] Federally Enforceable Through Title V Permit

49. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305] Federally Enforceable Through Title V Permit

50. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

51. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305] Federally Enforceable Through Title V Permit

52. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

53. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

54. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

55. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

56. The following conditions must be met for representative unit(s) to be used to test for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

57. All units in a group for which representative units are source for NOx emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

58. All units in a group for which representative units are source tested for NOx emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

59. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

60. Scrubber pressure drop shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

61. Records of scrubber pressure drop shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

63. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

64. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

65. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

66. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

67. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

68. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

69. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

70. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

71. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

72. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

73. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [District Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

74. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

75. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

76. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

77. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

78. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-53-38

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #104 (DIS 41755-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. This generator is permitted to operate at the following locations: Section 31, T29S, R22E, SW/4 Section 6, T30S, R22E, SW/4 Section 36, T29S, R21E, Section 1, T30S, R21E, SE/4 Section 35, T29S, R21E, Section 22, T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
4. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0181 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.2 lb-CO/day, or 10,940 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Permittee shall maintain no less than 0.45 miles of paved roadway in the Midway-Sunset Oil Field. The 0.45 miles of roadways are separate from roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

11. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

18. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, in the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-55-32

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #105 (SN 81-37411-16, NB 1027, DIS 39622-90) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR AND TVC SYSTEMS

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. {518} All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. {521} Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
10. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

11. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or ARB Method 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2 and 4305, 6.2.1] Federally Enforceable Through Title V Permit

14. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

15. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. {534} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

19. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

20. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Permit unit shall include TEOR/TVC/natural gas-fired steam generator with North American burner, O2 controller, FGR, SO2 scrubber shared with S-1141-52, '-53, '-60, and '-61 and vapor piping from TEOR operations. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter, TEOR gas volume flowmeter, TVC gas flowmeter, and flue gas oxygen monitor. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit
23. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District NSR Rule and 1081] Federally Enforceable Through Title V Permit
24. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Scrubber sprays and/or nozzles shall be maintained as required to achieve compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Dissolved and suspended solids and condensed organics shall not exceed 20% of the scrubbing stream. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Scrubber shall be equipped with recirculation liquor pH indicator and pump discharge pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall have no detectible leaks. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Scrubber recirculation liquor pH shall be maintained between 6.2 and 7.5. [District NSR Rule] Federally Enforceable Through Title V Permit
33. Scrubber recirculation liquor pH shall be maintained only with soda ash unless District approval is granted for substitution. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
35. If the unit is operated with the scrubber, compliance source testing for SOx shall be conducted not less than once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
36. Upon recommencing operation, permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR/TVC gas incinerated in this unit. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
37. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
38. Permittee shall maintain with the permit a current listing of all TEOR and TVC systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Permittee shall maintain daily records of volume of fuel gas burned, TEOR/TVC gas incinerated, and permit number(s) of systems providing gas for incineration. [District NSR Rule] Federally Enforceable Through Title V Permit

40. Records required by this permit shall be retained at the facility for a period of no less than 5 years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

41. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit

42. SOx emissions, measured as total sulfur, shall not exceed 0.040 lb/MMBtu. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit

43. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu or CO: 1.4 ppmv @ 3% O2. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit

44. The acceptable range of positions of the FGR control valve and fuel firing rates shall be established by testing this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

45. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

46. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

47. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

48. Upon recommencing operation, if permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

49. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

50. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

51. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

52. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, PM10 - EPA Method 5, SOx (lb/MMBtu) - ARB Method 100 and EPA method 19, and gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305] Federally Enforceable Through Title V Permit

53. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District NSR Rule] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

54. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305] Federally Enforceable Through Title V Permit

55. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305] Federally Enforceable Through Title V Permit

56. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305] Federally Enforceable Through Title V Permit

57. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

58. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

59. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

60. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

61. The following conditions must be met for representative unit(s) to be used to test for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

62. All units in a group for which representative units are source for NOx emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

63. All units in a group for which representative units are source tested for NOx emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

64. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

65. Scrubber pressure drop shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

66. Records of scrubber pressure drop shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

67. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

68. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

69. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

70. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

71. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

72. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

73. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

74. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

75. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

76. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

77. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

78. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

79. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

80. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

81. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

82. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

83. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-60-32

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR/TVC GAS FIRED STRUTHERS STEAM GENERATOR #112 (SN 81-37411-12, NB 1022, DIS 39623-90) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR SYSTEMS AND TVC SYSTEMS

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. {518} All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. {521} Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or ARB Method 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2 and 4305, 6.2.1] Federally Enforceable Through Title V Permit

14. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

15. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. {534} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

19. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

DRAFT

20. {1678} This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
21. Permit unit shall include TEOR/TVC/natural gas-fired steam generator with North American burner, O2 controller, FGR, SO2 scrubber shared with S-1141-52, '-53, '-55, and '-61 and vapor piping from TEOR operations. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter, TEOR gas volume flowmeter, TVC gas flowmeter, and flue gas oxygen monitor. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit
23. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District NSR Rule and 1081] Federally Enforceable Through Title V Permit
24. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Scrubber sprays and/or nozzles shall be maintained as required to achieve compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Dissolved and suspended solids and condensed organics shall not exceed 20% of the scrubbing stream. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Scrubber shall be equipped with recirculation liquor pH indicator and pump discharge pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall have no detectible leaks. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Scrubber recirculation liquor pH shall be maintained between 6.2 and 7.5. [District NSR Rule] Federally Enforceable Through Title V Permit
33. Scrubber recirculation liquor pH shall be maintained only with soda ash unless District approval is granted for substitution. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
35. If the unit is operated with the scrubber, compliance source testing for SOx shall be conducted not less than once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
36. Upon recommencing operation, permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR/TVC gas incinerated in this unit. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
37. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall maintain with the permit a current listing of all TEOR and TVC systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit

39. Permittee shall maintain daily records of volume of fuel gas burned, TEOR/TVC gas incinerated, and permit number(s) of systems providing gas for incineration. [District NSR Rule] Federally Enforceable Through Title V Permit

40. Records required by this permit shall be retained at the facility for a period of no less than 5 years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

41. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit

42. SOx emissions, measured as total sulfur, shall not exceed 0.040 lb/MMBtu. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit

43. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu or CO: 1.4 ppmv @ 3% O2. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit

44. The acceptable range of positions of the FGR control valve and fuel firing rates shall be established by testing this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

45. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

46. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

47. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

48. Upon recommencing operation, if permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

49. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

50. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

51. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

52. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, PM10 - EPA Method 5, SOx (lb/MMBtu) - ARB Method 100 and EPA method 19, and gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

53. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District NSR Rule] Federally Enforceable Through Title V Permit

54. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305] Federally Enforceable Through Title V Permit

55. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305] Federally Enforceable Through Title V Permit

56. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305] Federally Enforceable Through Title V Permit

57. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

58. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

59. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

60. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

61. The following conditions must be met for representative unit(s) to be used to test for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. All units in a group for which representative units are source for NOx emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

63. All units in a group for which representative units are source tested for NOx emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

64. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

65. Scrubber pressure drop shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

66. Records of scrubber pressure drop shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

67. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

68. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

69. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

70. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

71. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

72. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

73. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

74. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

75. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

76. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

77. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

78. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

79. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

80. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

81. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

82. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

83. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-61-37

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #105 (DIS 41756-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4406] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with an operational gas flowmeter that measures the total combined volume of fuel gas sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
3. This generator is permitted to operate at the following locations: Section 31, T29S, R22E, SW/4 Section 6, T30S, R22E, SW/4 Section 36, T29S, R21E, Section 1, T30S, R21E, SE/4 Section 35, T29S, R21E, Section 22, T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0181 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.2 lb-CO/day, or 10,940 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Permittee shall maintain no less than 0.45 miles of paved roadway in the Midway-Sunset Oil Field. The 0.45 miles of roadways are separate from roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
11. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. The requirements of SJVUAPCD Rule 4351 (Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. This unit is subject to conditions (Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. This unit is subject to conditions Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
16. This unit is subject to conditions Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
17. This unit is subject to conditions Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-67-27

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR AND AN O2 CONTROLLER (#121, SN T-6718101-04, NB 108, DIS 20639-79)

PERMIT UNIT REQUIREMENTS

1. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter. [District Rules 4320 and 2201] Federally Enforceable Through Title V Permit
2. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 9.4.2, and 4406] Federally Enforceable Through Title V Permit
3. Emissions from the steam generator shall not exceed any of the following limits: 0.014 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
5. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/year, 56.3 lb-CO/day, and 20,531 lb-CO/year. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
17. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
18. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
19. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit
20. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
21. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

23. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

24. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

25. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-127-49 **EXPIRATION DATE:** 02/29/2016

DRAFT

SECTION: SW 09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF CRUDE OIL TANK #T-127, DEPURATORS, TWO NATURAL GAS-FIRED EXEMPT HEATER TREATERS (T9 AND T10) (EACH RATED LESS THAN 5.0 MMBTU/HR), AND SHARED VAPOR CONTROL EQUIPMENT INCLUDING INTAKE AND DISCHARGE HEAT EXCHANGERS, GAS-LIQUID SEPARATOR(S), COMPRESSOR(S) SERVING PERMIT UNITS S-1141-127 THROUGH '-131, '-560, '-571, '-572, '-575, '-576, '-577, '-578, '-579, '-580, '-585, '-590, AND '591; INCLUDING OPTIONAL USE H2S SCRUBBER, AND VAPOR PIPING DISCHARGING TO STEAM GENERATORS S-1141-26, '-31, '-515, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, '-558, EMERGENCY FLARE S-1141-513, AND/OR DOGGR APPROVED DISPOSAL WELL(S)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, except during periods of tank cleaning and maintenance. Collected vapors shall be disposed of in APCO approved control devices listed in this permit. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly sampling from the Station 1-09 tank vapor recovery system to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If fluids sampled are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. Such sampling is deemed representative of all components downstream of the equipment served by the vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-128-15 **EXPIRATION DATE:** 02/29/2016

SECTION: NW09 **TOWNSHIP:** 32S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
3000 BBL FIXED ROOF CRUDE OIL TANK #109-C3 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-129-15 **EXPIRATION DATE:** 02/29/2016

SECTION: NW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF CRUDE OIL TANK #109-C2 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-130-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL CRUDE OIL TANK #109-C1 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127-2; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-131-14 **EXPIRATION DATE:** 02/29/2016

DRAFT

SECTION: NW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF CRUDE OIL TANK #109-P2 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-168-5

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26F-C25

PERMIT UNIT REQUIREMENTS

1. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. The requirements of 40CFR 60 Subpart K, Ka and Kb 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
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-214-5

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SE31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
840,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-7

PERMIT UNIT REQUIREMENTS

1. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. The requirements of 40CFR 60 Subpart K, Ka and Kb 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
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-215-5

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SE31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
840,000 GALLONS FIXED ROOF PETROLEUM STORAGE TANK #T-6

PERMIT UNIT REQUIREMENTS

1. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. The requirements of 40CFR 60 Subpart K, Ka and Kb 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
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-250-29

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: 22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
TEOR SYSTEM WITH COMPRESSORS, HEAT EXCHANGERS, KNOCKOUT VESSELS AND PIPING SERVING 2906 THERMALLY ENHANCED WELL VENTS

PERMIT UNIT REQUIREMENTS

1. {1311} The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and non-condensible vapor piping to vapor disposal devices. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This permit authorizes TEOR operations at the following locations: Sec 15, 20, 21, 22, 23, 24, 27, and 28 of T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Collected vapors shall be incinerated in District approved incineration devices as listed on this permit, sent to facility S-1114, or injected in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall maintain documentation of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall document Department of Oil & Gas Geothermal Resources approval for vapor disposal wells prior to injection of vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum fugitive VOC emissions rate from the TEOR operation shall not exceed 6,969.4 lb/day, calculated using average emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fraction of total gas stream after initial compression shall not exceed 10% by weight. Permittee shall conduct quarterly gas sampling downstream of the Car 2 or 3 injection compressors. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling shall only be required annually. Such sampling is deemed representative of all components at and downstream of the initial compressors. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Authorized incineration sources for collected vapors include steam generators S-1141-55, '60, '515, '516, '517, '518, '519. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas/liquid separators and condensate drums/tanks and all other equipment used to handle or store condensate shall be inclosed and shall vent only to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

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

11. Water/VOC condensate from gas/liquid separators and condensate drums shall be pumped only to production manifold or to production facilities equipped with an operating vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
12. TEOR operation shall include vapor piping from tank vapor control systems listed on permits S-1141-88, '-479, and '-495. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
14. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-253-21

EXPIRATION DATE: 02/29/2016

SECTION: 17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING 556 STEAM ENHANCED WELLS, GAS/LIQUID SEPARATOR, AIR-COOLED VAPOR CONDENSER, CONDENSATE STORAGE VESSEL AND WELL VENT VAPOR COLLECTION PIPING NETWORK

DRAFT

PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain a well roster listing all wells connected to the well vent vapor recovery system. The well roster shall be kept on site for a period of at least five years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
2. {1311} The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Emissions of volatile organic compounds (VOC) shall not exceed 311.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and vapor piping to District authorized steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If vapor incineration devices are inoperative or if casing vent vapor control system is inoperative, produced fluids shall be introduced only to tanks S-1141-127, '128, '129, '130, '131, and '132 that are vented to an approved vapor collection and control system achieving 99% control. [District Rule 2201 & 4401] Federally Enforceable Through Title V Permit
6. VOC fugitive emissions from well vent vapor collection and control system including condensate collection and handling shall not exceed 311.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Sulfur compound emissions shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
9. Only steam generators under Permit to Operate #'s S-1141-26, '-31, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, and '-558 are authorized to incinerate collected vapors. Emission limits for steam generators are contained in each steam generator Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Condensate (VOC's and water) shall be handled only in piping and vessels closed to the atmosphere and shall be pumped only to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

12. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-263-22

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: 07 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING 184 STEAM ENHANCED WELLS, GAS/LIQUID SEPARATOR, AIR-COOLED CONDENSER, CONDENSATE STORAGE VESSEL AND WELL VENT VAPOR COLLECTION PIPING NETWORK

PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain with the permit an accurate, current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
2. {1311} The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Emissions of volatile organic compounds (VOC) shall not exceed 103.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and vapor piping to District authorized steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This permit authorizes TEOR operations at the following locations: Sec 6, 7, 8, & 27 of T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
6. If vapor incineration devices are inoperative or if casing vent vapor control system is inoperative, produced fluids shall be introduced only to tanks S-1141-127, '128, '129, '130, '131, and '132 that are vented to an approved vapor collection and control system achieving 99% control. [District Rule 2201 & 4401] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from well vent vapor collection and control system including condensate collection and handling shall not exceed 103.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Sulfur compound emissions shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
10. Only steam generators under Permit to Operate #'s S-1141-26, '-31, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, and '-558 are authorized to incinerate collected vapors. Emission limits for steam generators are contained in each steam generator Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

12. Condensate (VOC's and water) shall be handled only in piping and vessels closed to the atmosphere and shall be pumped only to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit

13. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-317-16 **EXPIRATION DATE:** 02/29/2016

SECTION: NW25 **TOWNSHIP:** 31S **RANGE:** 22E

DRAFT

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 850 STEAM-ENHANCED WELLS (PREVIOUSLY PERMITTED TEOR SYSTEMS S-1141-317, '-381, '-410, '-411, AND '-428), OPERATED WITH CLOSED CASING VENTS

PERMIT UNIT REQUIREMENTS

1. This PTO authorizes TEOR operations at the following locations: Sections 25, 26, 34, and 36 of T31S, R22E; Sections 30 and 31 of T31S, R23E; and Section 6 of T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permit unit shall comply with all applicable requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
3. All crude oil production wells operated under this permit unit shall have District-approved closed casing vents. [District Rule 4401] Federally Enforceable Through Title V Permit
4. Crude oil produced from wells with vents shut in to comply with Rule 4401 requirements shall be stored and handled in a manner not allowing the emission of volatile organic compound vapors prevented by shutting in the casing vent. [District Rule 4401] Federally Enforceable Through Title V Permit
5. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit
6. Maximum fugitive VOC emission rate from the fugitive components serving TEOR casing gas collection system shall not exceed 1642.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Protocol for Equipment Leak Emission Estimate, Table 2-4, Oil and Gas Production Operations Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain, for a period of at least five years, accurate listings of wells operated under this permit, including well number and location by quarter section and lease name, and shall make such listings readily available for District inspection upon request. [District Rule 1070, and 2520, 9.4.2, 9.5.2] Federally Enforceable Through Title V Permit
9. Permittee shall maintain, for a period of at least five years, accurate listings of tanks receiving fluids produced from these wells, including quarter section and lease name, and shall make such listing readily available for District inspection upon request. [District Rule 1070, and 2520, 9.4.2, 9.5.2] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-320-19

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SE17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 388 STEAM DRIVE AND 100 CYCLIC WELLS, GAS/LIQUID SEPARATORS, CONDENSATE TRANSFER PUMPS, AIR-COOLED HEAT EXCHANGERS, AND VAPOR COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. {1311} The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. VOC emission rate from casing gas collection system shall not exceed 9.94 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
3. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and vapor piping to District authorized steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This permit authorizes TEOR operations at the following locations: Sec 17, 18, & 20 of T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If vapor incineration devices are inoperative or if casing vent vapor control system is inoperative, produced fluids shall be introduced only to tanks S-1141-127, '128, '129, '130, '131, and '132 that are vented to an approved vapor collection and control system achieving 99% control. [District Rule 2201 & 4401] Federally Enforceable Through Title V Permit
6. VOC fugitive emissions from well vent vapor collection and control system including condensate collection and handling shall not exceed 251.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Sulfur compound emissions shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
9. Only steam generators under Permit to Operate #'s S-1141-26, '-31, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, and '-558 are authorized to incinerate collected vapors. Emission limits for steam generators are contained in each steam generator Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Condensate (VOC's and water) shall be handled only in piping and vessels closed to the atmosphere and shall be pumped only to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

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

12. Permittee shall maintain with the permit an accurate, current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

13. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-352-6

EXPIRATION DATE: 02/29/2016

SECTION: 22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

DRAFT

PERMIT UNIT REQUIREMENTS

1. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [17 CCR 93115]
2. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.2.1] Federally Enforceable Through Title V Permit
3. {833} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. {834} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ]
7. Engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
8. Engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ]
9. Engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
10. Engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
11. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

12. Permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

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

14. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-353-6

EXPIRATION DATE: 02/29/2016

SECTION: 22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

DRAFT

PERMIT UNIT REQUIREMENTS

1. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [17 CCR 93115]
2. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.2.1] Federally Enforceable Through Title V Permit
3. {833} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. {834} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ]
7. Engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
8. Engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ]
9. Engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
10. Engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
11. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

12. Permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

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

14. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-354-8

EXPIRATION DATE: 02/29/2016

SECTION: 31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

DRAFT

PERMIT UNIT REQUIREMENTS

1. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [17 CCR 93115]
2. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.2.1] Federally Enforceable Through Title V Permit
3. {833} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. {834} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ]
7. Engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
8. Engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ]
9. Engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
10. Engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
11. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

12. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

13. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit units: PTO S-1141-250, PTO S-1141-479, PTO S-1141-495 and PTO S-1128-116. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

14. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

15. Emission rates shall not exceed any of the following limits: 0.096 lb-PM10/MMBtu, or 0.0027 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

17. Including startup and shutdown periods, maximum emissions from the steam generators shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,965 lb-NOx/year, 0.084 lb-CO/MMBtu, 27.8 lb-CO/day, and 10,129 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit

18. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

19. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the sulfur content as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, 4320] Federally Enforceable Through Title V Permit

20. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

21. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

22. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

23. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

24. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

25. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

26. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-527-17

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: v **TOWNSHIP:** v **RANGE:** v

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 99) WITH NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR

PERMIT UNIT REQUIREMENTS

1. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
3. This generator is approved to operate at the following locations: SW/4 Sec 23, T31S, R22E; Sec 31, T29S, R22E; SW/4 Sec 36, T29S, R21E; Sec 1, T30S, R21E; and SE/4 Sec 35, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division in writing of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. The sulfur content of fuel combusted shall not exceed 5 grains-S per 100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: 0.096 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup and shutdown, shall not exceed any of the following: 0.018 lb-NOx/MMBtu (as NO2) (or 15 ppmvd @ 3% O2), or 25 ppmvd CO @ 3% O2. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,855 lb-NOx/yr, 28.1 lb-CO/day, and 10,266 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
11. The permittee shall keep daily records of the amount of natural gas and TEOR gas combusted, permit number(s) of TEOR systems providing gas for incineration, and shall make records available for inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 9.3.2 and 4406 and Kern County Rule 424] Federally Enforceable Through Title V Permit

15. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-528-14 **EXPIRATION DATE:** 02/29/2016

SECTION: SW23 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR (#101) WITH NORTH AMERICAN GLE MAGNA-FLAME LOW NOX BURNER, FGR, AND O2 CONTROLLER

DRAFT

PERMIT UNIT REQUIREMENTS

1. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. This generator is permitted to operate at the following locations: SE/4 Section 35, and SW/4 Section 36, T29S R21E; all of Section 31, T29S R22E; all of Section 1 T30S R21E;, SW/4 Section 6, T30S, R22E; and all of Section 22, T31S R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
4. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit units: PTO S-1141-250, PTO S-1141-479, PTO S-1141-495 and PTO S-1128-116. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.096 lb-PM10/MMBtu or 0.0027 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Including startup and shutdown periods, maximum emissions from the steam generators shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,965 lb-NOx/year, 0.084 lb-CO/MMBtu, 27.8 lb-CO/day, and 10,129 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

10. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the sulfur content as determined by periodic analytical testing or fuel supplier invoices/certifications. [District Rules 2201, 2520, 4320] Federally Enforceable Through Title V Permit
11. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-529-18 **EXPIRATION DATE:** 02/29/2016

SECTION: SW23 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
69.0 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9769 WITH A NORTH AMERICAN, MODEL MAGNA FLAME GLE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION

DRAFT

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: Section SW23 of Township 31S, Range 22E; Section 31 of Township 29S, Range 22E; Sections SW36 and SE35 of Township 29S, Range 21E; and Section 1 of Township 30S, Range 21E; and Section SW6 of Township 30S and Range 22E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
3. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown periods, and the initial shakedown period, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.7 lb-CO/day, and 11,182 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

DRAFT

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

10. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

11. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

12. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-530-10

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR #1 (N.B.#9814) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER SYSTEM WITH FGR

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
11. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Emissions from the steam generator shall not exceed any of the following limits: 0.073 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

14. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, 4320 and 4351, 5.1] Federally Enforceable Through Title V Permit

15. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

17. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit

18. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR gas incinerated in this unit. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit

19. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit

20. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

22. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

23. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

24. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

26. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

37. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

40. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-531-10 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR #3 (N.B.#3194) WITH FGR

DRAFT

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
11. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit

DRAFT

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

12. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emissions from the steam generator shall not exceed any of the following limits: 0.073 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
15. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
17. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
18. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
19. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
21. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
22. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
23. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
24. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
26. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
27. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
28. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
29. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
30. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
31. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
32. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
33. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
34. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
35. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
36. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
37. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-532-12

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED NATIONAL TANK STEAM GENERATOR #5 (N.B.#6870) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
10. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 4406] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
15. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]
16. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, NOx (as NO2): 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.0056 lb/MMBtu or CO: 0.027 lb/MMBtu or 37 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
18. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
19. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
21. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-533-10

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR #7 (N.B. #701) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
11. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit

DRAFT

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

12. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Emissions from the steam generator shall not exceed any of the following limits: 0.073 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

14. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

15. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

17. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

18. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit

19. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

21. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

22. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

23. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

37. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-534-11

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED HEATER TECHNOLOGY STEAM GENERATOR #9 (N.B. #8) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
11. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter and TEOR gas volume flowmeter. [District Rules 2201, 4305 and 4320] Federally Enforceable Through Title V Permit
12. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

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

13. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit
14. Emissions from the steam generator shall not exceed any of the following limits: 0.073 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
15. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
16. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
17. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
18. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
20. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
21. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-535-12

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED DANIEL STEAM GENERATOR #11 (N.B. #124) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
10. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 4406] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. This generator is permitted to operate at the following locations: Sections 21, 22, 25, 26, and 27 of Township 31S, Range 22E. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
16. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
17. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, NOx (as NO2): 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.0056 lb/MMBtu, CO: 0.027 lb/MMBtu or 37 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,885 lb NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
21. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR gas incinerated in this unit. [District Rule 2201 and 4406] Federally Enforceable Through Title V Permit
23. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

37. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

38. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

40. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

41. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-548-4

EXPIRATION DATE: 02/29/2016

DRAFT

EQUIPMENT DESCRIPTION:
200 HP JOHN DEERE MODEL 6076A DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Engine shall be equipped with turbocharger, intercooler/aftercooler and pollution control valve [PCV]. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-549-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED STRUTHERS STEEL STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW-NOX BURNER, WITH AN O2 ANALYZER/CONTROLLER AND FLUE GAS RECIRCULATION (FGR) SYSTEM WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS (NATIONAL BOARD #1026)

PERMIT UNIT REQUIREMENTS

1. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Emissions from the steam generator shall not exceed any of the following limits: 0.126 lb-SOx/MMBtu, 0.096 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
3. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
4. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
5. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-550-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED SMITH MOON STEEL STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH AN O2 ANALYZER/CONTROLLER AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS (NATIONAL BOARD #879)

DRAFT

PERMIT UNIT REQUIREMENTS

1. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201]
2. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions from the steam generator shall not exceed any of the following limits: 0.126 lb-SOx/MMBtu, 0.073 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201and 4320] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
5. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
6. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

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

12. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-551-12 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #2369) WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA LOW NOX BURNER, AN O2 CONTROLLER, AND A FLUE GAS RECIRCULATION SYSTEM

DRAFT

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit is located west of interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
10. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 0.078 lb/MMBtu, SOx (as SO2) 0.126 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District NSR Rule and District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 45 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
15. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain daily records of volume of natural gas burned, TEOR and TVC gas incinerated, and permit number(s) of systems providing gas for incineration and shall make the preceding five years records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
19. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
20. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit
21. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
22. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

24. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

25. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-552-12

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #192) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, AND FGR

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
10. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM10: 0.078 lb/MMBtu, SOx (as SO2) 0.126 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2 or CO: 0.033 lb/MMBtu or 45 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
16. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain daily records of volume of natural gas burned, TEOR and TVC gas incinerated, and permit number(s) of systems providing gas for incineration and shall make the preceding five years records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
19. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
20. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit
21. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
22. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
23. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
24. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

25. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

38. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-553-12

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #552) WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, O2 ANALYZER/CONTROLLER, AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201]
10. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 0.078 lb/MMBtu, SOx (as SO2) 0.126 lb/MMBtu, or VOC: 0.006 lb/MMBtu . [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 45 ppmv @ 3% O2. [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall maintain daily records of volume of natural gas burned, TEOR and TVC gas incinerated, and permit number(s) of systems providing gas for incineration and shall make the preceding five years records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
18. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
19. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit
20. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
21. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
22. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
23. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

24. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

25. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-554-12

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #690) WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA LOW NOX BURNER, AN O2 CONTROLLER, AND A FLUE GAS RECIRCULATION SYSTEM

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This generator is permitted to operate at the following locations: Section 8 and NW17 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall notify the District Compliance Division in writing of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2): 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.006 lb/MMBtu or CO: 45 ppmvd @ 3% O2. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

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

12. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

19. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520 and 4406] Federally Enforceable Through Title V Permit

20. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

21. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

22. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

24. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

25. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

35. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-555-18 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #7953) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, FGR AND SO2 SCRUBBER SHARED WITH '-556 AND '-557

DRAFT

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Exhaust from unit shall be directed to SOx scrubber authorized herein except when unit is combusting only PUC quality natural gas with a sulfur content not exceeding 1.0 gr S/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber control efficiency shall be maintained at least 95% by weight sulfur compounds or greater, or SO2 concentration at the stack gas outlet that shall not exceed 9 ppmvd corrected to 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Daily average pH of scrubber liquor (calculated from hourly averages) shall be maintained between 6 and 8, and shall be continuously monitored. [District 2201Rule] Federally Enforceable Through Title V Permit
10. SO2 scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when total H2S loading to any one of the steam generators exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H2S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H2S concentration. The H2S loading shall be calculated using the generator actual fuel volumetric flow rate and H2S concentration of the TEOR and fuel gas. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

11. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Annual combined emissions of PM10 from units '-555, '-556, and '-557 shall not exceed 115,687 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall demonstrate compliance with the annual PM10 combined emission limit for units '-555, '-556, and '-557 by calculation using the amount of fuel combusted, and either the results from the latest source test or the permitted emission factor if there is no PM10 source test data. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day and 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. Except during periods of startup and shutdown, emission rates shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 37 ppmv @ 3% O2 or 0.0273 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Compliance with PM10 emissions limits (lb/MMBtu) shall be demonstrated by source testing, at startup and at least once every twelve (12) months thereafter. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Compliance with the scrubber control efficiency requirement shall be demonstrated at least once every twelve (12) months . [District Rule 2201]
21. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of H2S loading (lb H2S/min) and dates and duration of Brinks Mist Eliminator operation and shall make such records readily available for District. [District Rule 2201] Federally Enforceable Through Title V Permit
25. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
26. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
27. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-556-20

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #653) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH O2 ANALYZER/CONTROLLER AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), ELECTRONIC CONTROLS AND SHARED SO2 SCRUBBER LISTED ON S-1141-555

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Exhaust from unit shall be directed to SOx scrubber authorized herein except when unit is combusting only PUC quality natural gas with a sulfur content not exceeding 1.0 gr S/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber control efficiency shall be maintained at least 95% by weight sulfur compounds or greater, or SO2 concentration at the stack gas outlet that shall not exceed 9 ppmvd corrected to 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Daily average pH of scrubber liquor (calculated from hourly averages) shall be maintained between 6 and 8, and shall be continuously monitored. [District 2201Rule] Federally Enforceable Through Title V Permit
10. SO2 scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when total H2S loading to any one of the steam generators exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H2S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H2S concentration. The H2S loading shall be calculated using the generator actual fuel volumetric flow rate and H2S concentration of the TEOR and fuel gas. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

11. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
15. Annual combined emissions of PM10 from units '-555, '-556, and '-557 shall not exceed 115,687 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day and 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall demonstrate compliance with the annual PM10 combined emission limit for units '-555, '-556, and '-557 by calculation using the amount of fuel combusted, and either the results from the latest source test or the permitted emission factor if there is no PM10 source test data. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Except during periods of startup and shutdown, emission rates shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2 or 0.0375 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
19. Emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, or SOx (as SO2): 0.063 lb/MMBtu or 9 ppmv @ 3% O2, or VOC: 0.006 lb/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
20. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Compliance with PM10 emissions limits (lb/MMBtu) shall be demonstrated by source testing, at startup and at least once every twelve (12) months thereafter. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Compliance with the scrubber control efficiency requirement shall be demonstrated at least once every twelve (12) months . [District Rule 2201]
23. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
25. Permittee shall maintain records of H2S loading (lb H2S/min) and dates and duration of Brinks Mist Eliminator operation and shall make such records readily available for District. [District Rule 2201] Federally Enforceable Through Title V Permit
26. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

28. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

29. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-557-18 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED C.E. NATCO STEAM GENERATOR (NATIONAL BOARD #9333, SMPS #8) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW-NOX BURNER, WITH O2 ANALYZER/CONTROLLER AND FLUE GAS RECIRCULATION (FGR) SYSTEM WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), ELECTRONIC CONTROLS AND SHARED SO2 SCRUBBER LISTED ON S-1141-555

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Exhaust from unit shall be directed to SOx scrubber authorized herein except when unit is combusting only PUC quality natural gas with a sulfur content not exceeding 1.0 gr S/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber control efficiency shall be maintained at least 95% by weight sulfur compounds or greater, or SO2 concentration at the stack gas outlet that shall not exceed 9 ppmvd corrected to 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Daily average pH of scrubber liquor (calculated from hourly averages) shall be maintained between 6 and 8, and shall be continuously monitored. [District 2201Rule] Federally Enforceable Through Title V Permit
10. SO2 scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when total H2S loading to any one of the steam generators exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H2S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H2S concentration. The H2S loading shall be calculated using the generator actual fuel volumetric flow rate and H2S concentration of the TEOR and fuel gas. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

11. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
15. Annual combined emissions of PM10 from units '-555, '-556, and '-557 shall not exceed 115,687 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall demonstrate compliance with the annual PM10 combined emission limit for units '-555, '-556, and '-557 by calculation using the amount of fuel combusted, and either the results from the latest source test or the permitted emission factor if there is no PM10 source test data. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day and 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, or SOx (as SO2): 0.063 lb/MMBtu or 9 ppmv @ 3%O2, or VOC: 0.006 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
19. Except during periods of startup and shutdown, emission rates shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2 or 0.0375 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
20. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Compliance with PM10 emissions limits (lb/MMBtu) shall be demonstrated by source testing, at startup and at least once every twelve (12) months thereafter. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Compliance with the scrubber control efficiency requirement shall be demonstrated at least once every twelve (12) months . [District Rule 2201]
23. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
25. Permittee shall maintain records of H2S loading (lb H2S/min) and dates and duration of Brinks Mist Eliminator operation and shall make such records readily available for District. [District Rule 2201] Federally Enforceable Through Title V Permit
26. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

29. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-558-13 **EXPIRATION DATE:** 02/29/2016

DRAFT

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #2398) WITH A NORTH AMERICAN MAGNA-FLAME MODEL GLE ULTRA LOW NOX BURNER, FGR AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. {533} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. {468} The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. {535} The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
10. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 0.096 lb/MMBtu, SOx (as SO2) 0.126 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 37 ppmv @ 3% O2. [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
15. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
19. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-560-10 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
50,762 GALLON FREE WATER KNOCKOUT VESSEL AND VAPOR RECOVERY SYSTEM SHARED WITH -127 (K-709)

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-571-5 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF WATER STORAGE TANK (T-600) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127

DRAFT

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor recovery system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Emissions from this tank and associated tank vapor recovery system components, which are not exempt from fugitive component counts, shall not exceed 0.0 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-572-5 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF WATER STORAGE TANK (T-900) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127

DRAFT

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor recovery system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Emissions from this tank and associated tank vapor recovery system components, which are not exempt from fugitive component counts, shall not exceed 0.0 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-575-8

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
1,209 BBL FREE WATER KNOCKOUT VESSEL (K431) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. Noncondensable vapors from pressure relief valves shall be routed only to knockout vessel listed on S-1141-560 and emergency flare S-1141-513. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-576-8 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
1,209 BBL FREE WATER KNOCKOUT VESSEL (K707) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. Noncondensable vapors from pressure relief valves shall be routed only to knockout vessel listed on S-1141-560 and emergency flare S-1141-513. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-577-7 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
699 BBL FREE WATER KNOCKOUT VESSEL (K708) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. Noncondensable vapors from pressure relief valves shall be routed only to knockout vessel listed on S-1141-560 and emergency flare S-1141-513. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-578-6 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
27,193 BBL CRUDE OIL PRODUCTION TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-579-6 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
27,193 BBL CRUDE OIL PRODUCTION TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-580-5 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
27,193 BBL CRUDE OIL TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-581-4

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-01 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall only vent to vapor recovery system identified on Permit S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight.. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-582-4 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-02 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

DRAFT

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall only vent to vapor recovery system identified on Permit S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-583-4

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-03 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall only vent to vapor recovery system identified on Permit S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-585-8

EXPIRATION DATE: 02/29/2016

DRAFT

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-590-3 **EXPIRATION DATE:** 02/29/2016

DRAFT

SECTION: SW9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
8,750 BBL VAPOR CONTROLED FIXED ROOF PRODUCED WATER STORAGE TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-591-4 **EXPIRATION DATE:** 02/29/2016

SECTION: SW9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
8,750 BBL VAPOR CONTROLED FIXED ROOF PRODUCED WATER STORAGE TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and, 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-594-6 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STEAM GENERATOR WITH A NORTH AMERICAN GLE 4231 BURNER, AN O2 CONTROLLER, AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. Emissions shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, VOC: 0.0054 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv at 3% O2, or CO: 0.037 lb/MMBtu or 50 ppmvd @3% O2. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
3. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
4. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
7. Formerly S-1549-129.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-598-1 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. {2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-599-1 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. {2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-600-1

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. {2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-601-1 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. {2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-602-1 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. {2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-603-1

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. {2490} All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-604-1 **EXPIRATION DATE:** 02/29/2016

SECTION: SE 35 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
500 BBL FIXED-ROOF (BAKER TYPE) CRUDE OIL STORAGE TANK (WELL 35G-23)

DRAFT

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
2. Tank liquid throughput shall not exceed 30 barrels of oil per monthly averaged day. [District Rule 2201]
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623]
4. The TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623]
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rules 2201 and 4623]
6. Records of TVP and API gravity testing shall be maintained on site and shall be made available for District inspection upon request. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623]
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 1070, 2201, and 4623]
8. Permittee shall maintain monthly records of average daily crude oil throughput. [District Rules 1070 and 2201]
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2201, and 4623]

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-609-2

EXPIRATION DATE: 02/29/2016

DRAFT

SECTION: SW 09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
324 BHP CUMMINS MODEL QSB7-G5 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. {4749} This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]
6. {4258} Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115]
7. Emissions from this IC engine shall not exceed any of the following limits: 2.8 g-NOx/bhp-hr, 2.6 g-CO/bhp-hr, or 0.2 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]
8. Emissions from this IC engine shall not exceed 0.147 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]
9. {4261} This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
10. {3478} During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
11. {3807} An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]
12. {3808} This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. {3496} The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]
14. {4777} This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]
15. {4263} The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]
16. {3475} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]

DRAFT

ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley
Air Pollution Control District

FACILITY: S-1141-0-5 **EXPIRATION DATE:** 02/29/2016

FACILITY-WIDE REQUIREMENTS

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 Rules 2520, 9.4.2; 4624; 4702, 6.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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), by using EPA Method 9. 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

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit

27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 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 Rules 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 Rules 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 Rules 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 Rules 8061 and 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 Rules 8071 and 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

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

42. All permits for facilities S-1128, S-1129, S-1141, S-1549, and S-2592 are included in the Chevron USA Inc. Heavy Oil Western stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit

43. Facility shall comply with all applicable requirements regarding preparation and implementation of a risk management plan (RMP) by August 31, 1999, and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR 68] Federally Enforceable Through Title V Permit

44. The following units are subject to the facility's SLC plan: S-1141-392, S-1141-394, S-1141-396, S-1141-402, S-1141-516, S-1141-517, S-1141-529. [District Rule 2201] Federally Enforceable Through Title V Permit

45. The reporting periods of the Report of Required monitoring and Compliance Certification Report begin November 30 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due on the 30 days after the end of the reporting period. If the due date falls on a day that the SJVAPCD is closed, they will be due on the next business day. [District Rule 2520] Federally Enforceable Through Title V Permit

46. The following conditions which include category titles are only applicable to those permit units with conditions which reference the specific category title. [District Rule 2080] Federally Enforceable Through Title V Permit

47. Steam Generator General Condition: Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rule 4301, 5.2.2] Federally Enforceable Through Title V Permit

48. Steam Generator General Condition: Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

49. Steam Generator General Condition: Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit

50. Steam Generator General Condition: Start-up is defined as 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. Shutdown is 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. [District Rules 4306, 3.25 and 3.22; and 4320, 3.25 and 3.29] Federally Enforceable Through Title V Permit

51. Steam Generator General Condition: Duration of start-up or shutdown shall not exceed two hours each per occurrence. [District Rules 4305, 5.5; 4306, 5.3; and 4320, 5.6] Federally Enforceable Through Title V Permit

52. Steam Generator General Condition: Permittee shall maintain records of duration of each start-up and shutdown. [District Rules 4305, 6.1; 4306, 6.1.4; and 4320, 6.1.4] Federally Enforceable Through Title V Permit

53. Steam Generator General Condition: Annual tests results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx or CO limits of this permit, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx or CO emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.3.2; 4305, 6.3.2; 4306, 6.3.2; and 4320, 6.3.2] Federally Enforceable Through Title V Permit

54. Steam Generator General Condition: The following conditions must be met for representative unit(s) to be used to test for NOx or CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2; 4305, 6.3.2; and 4320 6.3.2] Federally Enforceable Through Title V Permit

55. Steam Generator General Condition: All units in a group for which representative units are source for NOx or CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.3.2; 4305, 6.3.2; 4306, 6.3.2 and 4320, 6.3.2] Federally Enforceable Through Title V Permit

56. Steam Generator General Condition: All units in a group for which representative units are source tested for NOx or CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2; 4305, 6.3.2; 4306, 6.3.2; and 4320, 6.3.2] Federally Enforceable Through Title V Permit

57. Steam Generator General Condition: The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 2520, 9.3.2; 4305, 6.3.2; 4306, 6.3.2 and 4320, 6.3.2] Federally Enforceable Through Title V Permit

58. Steam Generator General Condition: Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

59. Steam Generator General Condition: Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

60. Steam Generator Fuel Monitoring Condition: When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

61. Steam Generator Fuel Monitoring Condition: When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using test methods specified in "Steam Generator - Source Testing Conditions". Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

62. Steam Generator Fuel Monitoring Condition: If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using "Steam Generator - Source Testing Conditions". [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

63. Steam Generator Fuel Monitoring Condition: If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by methods specified in "Steam Generator - Source Testing Conditions". [District Rules 2520, 9.3.2; 4305, 6.2.1 and 4320, 6.2.1] Federally Enforceable Through Title V Permit

64. Steam Generator Fuel Monitoring Condition: Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

65. Steam Generator Fuel Monitoring Condition: Compliance with SOx emission limits shall be demonstrated by fuel gas sulfur contents analysis at the time of NOx testing, except for units fired on natural gas purchased from a PUC regulated utility or operated with flue gas scrubber. [District Rule 1081] Federally Enforceable Through Title V Permit

66. Steam Generator Source Testing Condition: All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2; 4306, 5.5.2; and 4320, 5.8.2] Federally Enforceable Through Title V Permit

67. Steam Generator Source Testing Condition: The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1; 4306, 5.5.1; and 4320, 5.8.1] Federally Enforceable Through Title V Permit

68. Steam Generator Source Testing Condition: For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5; 4306, 5.5.5; and 4320, 5.8.5] Federally Enforceable Through Title V Permit

69. Steam Generator Source Testing Condition: The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

70. Steam Generator Source Testing Condition: Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1; 4306, 6.3.1; and 4320, 6.3.1] Federally Enforceable Through Title V Permit

71. Steam Generator Source Testing Condition: Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

72. Steam Generator Source Testing Condition: Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

73. Steam Generator Source Testing Condition: Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods or as approved by APCO. [District Rules 1081, and 2201] Federally Enforceable Through Title V Permit

74. Steam Generator Source Testing Condition: The following test methods shall be used (or other methods as approved by the District): NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; SOx (lb/MMBtu) - EPA Method 6, 6C, 8 or ARB Method 100; Stack Gas Oxygen - EPA Method 3 or 3A or ARB Method 100; Stack Gas Velocity (ft/min) - EPA Method 2; Stack Gas Volume Flow (cfm) - EPA Method 19; Stack Gas Moisture Content (%) - EPA Method 4; Fuel Gas Sulfur Content - EPA Method 11 or EPA Method 15 or ASTM D6288, D1072, D3031, D4084, D3246, or grab sample analysis by double GC; Fuel Gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588; PM10 (lb/scf) - EPA Methods 5 (front half), 201A, and/or 202, CARB Method 5, or any combination of these PM10 methods. [District Rules 4305, 6.2; 4306, 6.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit

75. Steam Generator Periodic Monitoring Condition: The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.2] Federally Enforceable Through Title V Permit

76. Steam Generator Periodic Monitoring Condition: If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.2] Federally Enforceable Through Title V Permit

77. Steam Generator Periodic Monitoring Condition: All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4.2 and 5.5.4; 4306, 5.4.2 and 5.5.4; and 4320, 5.7.2 and 5.8.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

78. Steam Generator Periodic Monitoring Condition: The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 5.4.2; 4306, 5.4.2; and 4320, 5.7.2] Federally Enforceable Through Title V Permit

79. Heavy Oil Tank Inspection and Maintenance: Flanges shall be monitored with portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit

80. Heavy Oil Tank Inspection and Maintenance: All other components such as diaphragms, dump arms, instruments, meters shall be monitored at all points of possible emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

81. Heavy Oil Tank Inspection and Maintenance: In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit

82. Heavy Oil Tank Inspection and Maintenance: Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (Feb 1999). [District Rule 2201] Federally Enforceable Through Title V Permit

83. Heavy Oil Tank Inspection and Maintenance: Valves shall be monitored with portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District Rule 2201] Federally Enforceable Through Title V Permit

84. Heavy Oil Tank Inspection and Maintenance: All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2050, 9.3.2] Federally Enforceable Through Title V Permit

85. Heavy Oil Tank Inspection and Maintenance: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

86. Heavy Oil Tank Inspection and Maintenance: A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

87. Heavy Oil Tank Inspection and Maintenance: An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

88. Heavy Oil Tank Inspection and Maintenance: Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 18 or 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 18 or 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

89. Heavy Oil Tank Insection and Maintenance: Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

90. Heavy Oil Tank Inspection and Maintenance: If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

91. Heavy Oil Tank Inspection and Maintenance: A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit

92. Heavy Oil Tank Cleaning Condition: Operator shall notify the District in writing at least 72 hours prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following information: (1) The PTO number and physical location of the tank being degassed, (2) The date and time that tank degassing and cleaning activities will begin, (3) The degassing method, as allowed in this permit, to be used, and (4) The method to be used to clean the tank, including any solvents to be used. [District Rule 2080] Federally Enforceable Through Title V Permit

93. Heavy Oil Tank Cleaning Condition: To facilitate connection to an external APCO-approved vapor recovery system a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit

94. Heavy Oil Tank Cleaning Condition: During degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system that is leak-free and achieves at least 95% control of inlet VOC emissions. [District Rule 2080] Federally Enforceable Through Title V Permit

95. Heavy Oil Tank Cleaning Condition: Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

96. Heavy Oil Tank Cleaning Condition: When storing organic liquid of TVP less than 0.5 psia, prior to returning the tank to normal operation, the tank vapor control system shall either be reactivated and the pressure/relief valves closed, or the tank shall be filled to the maximum possible level with water, inert gas, or a liquid with a TVP less than 0.5 psia and the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall then be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

97. Heavy Oil Tank Cleaning Condition: Prior to opening the tank to allow tank cleaning, one of the following degassing procedures must be followed: 1) Exhaust VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less; or 2) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or 3) Displace VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight; 4) For free-water knockout tanks, the operator may degas the tank vapor space by restricting the outflow of water and floating off the oilpad, such that at least 90 percent of the tank volume is displaced; or 5) operate the vapor recovery system for at least 24 hours after all the liquid in the tank has been drained. [District Rule 2080] Federally Enforceable Through Title V Permit

98. Heavy Oil Tank Cleaning Condition: Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit

99. Heavy Oil Tank Cleaning Condition: Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

100. Heavy Oil Tank Cleaning Condition: Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

101. Heavy Oil Tank Cleaning Condition: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

102. Heavy Oil Tank Cleaning Condition: While performing tank cleaning activities, operators may use the following cleaning agents: clean (produced) water, diesel, solvents with an initial boiling point of greater than 302øF, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit

103. Heavy Oil Tank Cleaning Condition: Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

104. Heavy Oil Tank Testing Condition: Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit

105. Heavy Oil Tank Testing Condition: Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or representative tank as provided in District Rule 4623, at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.1.1] Federally Enforceable Through Title V Permit

106. Heavy Oil Tank Testing Condition: Operator shall conduct quarterly sampling from the tank vapor recovery system to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If fluids sampled are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. Such sampling is deemed representative of all components downstream of the equipment served by the vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

107. Heavy Oil Tank Testing Condition: VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit

108. Heavy Oil Tank Testing Condition: The API gravity of crude oil or petroleum distillate shall be determined by using ASTM method D 287-92 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D-4057-95 "Standard Practices for manual Sampling of Petroleum and Petroleum Products". [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit

109. Heavy Oil Tank Testing Condition: For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory " Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

110. Heavy Oil Tank Testing Condition: Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623, 6.2.1.1] Federally Enforceable Through Title V Permit

111. Heavy Oil Tank Testing Condition: The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct API gravity testing. [District Rule 4623, 6.2.1.2] Federally Enforceable Through Title V Permit

112. Heavy Oil Tank Testing Condition: The permittee shall keep accurate records of vapor VOC concentration, API gravity, true vapor pressure, storage temperature and types of liquids stored. [District Rule 2201 and District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

113. Casing Collection System Conditions: The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4401, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit

114. Casing Collection System Condition: An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: 1) The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or 2) The steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system. [District Rule 4401, 5.1] Federally Enforceable Through Title V Permit

115. Casing Collection System Conditions: Permittee shall install and maintain an APCO-approved VOC collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401, 5.1] Federally Enforceable Through Title V Permit

116. Casing Collection System Conditions: During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit

117. Casing Collection System Conditions: The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit

118. Casing Collection System Conditions: Permittee shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

119. Casing Collection System Conditions: By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit

120. Casing Collection System Conditions: In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401, 6.6] Federally Enforceable Through Title V Permit

121. Casing Collection System Conditions: A gas leak is defined as the detection of a concentration of total organic compounds, above background (measured in accordance with EPA Method 21) that exceeds the following values: 1) A major gas leak is a detection of greater than 10,000 ppmv as methane; and 2) A minor gas leak is a detection of 400 to 10,000 ppmv as methane for pressure relief devices (PRDs) and 2,000 to 10,000 for components other than PRDs. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit

122. Casing Collection System Conditions: A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit

123. Casing Collection System Conditions: During District compliance inspection, the following conditions shall be used to determination of a violation: 1) Existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere; 2) Existence of a component with a major liquid leak; 3) Existence of a component with a gas leak greater than 50,000 ppmv; or 4) Existence of a component leak consisting of a minor liquid or gas leak, or a gas leak greater than 10,000 ppmv up to 50,000 ppmv, in excess of the allowable number of leaks specified in Table 2 of Rule 4401. [District Rule 4401, 5.2.2] Federally Enforceable Through Title V Permit

124. Casing Collection System Conditions: Permittee shall keep all hatches closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit

125. Casing Collection System Conditions: Except for pipes and unsafe-to-monitor components, permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.1 & 5.4.2] Federally Enforceable Through Title V Permit

126. Casing Collection System Conditions: Permittee shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401, 5.4.5] Federally Enforceable Through Title V Permit

127. Casing Collection System Conditions: Permittee shall inspect audio-visually (by hearing and by sight) for leaks all accessible operating pumps, compressors, and pressure relief devices (PRDs) in service at least once each calendar week. [District Rule 4401, 5.4.3.1] Federally Enforceable Through Title V Permit

128. Casing Collection System Conditions: Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.3.2] Federally Enforceable Through Title V Permit

129. Casing Collection System Conditions: Permittee shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. Permittee shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. [District Rule 4401, 5.4.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

130. Casing Collection System Condition: Permittee shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. [District Rule 4401, 5.4.4.2] Federally Enforceable Through Title V Permit

131. Casing Collection System Conditions: Except for PRDs, permittee shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401, 5.4.4.3] Federally Enforceable Through Title V Permit

132. Casing Collection System Conditions: Permittee shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. The following information shall be included on the tag: 1) the date and time of leak detection; 2) the date and time of leak measurement; 3) leak concentration in ppmv for a gaseous leak; 4) description of whether it is a major liquid leak or a minor liquid leak; and 5) whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit

133. Casing Collection System Conditions: Permittee shall keep the tag affixed to the component until all of the following conditions have been met: 1) the leaking component has been repaired or replaced, and 2) the component has been re-inspected using the test methods described in this permit; and 3) the component is found to be in compliance with the requirements of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit

134. Casing Collection System Conditions: Permittee shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit

135. Casing Collection System Conditions: Except for leaking critical components or leaking essential components, if the operator has minimized a leak but the leak still exceeds the applicable leak limits, the operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) repair or replace the leaking component; 2) vent the leaking component to a VOC collection and control system; or 3) remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit

136. Casing Collection System Conditions: The leak rate, measured after leak minimization has been performed, shall be used to determine the applicable repair period specified in Table 3 of Rule 4401 and the time of initial leak detection shall be the start of the repair period specified in Table 3 of Rule 4401. [District Rule 4401, 5.5.5] Federally Enforceable Through Title V Permit

137. Casing Collection System Conditions: If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

138. Casing Collection System Conditions: Permittee shall maintain an inspection log in which, at a minimum, all of the following information shall be recorded for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type; 2) The location, type, and name or description of each leaking component and description of any unit where the leaking component is found; 3) The date of leak detection and the method of leak detection; 4) For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of leaking components; 6) The identity and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number; and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4] Federally Enforceable Through Title V Permit

139. Casing Collection System Conditions: Permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit

140. Casing Collection System Conditions: Annual control efficiency compliance tests shall be performed by source testers certified by the California Air Resource Board (CARB) on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine, or in a smokeless flare. [District Rule 4401, 6.2.1 & 6.2.2] Federally Enforceable Through Title V Permit

141. Casing Collection System Conditions: The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit

142. Casing Collection System Conditions: VOC content shall be determined using ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by ARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit

143. Casing Collection System Conditions: VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.4] Federally Enforceable Through Title V Permit

144. Casing Collection System Conditions: Permittee shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. Permittee shall maintain at the facility the copies of the training records of the training program. [District Rule 4401, 6.1.6 & 6.5] Federally Enforceable Through Title V Permit

145. Casing Collection System Conditions: Unless the source testing requirement is waived by the District, permittee shall maintain source test records which show that the control efficiency requirements of the VOC collection and control system have been satisfied. [District Rule 4401, 6.1.3] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

146. Casing Collection System Conditions: Permittee shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit

147. Casing Collection System Conditions: Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit

148. Emergency Standby IC Engine Condition: Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

149. Emergency Standby IC Engine Condition: This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.9.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit

150. Emergency Standby IC Engine Condition: This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.9.2] Federally Enforceable Through Title V Permit

151. Emergency Standby IC Engine Condition: Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit

152. Emergency Standby IC Engine Condition: During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.9.3] Federally Enforceable Through Title V Permit

153. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4702, 6.2.3 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

154. Emergency Standby IC Engine Condition: The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-19-28 **EXPIRATION DATE:** 02/29/2016

SECTION: 21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED STRUTHERS STEAM GENERATOR 21S SG#7 (SN 80-37391-2, NB 983, DIS 20629-81) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source, the unit is located west of Interstate Highway 5 in Kern County. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2) 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.0028 lb/MMBtu or CO: 37 ppmvd @ 3% O2. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-26-37 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR STRUTHERS THERMOFLOOD NATURAL GAS/TEOR GAS/TVC VAPORS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE 4231 ULTRA-LOW NOX BURNER, FGR, A THERMOX O2 CONTROLLER, VAPOR PIPING FROM TEOR SYSTEM, VAPOR PIPING FROM TVC SYSTEMS, AND A SULFA SCRUB HYDROGEN SULFIDE (H2S) SYSTEM (COMMON TO -31, -549, -550, -551, -552, -553, -555, -556, -557 AND -558) (#48, DIS #20660-81, NATIONAL BOARD #1041)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary permit changes and/or retrofits required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rule 4320] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. The VOC content of the fluid stream handled by the Sulfa-Scrub system shall be less than ten (10) percent by weight, as determined by ASTM Methods D-1945, E-260-73, E-168-67, or E-169-63. Test samples shall be taken from sampling ports immediately upstream and downstream of the Sulfa-Scrub system. VOC content shall be determined quarterly, and if compliance with the VOC content limit is demonstrated for eight consecutive quarters, the testing frequency may be changed to annual. Testing frequency shall revert to quarterly if an annual test is failed. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually in accordance with EPA Method 21, with an instrument calibrated with methane. Components located in unsafe areas shall be inspected and repaired at the next process turnaround (the shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Except for components that are part of a critical process unit as defined in this permit, leaking components (having a gas leak >10,000 ppmv measured as methane) shall be repaired to a leak-free condition within 15 days of discovery. [District Rule 2201] Federally Enforceable Through Title V Permit

12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit

14. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit

15. For each steam generator site downstream of H2S scavenger vessel, permittee shall monitor sulfur content of the gas prior to incineration in affected steam generators on a weekly basis utilizing gas detection tubes calibrated for existing sulfur species or other District approved fuel sulfur detection method(s) or device(s). [District Rule 1070] Federally Enforceable Through Title V Permit

16. Fuel H2S, and total sulfur shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, double GC for H2S and mercaptans or ASTM D6228. [District Rule 4320] Federally Enforceable Through Title V Permit

17. Each fuel source shall be tested semi-annually for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which semi-annual testing may resume. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

18. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit

19. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

20. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.4.2 , 4305, 6.2.1 and 4320] Federally Enforceable Through Title V Permit

21. Emissions from the steam generator shall not exceed any of the following limits: 1.94 lb-SOx/MMBtu, 0.096 lb-PM10/MMBtu, or 0.005 lb-VOC/MMBtu. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit

22. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, 4320, and 4406] Federally Enforceable Through Title V Permit

23. During start-up and shutdown periods, emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

25. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6, 4306, 5.3 and 4320] Federally Enforceable Through Title V Permit

26. Start-up is defined as 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. Shutdown is 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. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit

27. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320] Federally Enforceable Through Title V Permit

29. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1 and 4320] Federally Enforceable Through Title V Permit

30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

31. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4 , 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

32. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

34. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; and Stack gas moisture content - EPA Method 4. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

35. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1 and 4320] Federally Enforceable Through Title V Permit

36. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

37. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320] Federally Enforceable Through Title V Permit

38. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320] Federally Enforceable Through Title V Permit

39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

40. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit

41. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit

42. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

43. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source, this unit is located west of Interstate Highway 5 in Kern County. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

44. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

46. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-31-38 **EXPIRATION DATE:** 02/29/2016

SECTION: 22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR #59 (DIS# 20639-81, NATIONAL BOARD #1352), WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER AND FGR PERMITTED TO OPERATE WITH EITHER AN AIR-FUEL MIXING ROD OR A MULTI-PORT (AKA GATLING GUN) PRIMARY MIXER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4320] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary permit changes and/or retrofits required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rule 4320] Federally Enforceable Through Title V Permit
5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Fuel H2S, and total sulfur shall be determined semi-annually using the following test methods H2S: ASTM D6228; and total sulfur: ASTM D1072; ASTM D3246, double GC for H2S and mercaptans or ASTM D6228. [District Rule 4320] Federally Enforceable Through Title V Permit
10. Each fuel source shall be tested semi-annually for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which semi-annual testing may resume. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit

12. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.4.2 , 4305, 6.2.1 and 4320] Federally Enforceable Through Title V Permit

14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source because this permit unit has not been modified per 40 CFR 60. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source, this permit unit is located west of Interstate Highway 5 in Kern County. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

18. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District 1081 and 2201] Federally Enforceable Through Title V Permit

19. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Duration of start-up and shutdown shall not exceed 2 hours each per occurrence. During a start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rule 4306] Federally Enforceable Through Title V Permit

21. Permittee shall maintain daily records of the duration of each start-up and shutdown, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit

22. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Start-up is defined as 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. Shutdown is 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. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit

24. Emission rates shall not exceed: PM10: 144.0 lb/day or 52,560 lb/year, SOx: 2910 lb/day or 1,062,150 lb/year, NOx (as NO2): 54.0 lb/day or 9855 lb/year, VOC: 9.0 lb/day or 3285 lb/year, CO: 40.5 lb/day or 14,783 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Emission rates shall not exceed any of the following: PM10: 0.096 lb/MMBtu, SOx (as SO2): 1.94 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District Rule 2201, and 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 37 ppmv @ 3% O2. [District Rule 2201, 4305, 4306, 4406 and 4320] Federally Enforceable Through Title V Permit

27. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320] Federally Enforceable Through Title V Permit

28. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

29. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

30. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

31. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

32. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

34. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

35. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; and Stack gas moisture content - EPA Method 4. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

36. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

38. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

39. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

40. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

41. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

42. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

43. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-38-33 **EXPIRATION DATE:** 02/29/2016

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MM BTU/HR C. E. NATCO NATURAL GAS FIRED SG #79 (SN T-6155901-11, NB 9815, DIS 20664-77) WITH NORTH AMERICAN BURNER, FGR, AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. This generator is permitted to operate at the following locations: Sections 8 and NE21 of Township 32S, Range 23E and Sections SW23 and NW27 of Township 31S, Range 22E. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.014 lb-PM10/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
12. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520 and 4406] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

20. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

21. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

40. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-43-26 **EXPIRATION DATE:** 02/29/2016

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED STRUTHERS STEAM GENERATOR (SG #87, N.B. 998) WITH NORTH AMERICAN GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, AND FLUE GAS RECIRCULATION (FGR)

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 9.3.2 and 4406] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. This generator is permitted to operate at the following locations: Sections 8 and 21 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
12. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rule 2201, 4305 and 4320] Federally Enforceable Through Title V Permit
13. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR gas incinerated in this unit. [District Rule 2201 and 4406] Federally Enforceable Through Title V Permit
14. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
15. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM-10: 0.073 lb/MMBtu, NOx as NO2: 15 ppmv @ 3% 02 or 0.018 lb/MMBtu, VOC: 0.0056 lb/MMBtu, or CO: 37 ppmv @ 3% O2 or 0.027 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
19. Emissions shall not exceed any of the following: 54 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
20. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadway constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
21. During start-up and shutdown periods, emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
22. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
23. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
24. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
25. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
26. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

35. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

36. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

37. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

38. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

40. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

41. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

42. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-44-33 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED STRUTHERS STEAM GENERATOR #106 (DIS 41757-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW NOX BURNER, O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: SE/4 Section 35, and SW/4 Section 36, T29S R21E; all of Section 31, T29S R22E; all of Section 1 T30S R21E; all of Sections 19 and 20, and the SW/4 Section 6, T30S, R22E; and NE/4 Section 22, T31S R22E (MDBM). [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit units: PTO S-1141-250, PTO S-1141-479, PTO S-1141-495 and PTO S-1128-116. [District Rules 2201, 4406, and 4320; and CH&SC 41700] Federally Enforceable Through Title V Permit
3. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320; and CH&SC 41700] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
5. Except during startup and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu/hr, and 25 ppmvd CO @ 3%O2 or 0.0185 lb-CO/MMBtu/hr. [District Rules 2201; 4301, 5.2; 4305, 5.1; 4306, 5.1; and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10 0.005 lb/MMBtu; or VOC 0.003 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During startup and shutdown periods, emissions from the steam generators shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including startup and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/year, 27.8 lb-CO/day, and 10,129 lb-CO/year [District Rule 2201] Federally Enforceable Through Title V Permit
9. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
15. Steam generator firebox convection section and all flue gas ductwork shall have no detectible leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned and permit number(s) of systems providing gas for incineration. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
17. Permittee shall maintain no less than 0.45 miles of asphalt-paved roadway. The 0.45 miles of asphalt-paved roadways are separate from roadways associated with other steam injection and oil production well projects. [District Rules 2201] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
19. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-45-33 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #107 (DIS 41762-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW NOX BURNER, O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: SE/4 Section 35, and SW/4 Section 36, T29S R21E; all of Section 31, T29S R22E; all of Section 1 T30S R21E; all of Sections 19 and 20, and the SW/4 Section 6, T30S, R22E; and NE/4 Section 22, T31S R22E (MDBM). [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit units: PTO S-1141-250, PTO S-1141-479, PTO S-1141-495 and PTO S-1128-116. [District Rules 2201, and 4320; and CH&SC 41700] Federally Enforceable Through Title V Permit
3. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 220, 4320, and 4406; and CH&SC 41700] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division in writing of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
5. Except during startup and shutdown periods, emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu-hr, or 25 ppmvd CO @ 3%O2 or 0.0185 lb-CO/MMBtu-hr. [District Rules 2201; 4305; 4306, and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10 0.005 lb/MMBtu or VOC 0.003 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During startup and shutdown periods, emissions from the steam generators shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including startup and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/year, 27.8 lb-CO/day, and 10,129 lb-CO/year [District Rule 2201] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Steam generator shall be equipped with an operational gas volume flowmeter that measures each fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District Rules 2201, 4320, and 4406] Federally Enforceable Through Title V Permit
13. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned and permit number(s) of systems providing gas for incineration. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Steam generator firebox convection section and all flue gas ductwork shall have no detectible leaks. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Records required by this permit shall be retained at the facility for a period of no less than 5 years and shall be made readily available for District inspection upon request. [District Rules 2201, 2520, 9.4.2, and 4306, 6.1] Federally Enforceable Through Title V Permit
16. This unit is not authorized to burn liquid or solid fuel. [District Rule 2010] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
19. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
22. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
23. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-46-35 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #103 (DIS 41754-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520 and 4406] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with an operational gas flowmeter that measures the total combined volume of fuel gas sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
3. This generator is permitted to operate at the following locations: Section 31, T29S, R22E, SW/4 Section 6, T30S, R22E, SW/4 Section 36, T29S, R21E, Section 1, T30S, R21E, SE/4 Section 35, T29S, R21E, Sections 17, 21, 22, 26, 27 of T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0181 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.2 lb-CO/day, and 10,940 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Permittee shall maintain no less than 0.45 miles of paved roadway in the Midway-Sunset Oil Field. The 0.45 miles of roadways are separate from roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

18. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, in the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-47-28 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #95 (SN 80-37387-4, NB 967, DIS 12810-85) WITH FLUE GAS RECIRCULATION (FGR), NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
7. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
8. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8 or ARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD or double GC performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

10. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD or Double GC performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2, 4305, 6.2.1 and 4320] Federally Enforceable Through Title V Permit

12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

13. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. This generator is permitted to operate at the following locations: Sections 17, 21, 22, 26, and 27 of Township 31S, Range 22E and Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit

19. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter, and flue gas oxygen monitor. [District Rule 2201, 4305 and 4320] Federally Enforceable Through Title V Permit

21. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as S): 0.001 lb/MMBTU, NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBTU, VOC: 0.003 lb/MMBtu or CO: 14.0 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

22. Source testing to measure NOx and CO emissions shall be conducted within 60 days of recommencing operation of this unit. [District Rule 4305 and 4320] Federally Enforceable Through Title V Permit

23. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months. [District Rule 2520, 9.3.2, 4305 and 4320] Federally Enforceable Through Title V Permit

24. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.3.2, 4305 and 4320] Federally Enforceable Through Title V Permit

25. If permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.3.2, 4305 and 4320] Federally Enforceable Through Title V Permit

26. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

29. Records required by this permit shall be retained at the facility for a period of no less than 5 years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

30. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, PM10 - EPA Method 5, and gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305 and 4320] Federally Enforceable Through Title V Permit

31. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

32. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

34. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

35. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

36. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

37. The unit shall only be fired on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

38. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

40. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

41. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

42. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

44. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

45. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

46. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

47. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

48. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

49. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

50. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

51. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

52. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

53. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

54. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

55. This Authority to Construct shall be implemented according to the date proposed in the District Approved Rule 4320 Emission Control Plan. [District Rule 4320] Federally Enforceable Through Title V Permit

56. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. Permittee shall maintain records of duration of each start-up and shutdown that exceeds two hours. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

57. Start-up is defined as 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. Shutdown is 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. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

58. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3Aor ARB Method 100, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H2S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

59. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

60. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

61. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-48-27 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #96 (SN 80-37387-7, NB 970, DIS 12811-85) WITH FLUE GAS RECIRCULATION (FGR), NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. This generator is permitted to operate at the following locations: Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 9.3.2, and 4406] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as total sulfur): 0.001 lb/MMBtu, NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.003 lb/MMBtu and CO: 1.4 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

13. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. The unit shall only be fired on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

16. As required by PSD permit number SJ 78-17 when firing on oil, all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

17. As required by PSD permit number SJ 78-17 when firing on oil, the EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

18. As required by PSD permit number SJ 78-17 when firing on oil, the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. As required by PSD permit number SJ 78-17 when firing on oil, in the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. As required by PSD permit number SJ 78-17 when firing on oil, the provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. As required by PSD permit number SJ 78-17 when firing on oil, the owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. As required by PSD permit number SJ 78-17 when firing on oil, the sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. As required by PSD permit number SJ 78-17 when firing on oil, the amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. As required by PSD permit number SJ 78-17 when firing on oil, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. As required by PSD permit number SJ 78-17 when firing on oil, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. As required by PSD permit number SJ 78-17 when firing on oil, performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

34. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-49-27 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #97 (SN 80-37387-15, DIS 12810-85) NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. This generator is permitted to operate at the following locations: Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as total sulfur): 0.001 lb/MMBtu, NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.003 lb/MMBtu and CO: 1.4 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

13. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. The unit shall only be fired on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

16. As required by PSD permit number SJ 78-17 when firing on oil, all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

17. As required by PSD permit number SJ 78-17 when firing on oil, the EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

18. As required by PSD permit number SJ 78-17 when firing on oil, the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. As required by PSD permit number SJ 78-17 when firing on oil, in the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. As required by PSD permit number SJ 78-17 when firing on oil, the provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. As required by PSD permit number SJ 78-17 when firing on oil, the owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. As required by PSD permit number SJ 78-17 when firing on oil, the sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. As required by PSD permit number SJ 78-17 when firing on oil, the amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. As required by PSD permit number SJ 78-17 when firing on oil, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. As required by PSD permit number SJ 78-17 when firing on oil, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. As required by PSD permit number SJ 78-17 when firing on oil, permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. As required by PSD permit number SJ 78-17 when firing on oil, performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

34. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-50-25 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR SMITH MOON STEEL NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR #98 (SN 77-37182-12, NB 810, DIS 20654-78) WITH A NORTH AMERICAN BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rule 4306] Federally Enforceable Through Title V Permit
4. This generator is permitted to operate at the following locations: Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

10. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as total sulfur): 0.001 lb/MMBtu, NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.003 lb/MMBtu and CO: 1.4 ppmvd @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

12. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

14 All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

15. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

16. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

17. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

18. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

32. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

33. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

34. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-51-27 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C. E. NATCO NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR #99 (SN T-6718101-08, NB 130, DIS 20640-79) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: Sections 17, 21 and 26 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201, and 4301. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as S): 0.00285 lb/MMBTU, VOC: 0.003 lb/MMBtu or CO: 25 ppmvd @ 3% O2. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods NOx emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu. [District Rule 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. Emissions of NOx shall not exceed 54.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

14. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

15. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

16. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

17. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

18. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-52-26 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #100 (SN 81-37469-2, NB 1056, DIS 39545-88) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR AND TVC SYSTEMS

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
10. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or ARB Method 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2 and 4305, 6.2.1] Federally Enforceable Through Title V Permit

14. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

15. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

19. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

20. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

21. Permit unit shall include TEOR/TVC/natural gas-fired steam generator with North American burner, O2 controller, FGR, SO2 scrubber shared with S-1141-53, '-55, '-60, and '-61 and vapor piping from TEOR operations. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter, TEOR gas volume flowmeter, TVC gas flowmeter, and flue gas oxygen monitor. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit
23. Permittee shall maintain with the permit a current listing of all TEOR and TVC systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit
24. Upon recommencing operation, testing for TEOR/TVC gas sulfur content shall be conducted no less than monthly. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Permittee shall maintain daily records of volume of fuel gas burned and TEOR/TVC gas incinerated, monthly TEOR/TVC and fuel gas sulfur content, and monthly Btu content of TEOR/TVC and fuel gas. Such records shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
26. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Scrubber sprays and/or nozzles shall be maintained as required to achieve compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Dissolved and suspended solids and condensed organics shall not exceed 20% of the scrubbing stream. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
32. Scrubber shall be equipped with recirculation liquor pH indicator and pump discharge pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
33. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall have no detectible leaks. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Scrubber recirculation liquor pH shall be maintained between 6.2 and 7.5. [District NSR Rule] Federally Enforceable Through Title V Permit
35. Scrubber recirculation liquor pH shall be maintained only with soda ash unless District approval is granted for substitution. [District NSR Rule] Federally Enforceable Through Title V Permit
36. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as S): 0.040 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu or CO: 1.4 ppmv @ 3% O2. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit
37. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
38. If the unit is operated with the scrubber, compliance source testing for SOx shall be conducted not less than once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
39. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.3.2 and 4305]

41. Upon recommencing operation, if permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

42. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

43. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

44. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

45. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

46. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, PM10 - EPA Method 5, SOx (lb/MMBtu) - ARB Method 100 and EPA method 19, and gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305] Federally Enforceable Through Title V Permit

47. Testing to measure TEOR/TVC gas sulfur content shall be conducted using ASTM D3246 oxidation combustion microcoulometric or double GC for H2S and mercaptans. [District Rule 1801] Federally Enforceable Through Title V Permit

48. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District NSR Rule] Federally Enforceable Through Title V Permit

49. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305] Federally Enforceable Through Title V Permit

50. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305] Federally Enforceable Through Title V Permit

51. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

52. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

53. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

54. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

55. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

56. The following conditions must be met for representative unit(s) to be used to test for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

57. All units in a group for which representative units are source for NOx emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

58. All units in a group for which representative units are source tested for NOx emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

59. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

60. Scrubber pressure drop shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

61. Records of scrubber pressure drop shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

62. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

63. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

64. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

65. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

66. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

67. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

68. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

69. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

70. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

71. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

72. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

73. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [District Rule] Federally Enforceable Through Title V Permit

74. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

75. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

76. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

77. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

78. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-53-35 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #104 (DIS 41755-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. This generator is permitted to operate at the following locations: Section 31, T29S, R22E, SW/4 Section 6, T30S, R22E, SW/4 Section 36, T29S, R21E, Section 1, T30S, R21E, SE/4 Section 35, T29S, R21E, Section 22, T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
4. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0181 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
7. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.2 lb-CO/day, or 10,940 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Permittee shall maintain no less than 0.45 miles of paved roadway in the Midway-Sunset Oil Field. The 0.45 miles of roadways are separate from roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
18. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
19. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
20. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, in the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, the amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. As required by PSD permit SJ 78-17 when using fuel oil and operating at the North Midway-Sunset Oil Field, performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-55-26 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #105 (SN 81-37411-16, NB 1027, DIS 39622-90) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR AND TVC SYSTEMS

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
10. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or ARB Method 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2 and 4305, 6.2.1] Federally Enforceable Through Title V Permit

14. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

15. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

19. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

20. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

21. Permit unit shall include TEOR/TVC/natural gas-fired steam generator with North American burner, O2 controller, FGR, SO2 scrubber shared with S-1141-52, '-53, '-60, and '-61 and vapor piping from TEOR operations. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter, TEOR gas volume flowmeter, TVC gas flowmeter, and flue gas oxygen monitor. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit
23. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District NSR Rule and 1081] Federally Enforceable Through Title V Permit
24. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Scrubber sprays and/or nozzles shall be maintained as required to achieve compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Dissolved and suspended solids and condensed organics shall not exceed 20% of the scrubbing stream. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Scrubber shall be equipped with recirculation liquor pH indicator and pump discharge pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall have no detectible leaks. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Scrubber recirculation liquor pH shall be maintained between 6.2 and 7.5. [District NSR Rule] Federally Enforceable Through Title V Permit
33. Scrubber recirculation liquor pH shall be maintained only with soda ash unless District approval is granted for substitution. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
35. If the unit is operated with the scrubber, compliance source testing for SOx shall be conducted not less than once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
36. Upon recommencing operation, permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR/TVC gas incinerated in this unit. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
37. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
38. Permittee shall maintain with the permit a current listing of all TEOR and TVC systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit
39. Permittee shall maintain daily records of volume of fuel gas burned, TEOR/TVC gas incinerated, and permit number(s) of systems providing gas for incineration. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. Records required by this permit shall be retained at the facility for a period of no less than 5 years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

41. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit

42. SOx emissions, measured as total sulfur, shall not exceed 0.040 lb/MMBtu. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit

43. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu or CO: 1.4 ppmv @ 3% O2. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit

44. The acceptable range of positions of the FGR control valve and fuel firing rates shall be established by testing this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

45. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

46. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

47. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

48. Upon recommencing operation, if permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

49. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

50. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

51. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

52. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, PM10 - EPA Method 5, SOx (lb/MMBtu) - ARB Method 100 and EPA method 19, and gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305] Federally Enforceable Through Title V Permit

53. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District NSR Rule] Federally Enforceable Through Title V Permit

54. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

55. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305] Federally Enforceable Through Title V Permit

56. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305] Federally Enforceable Through Title V Permit

57. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

58. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

59. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

60. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

61. The following conditions must be met for representative unit(s) to be used to test for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

62. All units in a group for which representative units are source for NOx emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

63. All units in a group for which representative units are source tested for NOx emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

64. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

65. Scrubber pressure drop shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

66. Records of scrubber pressure drop shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

67. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

68. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

69. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

70. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

71. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

72. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

73. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

74. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

75. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

76. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

77. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

78. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

79. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

80. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

81. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

82. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

83. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-60-26 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR/TVC GAS FIRED STRUTHERS STEAM GENERATOR #112 (SN 81-37411-12, NB 1022, DIS 39623-90) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR SYSTEMS AND TVC SYSTEMS

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rules 4305 and 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or ARB Method 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2 and 4305, 6.2.1] Federally Enforceable Through Title V Permit

14. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

15. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

18. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

19. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
21. Permit unit shall include TEOR/TVC/natural gas-fired steam generator with North American burner, O2 controller, FGR, SO2 scrubber shared with S-1141-52, '-53, '-55, and '-61 and vapor piping from TEOR operations. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter, TEOR gas volume flowmeter, TVC gas flowmeter, and flue gas oxygen monitor. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit
23. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District NSR Rule and 1081] Federally Enforceable Through Title V Permit
24. The scrubber shall be equipped with a differential pressure gauge to indicate the pressure drop across the unit. The gauge shall be maintained in good working condition at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Scrubber liquid supply (at inlet to scrubber) shall have an operational pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Scrubber liquid supply (at inlet to scrubber) shall have an operational flow meter. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Scrubber sprays and/or nozzles shall be maintained as required to achieve compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Dissolved and suspended solids and condensed organics shall not exceed 20% of the scrubbing stream. [District NSR Rule] Federally Enforceable Through Title V Permit
29. Scrubber stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Scrubber shall be equipped with recirculation liquor pH indicator and pump discharge pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Steam generator firebox convection section, scrubber bypass valve, and all flue gas ductwork shall have no detectible leaks. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Scrubber recirculation liquor pH shall be maintained between 6.2 and 7.5. [District NSR Rule] Federally Enforceable Through Title V Permit
33. Scrubber recirculation liquor pH shall be maintained only with soda ash unless District approval is granted for substitution. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
35. If the unit is operated with the scrubber, compliance source testing for SOx shall be conducted not less than once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
36. Upon recommencing operation, permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR/TVC gas incinerated in this unit. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit
37. Permittee shall measure and record the fuel gas sulfur content and BTU content at the time of NOx testing, except for natural gas purchased from a PUC regulated utility. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall maintain with the permit a current listing of all TEOR and TVC systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit

39. Permittee shall maintain daily records of volume of fuel gas burned, TEOR/TVC gas incinerated, and permit number(s) of systems providing gas for incineration. [District NSR Rule] Federally Enforceable Through Title V Permit

40. Records required by this permit shall be retained at the facility for a period of no less than 5 years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

41. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit

42. SOx emissions, measured as total sulfur, shall not exceed 0.040 lb/MMBtu. [District NSR Rule and 4406] Federally Enforceable Through Title V Permit

43. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu or CO: 1.4 ppmv @ 3% O2. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit

44. The acceptable range of positions of the FGR control valve and fuel firing rates shall be established by testing this unit or other representative units, as approved by the District. The acceptable ranges shall be maintained during operation at levels for which compliance with applicable NOx and CO emission rates have been demonstrated through source testing. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

45. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

46. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

47. Upon recommencing operation, source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

48. Upon recommencing operation, if permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.3.2 and 4305] Federally Enforceable Through Title V Permit

49. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

50. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

51. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

52. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, PM10 - EPA Method 5, SOx (lb/MMBtu) - ARB Method 100 and EPA method 19, and gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

53. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District NSR Rule] Federally Enforceable Through Title V Permit

54. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305] Federally Enforceable Through Title V Permit

55. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305] Federally Enforceable Through Title V Permit

56. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305] Federally Enforceable Through Title V Permit

57. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305] Federally Enforceable Through Title V Permit

58. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

59. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

60. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

61. The following conditions must be met for representative unit(s) to be used to test for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. All units in a group for which representative units are source for NOx emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

63. All units in a group for which representative units are source tested for NOx emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

64. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

65. Scrubber pressure drop shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

66. Records of scrubber pressure drop shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

67. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

68. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

69. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

70. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

71. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

72. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

73. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

74. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

75. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

76. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

77. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

78. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

79. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

80. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

81. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

82. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

83. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-61-35 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #105 (DIS 41756-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS

PERMIT UNIT REQUIREMENTS

1. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4406] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with an operational gas flowmeter that measures the total combined volume of fuel gas sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
3. This generator is permitted to operate at the following locations: Section 31, T29S, R22E, SW/4 Section 6, T30S, R22E, SW/4 Section 36, T29S, R21E, Section 1, T30S, R21E, SE/4 Section 35, T29S, R21E, Section 22, T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.005 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0181 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.2 lb-CO/day, or 10,940 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Permittee shall maintain no less than 0.45 miles of paved roadway in the Midway-Sunset Oil Field. The 0.45 miles of roadways are separate from roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. The requirements of SJVUAPCD Rule 4351 (Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. This unit is subject to conditions (Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. This unit is subject to conditions Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
16. This unit is subject to conditions Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
17. This unit is subject to conditions Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-67-26 **EXPIRATION DATE:** 02/29/2016

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C.E. NATCO NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR AND AN O2 CONTROLLER (#121, SN T-6718101-04, NB 108, DIS 20639-79)

PERMIT UNIT REQUIREMENTS

1. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter. [District Rules 4320 and 2201] Federally Enforceable Through Title V Permit
2. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 9.4.2, and 4406] Federally Enforceable Through Title V Permit
3. Emissions from the steam generator shall not exceed any of the following limits: 0.014 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
5. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/year, 56.3 lb-CO/day, and 20,531 lb-CO/year. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

17. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

18. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

19. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

20. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

21. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

22. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

23. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

25. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-127-47 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF CRUDE OIL TANK #T-127, DEPURATORS, TWO NATURAL GAS-FIRED EXEMPT HEATER TREATERS (T9 AND T10) (EACH RATED LESS THAN 5.0 MMBTU/HR), AND SHARED VAPOR CONTROL EQUIPMENT INCLUDING INTAKE AND DISCHARGE HEAT EXCHANGERS, GAS-LIQUID SEPARATOR(S), COMPRESSOR(S) SERVING PERMIT UNITS S-1141-127 THROUGH '-131, '-560, '-571, '-572, '-575, '-576, '-577, '-578, '-579, '-580, '-585, '-590, AND '591; INCLUDING OPTIONAL USE H2S SCRUBBER, AND VAPOR PIPING DISCHARGING TO STEAM GENERATORS S-1141-26, '-31, '-515, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, '-558, EMERGENCY FLARE S-1141-513, AND/OR DOGGR APPROVED DISPOSAL WELL(S)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, except during periods of tank cleaning and maintenance. Collected vapors shall be disposed of in APCO approved control devices listed in this permit. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall conduct quarterly sampling from the Station 1-09 tank vapor recovery system to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If fluids sampled are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. Such sampling is deemed representative of all components downstream of the equipment served by the vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-128-14 **EXPIRATION DATE:** 02/29/2016

SECTION: NW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3000 BBL FIXED ROOF CRUDE OIL TANK #109-C3 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-129-14 **EXPIRATION DATE:** 02/29/2016

SECTION: NW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF CRUDE OIL TANK #109-C2 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-130-10 **EXPIRATION DATE:** 02/29/2016

SECTION: NW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL CRUDE OIL TANK #109-C1 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127-2; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-131-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF CRUDE OIL TANK #109-P2 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-168-4 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26F-C25

PERMIT UNIT REQUIREMENTS

1. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. The requirements of 40CFR 60 Subpart K, Ka and Kb 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
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-214-4 **EXPIRATION DATE:** 02/29/2016

SECTION: SE31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
840,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-7

PERMIT UNIT REQUIREMENTS

1. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. The requirements of 40CFR 60 Subpart K, Ka and Kb 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
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-215-4 **EXPIRATION DATE:** 02/29/2016

SECTION: SE31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
840,000 GALLONS FIXED ROOF PETROLEUM STORAGE TANK #T-6

PERMIT UNIT REQUIREMENTS

1. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. The requirements of 40CFR 60 Subpart K, Ka and Kb 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
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-250-28 **EXPIRATION DATE:** 02/29/2016

SECTION: 22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
TEOR SYSTEM WITH COMPRESSORS, HEAT EXCHANGERS, KNOCKOUT VESSELS AND PIPING SERVING 2906 THERMALLY ENHANCED WELL VENTS

PERMIT UNIT REQUIREMENTS

1. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and non-condensible vapor piping to vapor disposal devices. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This permit authorizes TEOR operations at the following locations: Sec 15, 20, 21, 22, 23, 24, 27, and 28 of T31S, R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Collected vapors shall be incinerated in District approved incineration devices as listed on this permit, sent to facility S-1114, or injected in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall maintain documentation of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall document Department of Oil & Gas Geothermal Resources approval for vapor disposal wells prior to injection of vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum fugitive VOC emissions rate from the TEOR operation shall not exceed 6,969.4 lb/day, calculated using average emission factors from EPA Protocol for Equipment Leak Emission Estimate, 1995, Table 2-4, Oil and Gas Production Operations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fraction of total gas stream after initial compression shall not exceed 10% by weight. Permittee shall conduct quarterly gas sampling downstream of the Car 2 or 3 injection compressors. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling shall only be required annually. Such sampling is deemed representative of all components at and downstream of the initial compressors. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Authorized incineration sources for collected vapors include steam generators S-1141-55, '60, '515, '516, '517, '518, '519. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas/liquid separators and condensate drums/tanks and all other equipment used to handle or store condensate shall be inclosed and shall vent only to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Water/VOC condensate from gas/liquid separators and condensate drums shall be pumped only to production manifold or to production facilities equipped with an operating vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

12. TEOR operation shall include vapor piping from tank vapor control systems listed on permits S-1141-88, '-479, and '-495. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

14. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-253-20 **EXPIRATION DATE:** 02/29/2016

SECTION: 17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING 556 STEAM ENHANCED WELLS, GAS/LIQUID SEPARATOR, AIR-COOLED VAPOR CONDENSER, CONDENSATE STORAGE VESSEL AND WELL VENT VAPOR COLLECTION PIPING NETWORK

PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain a well roster listing all wells connected to the well vent vapor recovery system. The well roster shall be kept on site for a period of at least five years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
2. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Emissions of volatile organic compounds (VOC) shall not exceed 311.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and vapor piping to District authorized steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If vapor incineration devices are inoperative or if casing vent vapor control system is inoperative, produced fluids shall be introduced only to tanks S-1141-127, '128, '129, '130, '131, and '132 that are vented to an approved vapor collection and control system achieving 99% control. [District Rule 2201 & 4401] Federally Enforceable Through Title V Permit
6. VOC fugitive emissions from well vent vapor collection and control system including condensate collection and handling shall not exceed 311.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Sulfur compound emissions shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
9. Only steam generators under Permit to Operate #'s S-1141-26, '-31, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, and '-558 are authorized to incinerate collected vapors. Emission limits for steam generators are contained in each steam generator Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Condensate (VOC's and water) shall be handled only in piping and vessels closed to the atmosphere and shall be pumped only to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-263-21 **EXPIRATION DATE:** 02/29/2016

SECTION: 07 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING 184 STEAM ENHANCED WELLS, GAS/LIQUID SEPARATOR, AIR-COOLED CONDENSER, CONDENSATE STORAGE VESSEL AND WELL VENT VAPOR COLLECTION PIPING NETWORK

PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain with the permit an accurate, current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
2. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. Emissions of volatile organic compounds (VOC) shall not exceed 103.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and vapor piping to District authorized steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This permit authorizes TEOR operations at the following locations: Sec 6, 7, 8, & 27 of T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
6. If vapor incineration devices are inoperative or if casing vent vapor control system is inoperative, produced fluids shall be introduced only to tanks S-1141-127, '128, '129, '130, '131, and '132 that are vented to an approved vapor collection and control system achieving 99% control. [District Rule 2201 & 4401] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from well vent vapor collection and control system including condensate collection and handling shall not exceed 103.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Sulfur compound emissions shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
10. Only steam generators under Permit to Operate #'s S-1141-26, '-31, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, and '-558 are authorized to incinerate collected vapors. Emission limits for steam generators are contained in each steam generator Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Condensate (VOC's and water) shall be handled only in piping and vessels closed to the atmosphere and shall be pumped only to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit

13. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-317-14 **EXPIRATION DATE:** 02/29/2016

SECTION: NW25 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 850 STEAM-ENHANCED WELLS (PREVIOUSLY PERMITTED TEOR SYSTEMS S-1141-317, '-381, '-410, '-411, AND '-428), LIQUID KNOCKOUT VESSELS, CONDENSATE DRIP POT (V-3), AIR COOLED HEAT EXCHANGERS, CONDENSATE PUMPS, AND WELL VENT VAPOR COLLECTION PIPING NETWORK

PERMIT UNIT REQUIREMENTS

1. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and non-condensible vapor piping to vapor disposal devices. [District Rule 2201] Federally Enforceable Through Title V Permit
2. TEOR operation shall include vapor piping from tank vapor control systems listed on permit S-1141-417. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Collected vapors shall disposed of in District approved incineration devices as listed on this permit or in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall make copies of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
5. Emissions rate of VOC associated with the fugitive emissions from TEOR system including condensate collection and handling, and polish rod stuffing box fugitive emissions shall not exceed 388.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC fraction of total organic compounds in gas after compression shall not exceed 25% by weight. Permittee shall test using EPA Method E168, E169 or E260 a representative sample, per District approved plan after initial compression not less than once per calendar quarter. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
8. Authorized incineration sources for collected vapors include steam generators S-1141-396, '530, '531, '532, '533, '534, and '535. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Water/VOC condensate from gas/liquid separators and condensate drums shall be pumped only to production manifold or to production facilities equipped with an operating vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall document Department of Oil & Gas Geothermal Resources approval for vapor disposal wells prior to injection of vapors. [District Rules 2201& 4401] Federally Enforceable Through Title V Permit
12. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District Rule 2201] Federally Enforceable Through Title V Permit
13. An inspection and maintenance program consistent with that described in Rule 4409 sections 5.1 and 5.3 shall be implemented for stuffing boxes and polish rods for 136 wells on the McDonald/Star properties (SW/4 Sec. 26, T31S, R22E) and for all wells put into thermally enhanced production. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Thermal oxidizer (located at NE/4 Sec. 35, T31S, R22E) may be used to incinerate vapors collected from TEOR wells and tank vapor control system listed on permit S-1141-417 when steam generator S-1141-396 is not operating. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Thermal oxidizer shall be equipped with an operational temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Thermal oxidizer shall operate between 1200 F and 1800 F and shall have a minimum residence time of one second. On any day oxidizer is in operation permittee shall record thermal oxidizer operating temperature. Such records shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Thermal oxidizer shall be compliance source tested for VOC destruction efficiency each time the oxidizer is put into operation unless testing has been conducted within the previous 12 months. Thermal oxidizer shall be tested not less than annually in any year that the oxidizer is in operated. Testing shall be conducted using EPA Method 18. [District Rule 2201] Federally Enforceable Through Title V Permit
18. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-320-18 **EXPIRATION DATE:** 02/29/2016

SECTION: SE17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 388 STEAM DRIVE AND 100 CYCLIC WELLS, GAS/LIQUID SEPARATORS, CONDENSATE TRANSFER PUMPS, AIR-COOLED HEAT EXCHANGERS, AND VAPOR COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. VOC emission rate from casing gas collection system shall not exceed 9.94 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
3. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and vapor piping to District authorized steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This permit authorizes TEOR operations at the following locations: Sec 17, 18, & 20 of T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If vapor incineration devices are inoperative or if casing vent vapor control system is inoperative, produced fluids shall be introduced only to tanks S-1141-127, '128, '129, '130, '131, and '132 that are vented to an approved vapor collection and control system achieving 99% control. [District Rule 2201 & 4401] Federally Enforceable Through Title V Permit
6. VOC fugitive emissions from well vent vapor collection and control system including condensate collection and handling shall not exceed 251.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Sulfur compound emissions shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
9. Only steam generators under Permit to Operate #'s S-1141-26, '-31, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, and '-558 are authorized to incinerate collected vapors. Emission limits for steam generators are contained in each steam generator Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Condensate (VOC's and water) shall be handled only in piping and vessels closed to the atmosphere and shall be pumped only to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Permittee shall maintain with the permit an accurate, current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

13. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-352-4 **EXPIRATION DATE:** 02/29/2016

SECTION: 22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [17 CCR 93115]
2. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.2.1] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-353-4 **EXPIRATION DATE:** 02/29/2016

SECTION: 22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [17 CCR 93115]
2. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.2.1] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-354-4 **EXPIRATION DATE:** 02/29/2016

SECTION: 09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [17 CCR 93115]
2. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.2.1] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-355-4 **EXPIRATION DATE:** 02/29/2016

SECTION: 09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [17 CCR 93115]
2. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.2.1] Federally Enforceable Through Title V Permit
3. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-363-11 **EXPIRATION DATE:** 02/29/2016

SECTION: SW22 **TOWNSHIP:** T31S **RANGE:** R22E

EQUIPMENT DESCRIPTION:
12 MMBTU/HR HEATER TREATER WITH KVAERNER/HRI LOW NOX BURNERS AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
7. Maximum annual heat input of the unit shall not exceed 30 billion Btu per calendar year. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
8. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following; PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2): 30 ppmv @ 3% O2, VOC: 0.005 lb/MMBtu, or CO: 111 ppmv @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-366-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT CASING VAPOR CONTROL SYSTEM SERVING 171 STEAM ENHANCED WELLS

PERMIT UNIT REQUIREMENTS

1. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
2. Vapor control system shall include gas/liquid separators, condensate drums, condensate pumps, air cooled heat exchangers, and one non-condensible vapor compressor with electric motor. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operation shall include non-condensible vapor piping to steam generators S-1141-87 and '121. [District Rule 2201] Federally Enforceable Through Title V Permit
4. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and vapor piping to District authorized steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This permit authorizes TEOR operations at the following locations: Sec 15, 16, 21 & 22 of T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
6. If vapor incineration devices are inoperative or if casing vent vapor control system is inoperative, produced fluids shall be introduced only to tanks S-1141-127, '128, '129, '130, '131, and '132 that are vented to an approved vapor collection and control system achieving 99% control. [District Rule 2201 & 4401] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from well vent vapor collection and control system including condensate collection and handling shall not exceed 71.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Sulfur compound emissions shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
10. Only steam generators under Permit to Operate #'s S-1141-43, and '-67 are authorized to incinerate collected vapors. Emission limits for steam generators are contained in each steam generator Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Condensate (VOC's and water) shall be handled only in piping and vessels closed to the atmosphere and shall be pumped only to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Permittee shall maintain with the permit an accurate, current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

14. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-368-10 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR WITH NORTH AMERICAN NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.006 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
4. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-369-19 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #131 (NB 890) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. The requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter and flue gas oxygen monitor. [District Rules 2201, 4305, and 4320] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM-10: 0.006 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 25 ppmv @ 3% O2. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-370-19 **EXPIRATION DATE:** 02/29/2016

SECTION: NE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #132 (NB 888) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of 40 CFR 60, Subpart Dc (except 60.44c(g) and (h) and 60.48c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. The requirements of 40 CFR 72.6(b) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter and flue gas oxygen monitor. [District Rules 2201, 4305, and 4320] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM-10: 0.006 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 25 ppmv @ 3% O2. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-371-22 **EXPIRATION DATE:** 02/29/2016

SECTION: 21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR 21S SG #8 DIS# 19962-71 WITH OXYGEN CONTROLLER, NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM-10: 0.006 lb/MMBtu, SOx (as SO2) 0.00285 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 25 ppmv @ 3% O2. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
12. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-372-25 **EXPIRATION DATE:** 02/29/2016

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED C. E. NATCO STEAM GENERATOR #79 (SN T-7585901-07, NB 1220, DIS 20633-81) WITH A NORTH AMERICAN MODEL 4231-625-GLE LOW NOX BURNER, FLUE GAS RECIRCULATION, AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: Sections SW23 and NW27 of Township 31S, Range 22E and Section NE21, Township 32S, Range 23E . [District Rule 2201] Federally Enforceable Through Title V Permit
2. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Emission rates shall not exceed any of the following: PM10 - 0.006 lb/MMBTU; SOx (as SO2) - 0.00285 lb/MMBTU; VOC - 0.0055 lb/MMBTU. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
5. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 55.5 lb-CO/day, and 20,258 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District NSR Rule and District Rules 4305 and 4320] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-373-24 **EXPIRATION DATE:** 02/29/2016

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #21S-4 (DIS# 19452-71, NB 551) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10 - 0.006 lb/MMBTU; SOx (as SO2) - 0.00285 lb/MMBTU; NOx (as NO2) - 0.018 lb/MMBTU or 15 ppmv @ 3% O2; VOC - 0.0055 lb/MMBTU; or CO - 0.0185 lb/MMBtu or 25 ppmv @ 3% 02. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
7. Daily emissions shall not exceed any of the following: 54.0 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-374-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS-FIRED SMITH MOON STEEL STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR AND AN OXYGEN CONTROLLER (#4, SN 74-37127-1, NB 668)

PERMIT UNIT REQUIREMENTS

1. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.006 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
3. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day; 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-376-17 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #2 (DIS #30405-79) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
10. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10 - 0.006 lb/MMBTU; SOx (as SO2) - 0.00285 lb/MMBTU; NOx (as NO2) - 0.018 lb/MMBTU or 15 ppmv @ 3% O2; VOC - 0.0055 lb/MMBTU; or CO - 0.0185 lb/MMBtu or 25 ppmv @ 3% 02. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
11. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-377-17 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #4 (SN 78-37189-3, NB 828, DIS 30413-79) WITH NORTH AMERICAN MODEL GLE 4211 OR GLE 4231 MAGNA-FLAME LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), FUEL INDUCED RECIRCULATION (FIR), AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Flue gas recirculation (FGR) shall be utilized, as needed, in conjunction with low-NOx burner to maintain ongoing compliance with permitted emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Emission rates shall not exceed: 0.006 lb-PM10/MMBtu, 0.00285 lb-SOx/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu; or CO: 25 ppmvd @ 3% O2 or 0.0185 lb/MMBtu. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
4. Permittee shall satisfy all applicable requirements of District Rule 4001 - New Source Performance Standards - Subpart Dc including notification and reporting Requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
5. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-378-17 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED CE NATCO STEAM GENERATOR # 6 (NB 9807) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10 - 0.006 lb/MMBTU; SOx (as SO2) - 0.00285 lb/MMBTU; NOx (as NO2) - 0.018 lb/MMBTU or 15 ppmv @ 3% O2; VOC - 0.0055 lb/MMBTU; or CO - 0.0185 lb/MMBtu or 25 ppmv @ 3% 02. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
7. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-380-22 **EXPIRATION DATE:** 02/29/2016

SECTION: NE21 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED CE NATCO STEAM GENERATOR # 141, NB 101, DIS# 20630-79 WITH OXYGEN CONTROLLER, NORTH AMERICAN BURNER AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.006 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
9. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
12. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

15. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

16. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-385-6 **EXPIRATION DATE:** 02/29/2016

SECTION: SE31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
HEAVY CRUDE OIL TRUCK LOADING/UNLOADING OPERATION (TRUCK LACT #1) WITH VAPOR CONTROL INCLUDING TWO BOTTOM LOADING ARMS WITH CAMLOCK FITTINGS AND TWO VAPOR RETURN LINES WITH CAMLOCK FITTINGS

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of all transferred crude oil shall be less than 1.5 psia, or less if tanks receiving the crude oil have a TVP limit of 0.5 psia pursuant to District Rules 2201 or 4623. [District Rule 4624, 4.3] Federally Enforceable Through Title V Permit
2. Vapor recovery hoses shall be connected to the truck whenever crude oil is being transferred into truck. Vapor recovery hoses are not required to be connected to the truck when crude oil is being transferred from the truck. Vapor recovery hoses may be disconnected and stored when not in use. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All vapors displaced from the truck shall be piped to vapor control system S-1423-1. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No more than 100 crude oil line disconnections shall occur per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emission rate, calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995, from the total number of vapor components associated with the loading/unloading rack vapor control system shall not exceed 2.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emissions from crude oil line disconnection drainage shall not exceed 1.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Crude oil transfer equipment shall be maintained and operated such that there is no excess organic liquid drainage at disconnects. Excess organic liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. If 3 disconnects cannot be achieved during the inspection period, then an average of all disconnects during the inspection period will be used to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Loading rack vapor recovery system shall be monitored for evidence of leaks by visual, audible, and olfactory methods when in use. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. During truck loading, operator shall perform and record the results of quarterly leak and drainage inspections of the loading equipment at each loading arm. If truck loading has not been performed since the previous leak and drainage inspection, then leak and drainage inspections shall not be required for that inspection period. If none of the components are found to be leaking or exceeding the drainage standard during five consecutive quarterly inspections, in which inspections were performed, the leak and drainage inspection frequency may be changed from quarterly to annual. However, if one or more of the components are found to leak or if excess liquid is drained during an annual inspection, the inspection frequency shall change back to quarterly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Permittee shall maintain accurate records of: daily crude oil line disconnects, true vapor pressure of all crude oil transferred, and fugitive component count. [District Rules 1070; 2520, 9.4.2; and 4624] Federally Enforceable Through Title V Permit
12. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Liquid TVP shall be determined using District Rule 4624, Appendix A or the applicable test method in district Rule 4624, Section 6.3 [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-386-6 **EXPIRATION DATE:** 02/29/2016

SECTION: SE31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
HEAVY CRUDE OIL TRUCK LOADING/UNLOADING OPERATION (TRUCK LACT #2) WITH VAPOR CONTROL INCLUDING TWO BOTTOM LOADING ARMS WITH CAMLOCK FITTINGS AND TWO VAPOR RETURN LINES WITH CAMLOCK FITTINGS

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of all transferred crude oil shall be less than 1.5 psia, or less if tanks receiving the crude oil have a TVP limit of 0.5 psia pursuant to District Rules 2201 or 4623. [District Rule 4624, 4.3] Federally Enforceable Through Title V Permit
2. Vapor recovery hose shall be connected to the truck whenever crude oil is being transferred into truck. Vapor recovery hoses are not required to be connected to the truck when crude oil is being transferred from the truck. Vapor recovery hoses may be disconnected and stored when not in use. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All vapors displaced from the truck shall be piped to vapor control system S-1423-1. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No more than 100 crude oil line disconnections shall occur per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emission rate, calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995, from the total number of vapor components associated with the loading/unloading rack vapor control system shall not exceed 2.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emissions from crude oil line disconnection drainage shall not exceed 1.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Crude oil transfer equipment shall be maintained and operated such that there is no excess organic liquid drainage at disconnects. Excess organic liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. If 3 disconnects cannot be achieved during the inspection period, then an average of all disconnects during the inspection period will be used to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Loading rack vapor recovery system shall be monitored for evidence of leaks by visual, audible, and olfactory methods when in use. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. During truck loading, operator shall perform and record the results of quarterly leak and drainage inspections of the loading equipment at each loading arm. If truck loading has not been performed since the previous leak and drainage inspection, then leak and drainage inspections shall not be required for that inspection period. If none of the components are found to be leaking or exceeding the drainage standard during five consecutive quarterly inspections, in which inspections were performed, the leak and drainage inspection frequency may be changed from quarterly to annual. However, if one or more of the components are found to leak or if excess liquid is drained during an annual inspection, the inspection frequency shall change back to quarterly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

10. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

11. Permittee shall maintain accurate records of: daily crude oil line disconnects, true vapor pressure of all crude oil transferred, and fugitive component count. [District Rules 1070; 2520, 9.4.2; and 4624] Federally Enforceable Through Title V Permit

12. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Liquid TVP shall be determined using district Rule 4624, Appendix A or the applicable test method in district Rule 4624, Section 6.3. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-387-4 **EXPIRATION DATE:** 02/29/2016

SECTION: 31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
840,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #1

PERMIT UNIT REQUIREMENTS

1. The requirements of 40 CFR 60 Subpart K and Ka 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
2. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-388-4 **EXPIRATION DATE:** 02/29/2016

SECTION: 31 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
840,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #2

PERMIT UNIT REQUIREMENTS

1. The requirements of 40 CFR 60 Subpart K and Ka 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
2. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-402-17 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR SMITH MOON STEEL NATURAL GAS FIRED STEAM GENERATOR HSG #192 (SN 79-37317-3, NB 901, DIS 20634-79) WITH NORTH AMERICAN BURNER - (INDIAN & COLONIAL LEASE)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4306 and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
5. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
6. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
7. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
9. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.4.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
10. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B or 6C; or Method 8 or ARB Method 1-100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 3246, D 4084 or a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

12. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2 and 4305, 6.2.1] Federally Enforceable Through Title V Permit

14. Emission rates shall not exceed any of the following: PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, or CO: 10 ppmv @ 3% O2. [District NSR Rule and 4305] Federally Enforceable Through Title V Permit

15. Emissions assessed to the SLC for this unit are PM10: 9.6 lb/day, SOx (as SO2): 1.1 lb/day, NOx (as NO2): 34.6 lb/day, VOC: 2.9 lb/day, and CO: 6.7 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

16. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 289.5 lb/day, SOx (as SO2): 3,326.5 lb/day; NOx (as NO2): 302.0 lb/day, VOC: 33.8 lb/day, and CO: 175.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

17. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

18. The stack concentration of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. [District Rule 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit

19. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2520, 9.5.2 and 4305] Federally Enforceable Through Title V Permit

20. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the permitted emission limits, the permittee or third party shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the permitted emission limits after (1) hour, the permittee shall conduct a source test within 60 days, of the first exceedance to demonstrate compliance with the permitted emission limits. [District Rule 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit

21. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
24. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule] Federally Enforceable Through Title V Permit
27. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District NSR Rule] Federally Enforceable Through Title V Permit
28. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule] Federally Enforceable Through Title V Permit
29. This permit unit shall comply with NOx and sulfur compound emission requirements as specified in Rules 4405 and 4406. [Rules 4405 and 4406] Federally Enforceable Through Title V Permit
30. Source testing to demonstrate compliance with NOx and CO gas fired emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit
31. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit
32. If permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit
33. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 2520, 9.4.2 and 4305] Federally Enforceable Through Title V Permit
34. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
35. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081 and 4305] Federally Enforceable Through Title V Permit
36. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

38. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

39. The following conditions must be met for representative unit(s) to be used to test for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

40. All units in a group for which representative units are source for NOx emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

41. All units in a group for which representative units are source tested for NOx emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.4.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit

42. The number of representative units source tested for NOx emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-426-5 **EXPIRATION DATE:** 02/29/2016

EQUIPMENT DESCRIPTION:
1,512 CYCLICALLY STEAM-ENHANCED HEAVY CRUDE OIL PRODUCTION WELLS WITH CLOSED CASING VENTS

PERMIT UNIT REQUIREMENTS

1. Permit unit shall comply with all applicable requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
2. All crude oil production wells operated under this permit unit shall have District-approved closed casing vents. [District Rule 4401] Federally Enforceable Through Title V Permit
3. Crude oil produced from wells with vents shut in to comply with Rule 4401 requirements shall be stored and handled in a manner not allowing the emission of volatile organic compound vapors prevented by shutting in the casing vent. [District Rule 4401] Federally Enforceable Through Title V Permit
4. Permittee shall maintain, for a period of at least five years, accurate listings of wells operated under this permit, including well number and location by quarter section and lease name, and shall make such listings readily available for District inspection upon request. [District Rule 1070, and 2520, 9.4.2, 9.5.2] Federally Enforceable Through Title V Permit
5. Permittee shall maintain, for a period of at least five years, accurate listings of tanks receiving fluids produced from these wells, including quarter section and lease name, and shall make such listing readily available for District inspection upon request. [District Rule 1070, and 2520, 9.4.2, 9.5.2] Federally Enforceable Through Title V Permit
6. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit
7. Formerly S-1129-376

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-429-7 **EXPIRATION DATE:** 02/29/2016

SECTION: NW36 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
56,700 GALLON FIXED ROOF WASTEWATER TANK WITH VAPOR CONTROL SYSTEM

PERMIT UNIT REQUIREMENTS

1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The tank shall be connected to and vent only to (except in breakdown situations as described in Rule 1100) the vapor recovery system listed on permit S-1141-417. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The tank PV valve pressure setting shall be no less than 2.0" water column. [District NSR Rule] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit
9. Formerly S-1129-819

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-430-14 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY WELL VENT CONTROL SYSTEM WITH 78 STEAM DRIVE WELLS, GAS/LIQUID SEPARATOR, HEAT EXCHANGER, CONDENSATE PIPING TO AUTHORIZED INCINERATION DEVICES

PERMIT UNIT REQUIREMENTS

1. Condensate shall be mixed with produced fluids and piped only to the Section 36 production dehy facility equipped with vapor control capable of 99% control. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
2. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and vapor piping to District authorized steam generators. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This permit authorizes TEOR operations at the following locations: Sec 22, 23& 27 of T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. If vapor incineration devices are inoperative or if casing vent vapor control system is inoperative, produced fluids shall be introduced only to tanks S-1141-127, '128, '129, '130, '131, and '132 that are vented to an approved vapor collection and control system achieving 99% control. [District Rule 2201 & 4401] Federally Enforceable Through Title V Permit
6. VOC fugitive emissions from well vent vapor collection and control system including condensate collection and handling, and polish rod stuffing box fugitive emissions shall not exceed 35.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit accurate, current fugitive components counts; fugitive emissions calculations make using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1; and shall make such information readily available for District inspection upon request. [District Rules 1070 & 2201] Federally Enforceable Through Title V Permit
8. Only steam generator S-1141-394 is authorized to incinerate collected vapors. Emission limits for are contained in the steam generator Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas/liquid separators and condensate containers shall vent only to well vent vapor collection and control system. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Condensate (VOC's and water) shall be handled only in piping and vessels closed to the atmosphere and shall be pumped only to production manifold. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing collection system and shall make such listing readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. This unit is subject to Casing Collection System Conditions on the facility wide permit S-1141-0. [District Rule 2520, 4401, and 4407] Federally Enforceable Through Title V Permit

13. Formerly S-1129-820.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-431-14 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR C. E. NATCO NATURAL GAS-FIRED STEAM GENERATOR (#26 CENTRAL 6) WITH A NORTH AMERICAN GLE LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This steam generator is authorized to operate at the following locations: NE26, T31S, R22E and SE17, T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall notify the District Compliance Division in writing of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown, emissions rates from the unit shall not exceed any of the following emission limits: 14 ppmvd NOx @ 3% O2 or 0.017 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu, or 0.0055lb-VOC/MMBtu. [District NSR Rule and District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
9. Emissions shall not exceed any of the following limits: 54.0 lb-NOx/day, 9308 lb-NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall satisfy all applicable requirements of District Rule 4001 - New Source Performance Standards - Subpart Dc including notification and reporting Requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
12. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-432-12 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STRUTHERS THERMOFLOOD NATURAL GAS-FIRED STEAM GENERATOR (#26 CENTRAL 8, NATIONAL BOARD# 1254) WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This steam generator is authorized to operate at the following locations: NE26, T31S, R22E and SE17, T32S, R23E. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown, emissions rates from the unit shall not exceed any of the following emission limits: 14 ppmvd NOx @ 3% O2 or 0.017 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu, or 0.0055lb-VOC/MMBtu. [District NSR Rule and District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
9. Emissions shall not exceed any of the following limits: 54.0 lb-NOx/day, 9308 lb-NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall satisfy all applicable requirements of District Rule 4001 - New Source Performance Standards - Subpart Dc including notification and reporting Requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-479-26 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-50-01 (STATION 2-22) VENTED TO VAPOR CONTROL SYSTEM SHARED BETWEEN PERMIT UNITS S-1141-479 AND -481 THROUGH -486, -500, -501, 581, -582, AND -583 INCLUDING AIR COOLED HEAT EXCHANGERS, COMPRESSOR INLET LIQUID KNOCKOUT VESSEL(S), COMPRESSOR(S), AFTERCOOLER(S), DISCHARGE LIQUID KNOCKOUT VESSEL(S), COMPRESSOR LIQUID KNOCKOUT VESSEL(S), AND NON-CONDENSIBLE VAPOR PIPING TO AUTHORIZED INCINERATION DEVICES OR TEOR CASING GAS COLLECTION SYSTEM S-1141-250, ASSOCIATED CONTROL OPTIONS, AND THREE 50 BBL PERMIT EXEMPT TANKS

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vapor control equipment compressor(s) shall activate before the pressure relief valve on any of the units served by the vapor control system vents. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Condensate from the vapor control system knockout vessel shall be transferred via closed system to vapor controlled produced water tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authorized incineration devices for collected vapors are steam generators S-1141-26, '31, '44, '45, '46, '52, '53, '55, '60, '61 and emergency flare S-1141-514. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The operator shall ensure that the vapor control system is functional and is operating as designed, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-481-15 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5,000 BBL (210,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-50-03 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. This unit is subject Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-482-15 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
5,000 BBL (210,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-50-04 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-483-19 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
20,000 GALLON CRUDE OIL PRODUCTION OPERATION TANK T-100-001 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-484-19 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-100-002 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-485-15 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10,000 BBL (420,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-100-003 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-486-15 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
10,000 BBL (420,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-100-004 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-495-25 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
20,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-200-1 (STATION 2-22) WITH INLET GAS BOOT #T-200-1A BOTH VENTED TO VAPOR CONTROL SYSTEM SHARED BETWEEN PERMIT UNITS S-1141-495 THROUGH '-498 INCLUDING AIR COOLED HEAT EXCHANGERS, COMPRESSOR INLET LIQUID KNOCKOUT VESSEL(S), COMPRESSOR(S), AFTERCOOLER(S), COMPRESSOR DISCHARGE LIQUID KNOCKOUT VESSEL(S), AND PIPING TO AUTHORIZED INCINERATION DEVICES OR TEOR CASING GAS COLLECTION SYSTEM S-1141-250 AND ASSOCIATED DISPOSAL OPTIONS

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive and process produced fluids from North Midway Station 1. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank may be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. When tank is in produced water service inlet gas boot may be bypassed. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Vapor control equipment compressor(s) shall activate before the pressure relief valve on any of the units served by the vapor control system vents. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Condensate from vapor control system knockout vessels shall be transferred via closed system to vapor controlled produced water tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Authorized incineration devices for collected vapors are steam generators S-1141-26, '31, '44, '45, '46, '52, '53, '55, '60, '61, and emergency flare S-1141-514. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
11. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-496-19 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
20,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-200-02 (STATION 2-22) WITH GAS BOOT #T-200-2A BOTH SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-495

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive and process produced fluids from North Midway Station 1. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank may be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. When tank is in produced water service inlet gas boot may be bypassed. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Tank shall vent only to vapor control equipment listed in S-1141-495, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall ensure that the vapor recovery system is functional and is operating as designed, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-497-15 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
20,000 BBL (840,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-200-03 (STATION 2-22) WITH GAS BOOT #T-200-3A BOTH SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-495

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive and process produced fluids from North Midway Station 1. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank may be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. When tank is in produced water service inlet gas boot may be bypassed. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Tank shall vent only to vapor control equipment listed in S-1141-495, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall ensure that the vapor recovery system is functional and is operating as designed, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-498-15 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
20,000 BBL (840,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-200-04 (STATION 2-22) WITH GAS BOOT #T-200-4A BOTH SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-495

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive and process produced fluids from North Midway Station 1. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank may be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. When tank is in produced water service inlet gas boot may be bypassed. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Tank shall vent only to vapor control equipment listed in S-1141-495, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall ensure that the vapor recovery system is functional and is operating as designed, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
11. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-500-8 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
7,500 BBL CRUDE OIL PRODUCTION OPERATION TANK D-1 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. Tank may be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The operator shall ensure that the vapor recovery system is functional and is operating as designed, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-501-10 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
7,500 BBL CRUDE OIL PRODUCTION OPERATION TANK D-2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Tank shall vent only to vapor control equipment listed in S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201and 2520] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-513-9 **EXPIRATION DATE:** 02/29/2016

SECTION: SW9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
167 MM BTU/HR DUAL BLOWER AIR-ASSISTED EMERGENCY GROUND FLARE WITH KALDAIR AZDAIR PLA-12 FLARE TIP AND 9' DIA X 40' TALL FLAME ENCLOSURE SERVING TANK VAPOR RECOVERY EQUIPMENT LISTED ON S-1141-127, STATION 109

PERMIT UNIT REQUIREMENTS

1. This unit must be at least 1000 feet away from the property boundary. [District Rule 4102]
2. Flare shall be equipped with operational volumetric flow rate meter for each of the flared gas, pilot gas, and purge gas lines. [District Rules 2201 and 4311, 6.7] Federally Enforceable Through Title V Permit
3. A heat sensing device such as a thermocouple, ultraviolet beam sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
4. A flame shall be present at all times when combustible gases are introduced to the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
5. Flare shall operate with a pilot flame present at all times when combustible gases are introduced to the flare. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1/4 or 5% opacity. [District Rule 2010] Federally Enforceable Through Title V Permit
7. Flare shall be equipped with a purge gas and a continuous pilot, using solely PUC quality natural gas consisting primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane. [District Rules 2201 and 4311, 5.3] Federally Enforceable Through Title V Permit
8. The total sulfur content of the pilot/purge gas shall not exceed 1.0 grain S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
10. Flare shall operate only in emergencies except for pilot and purge gas and up to 200 hours per year of flare testing and maintenance. [District Rule 2201 and 4311, 5.1] Federally Enforceable Through Title V Permit
11. Maximum daily gas flow to flare shall not exceed any of the following limits: 14,020 scf pilot and purge gas combined; or 4,000,000 scf TVR/produced gas during non-emergency testing and maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emissions from pilot fuel and purge gas shall not exceed any of the following limits: NOx (as NO2): 0.068 lb/MM Btu; VOC: 0.063 lb/MM Btu; CO: 0.37 lb/MM Btu; PM10: 0.026 lb/MM Btu; or SOx (as SO2): 0.00285 lb/MM Btu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emissions from TVR/produced gas during non-emergency testing and maintenance shall not exceed any of the following limits: NOx (as NO2): 0.068 lb/MM Btu; VOC: 0.063 lb/MM Btu; CO: 0.37 lb/MM Btu; PM10: 0.026 lb/MM Btu; or SOx (as SO2): 16.864 lb/MM Btu. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Total sulfur content, as H2S, of TVR/produced gas introduced to flare shall not exceed 50,000 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Permittee shall, at least annually, measure and record sulfur content of pilot/purge gas. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Pilot/purge gas sulfur content shall be determined using method ASTM D 1072 , grab sample analysis by GC-FPD/TCD performed in the laboratory, or by certified copies of the gas sulfur content from the gas supplier. [District Rule 1081] Federally Enforceable Through Title V Permit

17. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of Rule 4311 shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit

18. The operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: 1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit

19. The operator shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: 1) The total volumetric flow of vent gas in standard cubic feet for each day, 2) Hydrogen sulfide content of vent gas composition pursuant to Section 6.6, 3) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, 4) Flare monitoring system downtime periods, including dates and times, 5) For each day and for each month provide calculated sulfur dioxide emissions, and 6) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3. [District Rule 4311, 6.2.3 and 6.3.5] Federally Enforceable Through Title V Permit

20. Permittee shall submit an updated Flare Minimization Plan (FMP) 1) every five years after the initial FMP submittal, and 2) prior to installing new or modified equipment subject to 6.5.3.1 through 6.5.3.3. [District Rule 4311, 6.5] Federally Enforceable Through Title V Permit

21. Hydrogen sulfide content of vent gas shall be determined daily, on days when flaring occurs, using a calorimetric tube system and ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4.2 and 6.6.5] Federally Enforceable Through Title V Permit

22. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit

23. All required monitors and recording devices shall be maintained in accordance with the applicable manufacturer's specifications. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit

24. All in-line continuous analyzer and flow monitoring data shall be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. Permittee shall maintain accurate records of sulfur content and daily volume of TVR/produced gas, pilot gas, and purge gas introduced to flare. [District Rule 1070] Federally Enforceable Through Title V Permit

26. Permittee shall maintain accurate records of the hours of operation and the amount of TVR/produced gas combusted during maintenance and testing. [District Rule 1070] Federally Enforceable Through Title V Permit

27. The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: 1) A copy of the compliance determination conducted pursuant to Section 6.4.1, 2) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation, 3) A copy of the approved flare minimization plan pursuant to Section 6.5, 4) On and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2, and 5) Where applicable, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7, and 6.9. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

28. Records shall be retained for a minimum of 5 years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-514-7 **EXPIRATION DATE:** 02/29/2016

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
167 MMBTU/HR DUAL BLOWER AIR-ASSISTED EMERGENCY GROUND FLARE WITH KALDAIR AZDAIR PLA-12 FLARE TIP AND 9' DIA X 40' TALL FLAME ENCLOSURE SERVING TANK VAPOR RECOVERY EQUIPMENT LISTED ON S-1141-88-3 STATION 2-22, S-1141-479 THROUGH '-486, S-1141-487, S-1141-491, AND S-1141-495 THROUGH '-498

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1/4 or 5% opacity. [District Rule 2010] Federally Enforceable Through Title V Permit
2. Flare shall be equipped with a continuous pilot fired solely on propane or natural gas. The sulfur content of propane shall not exceed 0.0164 lb/MMBtu and the sulfur content of natural gas shall not exceed 1 grains S/100 scf. The hydrocarbon content of pilot gas shall not exceed 5% by weight hydrocarbons heavier than butane. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Total quantity of produced gas and tank vapors combusted in flare shall not exceed 4000 MSCF/DAY. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operation of flare for other than maintenance and testing shall be limited to breakdown conditions (pursuant to Rule 1100), non-voluntary power interruptions, and other emergencies as approved by the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operation of flare shall not exceed 200 hours per year for purposes of flare maintenance and testing. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
7. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
8. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting the presence of at least one pilot flame or the flare flame, shall be installed and operated. [District Rule 4311] Federally Enforceable Through Title V Permit
9. If the flare uses a flow-sensing automatic ignition system and does not use a continuous flame pilot, the flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
10. The operator shall notify the District of any emergency use of the flare within 24 hours after the start of the next business day or within 24 hours after discovery, which ever occurs first. The notification shall include the flare source identification, the start date and time and the end date and time. [District Rule 1070 and 4311] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include the items set forth in Sections 6.2.2.1 through 6.2.2.4 of Rule 4311 (as amended 6/18/09). [District Rule 4311] Federally Enforceable Through Title V Permit

12. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO within 30 days following the end of the twelve month period of the previous year. The report shall include, as is applicable, the items set forth in Sections 6.2.3.1 through 6.2.3.8 of Rule 4311 (as amended 6/18/09). [District Rule 4311] Federally Enforceable Through Title V Permit

13. Operator shall monitor the vent gas composition using one of the methods specified in Rule 4311, Sections 6.6.1 through 6.6.5. [District Rule 4311] Federally Enforceable Through Title V Permit

14. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate. [District Rule 4311] Federally Enforceable Through Title V Permit

15. If the flare is equipped with a water seal, the operator shall monitor and record the water level and pressure of the water seal that services each flare daily. [District Rule 4311] Federally Enforceable Through Title V Permit

16. Periods of flare monitoring system in operation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system in operation do not include the periods when the system feeding the flare is not operating. [District Rule 4311] Federally Enforceable Through Title V Permit

17. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. [District Rule 4311] Federally Enforceable Through Title V Permit

18. Operator shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311] Federally Enforceable Through Title V Permit

19. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311] Federally Enforceable Through Title V Permit

20. The flared gas H2S concentration (ppmv) shall be measured using ASTM D-1945 or ASTM D-6228. Sulfur content of the pilot fuel shall be demonstrated by certified copies of the gas sulfur content performed using method ASTM D-1072 by or for the gas supplier. [District Rule 1081] Federally Enforceable Through Title V Permit

21. Flare shall only be operated for emergency purposes and/or for maintenance and testing for a maximum time of 200 hours per year. An emergency is any situation or a condition arising from a sudden and reasonably unforeseeable and unpreventable event beyond the control of the operator. Examples include, but are not limited to, non preventable equipment failure, natural disaster, act of war or terrorism, or external power curtailment, excluding a power curtailment due to an interruptible power service agreement from a utility. A flaring event due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, operator error or willful misconduct does not quality as an emergency. An emergency situation requires immediate corrective action to restore safe operation. A planned flaring event shall not be considered as an emergency. [District Rule 2201 and 4311] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere. [District Rule 4311] Federally Enforceable Through Title V Permit

23. The operator shall maintain records of the approved flare minimization plan and annual reports. [District Rule 4311] Federally Enforceable Through Title V Permit

24. Permittee shall keep accurate weekly records of duration of emergency and non-emergency operation, the nature of the emergency situation, and total gas combusted. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-515-5 **EXPIRATION DATE:** 02/29/2016

SECTION: 17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
DORMANT 62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR WITH A NORTH AMERICAN MODEL #GLE MAGNA-FLAME WITH FGR AND O2 ANALYZER/CONTROLLER (N.B. #826)

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary permit changes and/or retrofits required to comply with the applicable requirements of District Rule 4320 and all other applicable District regulations. [District Rule 4320] Federally Enforceable Through Title V Permit
3. The fuel supply line shall be physically disconnected from this unit. [District Rule 4320] Federally Enforceable Through Title V Permit
4. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4320]
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Fuel H2S, total sulfur, and methane content shall be determined semi-annually using the following test methods H2S: ASTM D6228; total sulfur: ASTM D1072; ASTM D3246, double GC for H2S and mercaptans or ASTM D6228; and methane content: ASTM D1945. [District Rule 4320]
9. Each fuel source shall be tested semi-annually for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which semi-annually testing may resume. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit
10. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
11. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rules 2520, 9.3.2 and 4320, 5.7.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.4.2 , 4305, 6.2.1 and 4320] Federally Enforceable Through Title V Permit

13. Emissions from the steam generator shall not exceed any of the following limits: 1.644 lb-SOx/MMBtu, 0.096 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

14. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit

15. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]

16. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit

18. Start-up is defined as 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. Shutdown is 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. [District Rule 4306, 3.25 and 3.22] Federally Enforceable Through Title V Permit

19. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 41.0 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1 and 4320] Federally Enforceable Through Title V Permit

21. Compliance with SOx emission limits shall be demonstrated within 60 days of initial operation under this ATC. [District Rule 4320]

22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

23. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

25. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320] Federally Enforceable Through Title V Permit

26. The following test methods shall be used: NOX (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; SOx - EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H2S content - EPA Method 11 or 15; and fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

27. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

28. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320] Federally Enforceable Through Title V Permit

29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320] Federally Enforceable Through Title V Permit

30. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

31. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1 and 4320] Federally Enforceable Through Title V Permit

32. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit

33. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit

34. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

36. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-516-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED SMITH MOON STEEL STEAM GENERATOR #3 (N.B. #827 A) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.010 lb/MMBtu; NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2; VOC: 0.003 lb/MMBtu; or CO: 0.0185 lb/MMBtu or 25 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
9. Daily emissions shall not exceed any of the following: 54.0 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
10. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-517-19 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED STRUTHERS THERMOFLOOD STEAM GENERATOR N.B. #981 WITH MAGNA-FLAME LOW NOX BURNER, FGR O2 ANALYZER/ CONTROLLER

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed: 0.093 lb-PM10/MMBtu or 0.007 lb-VOC/MMBtu. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
9. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu; or CO: 45 ppmvd @ 3% O2 or 0.0332 lb/MMBtu. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
10. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit
12. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
13. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
14. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-518-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS/TEOR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR N.B. #856 WITH GLE 4231 LOW NOX BURNER, FGR, O2 ANALYZER/CONTROLLER:

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 9.4.2 and 4406] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source, this source is located west of Interstate 5 in Kern County. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed: 0.073 lb-PM10/MMBtu or 0.0056 lb-VOC/MMBtu. [District Rule 2201 and 4406] Federally Enforceable Through Title V Permit
14. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 15 ppmvd @ 3% O2 or 0.018 lb/MMBtu; or CO: 37 ppmvd @ 3% O2 or 0.0273 lb/MMBtu. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
16. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadway paved is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
19. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
21. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
22. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
23. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-519-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9777 WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520 and 4406] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. and flue gas oxygen monitor. [District Rule 2201, 4305 and 4320] Federally Enforceable Through Title V Permit

11. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, VOC: 0.0056 lb/MMBtu, or CO: 0.027 lb/MMBtu or 37 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

12. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit

13. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

14. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadway paved is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit

16. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

17. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

20. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

21. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-520-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED STRUTHERS THERMOFLOOD STEAM GENERATOR N.B. #973 WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 MONITOR/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. This steam generator may only operate at the following locations: NW/4 and SW/4 of Section 7, Township 30S, Range 22E , SE/4 Section 8, Township 30S, Range 22E, NW/4 of Section 21, Township 31S, Range 22E, NE/4, NW/4, SE/4, and SW/4 of Section 1, Township 30S, Range 21E and NE/4, NW/4, SE/4, and SW/4 of Section 36, Township 29S, Range 21E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. The requirements of SJVUAPCD Rule 4351 (Amended October 19, 1995) do not apply to this source because this permit unit is located west of Interstate Highway 5. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
4. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520 and 4406] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Steam generator shall be equipped with operational instrumentation fuel gas volume flowmeter. [District Rules 2201 and 4305] Federally Enforceable Through Title V Permit
8. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu; NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2; SOx (as SO2): 0.00285 lb/MMBtu; VOC: 0.0027 lb/MMBtu; or CO: 0.0185 lb/MMBtu or 25 ppmvd @ 3% O2. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
9. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,855 lb NOx/year, 4.3 lb/SOx/day, or 27.8 lb CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. This unit is subject Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
12. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
13. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-521-10 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED C.E. NATCO STEAM GENERATOR #11 (N.B. #9788) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR) SYSTEM, AND O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
10. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

13. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

14. Steam generator shall be equipped with a fuel gas volume flowmeter. [District Rules 2201and 4305] Federally Enforceable Through Title V Permit

15. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu; NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2; SOx (as SO2) 0.00285 lb/MMBtu; VOC: 0.0056 lb/MMBtu; or CO: 0.027 lb/MMBtu or 37 ppmv @ 3% O2. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit

16. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

18. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-522-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STRUTHERS THERMOFLOOD NATURAL GAS-FIRED STEAM GENERATOR #12 (N.B. #979) WITH A NORTH AMERICAN MAGNA-FLAME MODEL GLE ULTRA LOW NOX BURNER, FGR AND O2 ANALYZER/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source because this permit unit is located west of Interstate Highway 5 in Kern County. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
10. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.0049 lb/MMBtu, NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, SOx (as SO2) 0.00285 lb/MMBtu, VOC: 0.0027 lb/MMBtu or CO: 0.0185 lb/MMBtu or 25 ppmv @ 3% O2. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
11. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

13. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

16. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 9.3.2 and 4406] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-523-13 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR #2 (N.B. #855) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
10. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

13. This unit is located west of Interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

14. Steam generator shall be equipped with a fuel gas volume flowmeter. [District Rules 2201and 4305] Federally Enforceable Through Title V Permit

15. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2): 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.006 lb/MMbtu or CO: 37 ppmvd @ 3% O2. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit

17. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadway is in addition to any associated with other steam injection or oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

18. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

19. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

20. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

21. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

22. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

26. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-524-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR (N.B. #776) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.006 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1] Federally Enforceable Through Title V Permit
10. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emissions from the steam generator shall not exceed either of the following limits: 32.7 lb-NOx/day or 56.3 lb-CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

14. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

17. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

18. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-525-18 **EXPIRATION DATE:** 02/29/2016

SECTION: NW1 **TOWNSHIP:** 30S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID#98) WITH NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR

PERMIT UNIT REQUIREMENTS

1. The sulfur content of fuel combusted shall not exceed 5 grains-S per 100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
2. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2 and County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
3. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 1081 (Amended December 16, 1993), 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source because this permit unit is located west of Interstate Highway 5. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Emission rates shall not exceed any of the following: NOx as NO2: 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, or CO: 14 ppmv @ 3% O2. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Emissions from the steam generator shall not exceed 0.096 lb-PM10/MMBtu or 0.0027 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. SOx (as SO2) emissions shall not exceed 87,629 lb/year based on a rolling 12 month period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permittee shall determine on at least a monthly basis the total amount of sulfur oxides (SOx as SO2) discharged to the atmosphere from the steam generator. When burning waste gas, permittee shall determine the SO2 concentration and the oxygen concentration (O2) in the discharge stack gas using a portable (hand-held) or transportable gas analyzer. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The SO2 analyzer(s) shall be calibrated, operated and maintained as specified by the manufacturer. Mass emissions of SO2 discharged to the atmosphere shall be calculated from the measured stack gas concentration of SO2 and O2, and the measured fuel rates (fuel gas + waste gas) using EPA F-Factors, determined in accordance with EPA Method 19. [District Rule 1081] Federally Enforceable Through Title V Permit
15. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Permittee shall maintain records documenting the amount of SO2 discharged by steam generator for a period of at least 5 years and shall make the records readily available for inspection upon District request. [District Rule 1070] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
19. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-526-17 **EXPIRATION DATE:** 02/29/2016

SECTION: SW23 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED STRUTHERS THERMOFLOOD STEAM GENERATOR #100 N.B.#980 WITH NORTH AMERICAN MAGNA-FLAME GLE LOW NOX BURNER, O2 CONTROLLER, AND FGR WITH BLOWER MOTOR AND VARIABLE SPEED DRIVE (VSD)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
6. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
7. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
9. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
10. Steam generator shall be equipped with an operational gas volume flowmeter that measures each fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 4306 and 4320] Federally Enforceable Through Title V Permit
11. This generator is permitted to operate at the following locations: SE/4 Section 35, and SW/4 Section 36, T29S R21E; all of Section 31, T29S R22E; all of Section 1 T30S R21E;, SW/4 Section 6, T30S, R22E; and all of Section 22, T31S R22E. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

13. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit units: PTO S-1141-250, PTO S-1141-479, PTO S-1141-495 and PTO S-1128-116. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

14. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

15. Emission rates shall not exceed any of the following limits: 0.096 lb-PM10/MMBtu, or 0.0027 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

17. Including startup and shutdown periods, maximum emissions from the steam generators shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,965 lb-NOx/year, 0.084 lb-CO/MMBtu, 27.8 lb-CO/day, and 10,129 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit

18. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

19. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the sulfur content as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, 4320] Federally Enforceable Through Title V Permit

20. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

21. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

22. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

23. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

24. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

25. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

26. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-527-15 **EXPIRATION DATE:** 02/29/2016

SECTION: v **TOWNSHIP:** v **RANGE:** v

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 99) WITH NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR

PERMIT UNIT REQUIREMENTS

1. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
3. This generator is approved to operate at the following locations: SW/4 Sec 23, T31S, R22E; Sec 31, T29S, R22E; SW/4 Sec 36, T29S, R21E; Sec 1, T30S, R21E; and SE/4 Sec 35, T29S, R21E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall notify the District Compliance Division in writing of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. The sulfur content of fuel combusted shall not exceed 5 grains-S per 100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: 0.096 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit
7. Emission rates, except during startup and shutdown, shall not exceed any of the following: 0.018 lb-NOx/MMBtu (as NO2) (or 15 ppmvd @ 3% O2), or 25 ppmvd CO @ 3% O2. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320] Federally Enforceable Through Title V Permit
8. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,855 lb-NOx/yr, 28.1 lb-CO/day, and 10,266 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
11. The permittee shall keep daily records of the amount of natural gas and TEOR gas combusted, permit number(s) of TEOR systems providing gas for incineration, and shall make records available for inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 9.3.2 and 4406 and Kern County Rule 424] Federally Enforceable Through Title V Permit

15. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

19. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-528-13 **EXPIRATION DATE:** 02/29/2016

SECTION: SW23 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR (#101) WITH NORTH AMERICAN GLE MAGNA-FLAME LOW NOX BURNER, FGR, AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
2. This generator is permitted to operate at the following locations: SE/4 Section 35, and SW/4 Section 36, T29S R21E; all of Section 31, T29S R22E; all of Section 1 T30S R21E;, SW/4 Section 6, T30S, R22E; and all of Section 22, T31S R22E. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made in writing no later than 48 hours after starting operation at the location. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
4. The operator shall fire the unit only on natural gas and vapor recovery gas from the following permit units: PTO S-1141-250, PTO S-1141-479, PTO S-1141-495 and PTO S-1128-116. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
5. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406 and 4320] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following limits: 0.096 lb-PM10/MMBtu or 0.0027 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu except during start-up or shutdown. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Including startup and shutdown periods, maximum emissions from the steam generators shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,965 lb-NOx/year, 0.084 lb-CO/MMBtu, 27.8 lb-CO/day, and 10,129 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the sulfur content as determined by periodic analytical testing or fuel supplier invoices/certifications. [District Rules 2201, 2520, 4320] Federally Enforceable Through Title V Permit
11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
16. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-529-17 **EXPIRATION DATE:** 02/29/2016

SECTION: SW23 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
69.0 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9769 WITH A NORTH AMERICAN, MODEL MAGNA FLAME GLE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. This generator is permitted to operate at the following locations: Section SW23 of Township 31S, Range 22E; Section 31 of Township 29S, Range 22E; Sections SW36 and SE35 of Township 29S, Range 21E; and Section 1 of Township 30S, Range 21E; and Section SW6 of Township 30S and Range 22E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
3. Total sulfur content of natural gas combusted shall not exceed 1.0 grain/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. Emissions from the steam generator shall not exceed any of the following limits: 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except during start-up and shutdown periods, and the initial shakedown period, emissions from the steam generator shall not exceed any of the following limits: 10.5 ppmvd NOx @ 3% O2 or 0.0128 lb-NOx/MMBtu or 25 ppmvd CO @ 3% O2 or 0.0185 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
6. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.036 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 27.6 lb-NOx/day, 7,737 lb-NOx/yr, 48.7 lb-CO/day, and 11,182 lb-CO/yr. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rule 2520 and 4606] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-530-9 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR #1 (N.B.#9814) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER SYSTEM WITH FGR

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
11. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Emissions from the steam generator shall not exceed any of the following limits: 0.073 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

14. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, 4320 and 4351, 5.1] Federally Enforceable Through Title V Permit

15. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

17. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit

18. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR gas incinerated in this unit. [District Rules 2201 and 4406] Federally Enforceable Through Title V Permit

19. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit

20. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

22. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

23. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

24. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

25. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

37. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

40. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-531-9 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR #3 (N.B.#3194) WITH FGR

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
11. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emissions from the steam generator shall not exceed any of the following limits: 0.073 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
15. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
17. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
18. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
19. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
21. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
22. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
23. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
24. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
26. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
27. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
28. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
29. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
30. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
31. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
32. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
33. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
34. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
35. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
36. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
37. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-532-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR GAS-FIRED NATIONAL TANK STEAM GENERATOR #5 (N.B.#6870) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
10. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

15. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201]

16. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, NOx (as NO2): 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.0056 lb/MMBtu or CO: 0.027 lb/MMBtu or 37 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

17. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,855 lb NOx/year. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit

18. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

19. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit

21. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
28. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
31. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-533-9 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR #7 (N.B. #701) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
11. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Emissions from the steam generator shall not exceed any of the following limits: 0.073 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

14. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

15. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit

17. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

18. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit

19. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

21. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

22. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit

23. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

24. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
26. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
27. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
28. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
29. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
30. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
31. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
32. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
33. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
34. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
35. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
36. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
37. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-534-9 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED HEATER TECHNOLOGY STEAM GENERATOR #9 (N.B. #8) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing and monitoring shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing and monitoring shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
11. Steam generator shall be equipped with the following operational instrumentation: fuel gas volume flowmeter and TEOR gas volume flowmeter. [District Rules 2201, 4305 and 4320] Federally Enforceable Through Title V Permit
12. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424 and District Rules 2520, 4406] Federally Enforceable Through Title V Permit
14. Emissions from the steam generator shall not exceed any of the following limits: 0.073 lb-PM10/MMBtu, or 0.0056 lb-VOC/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
15. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
16. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
17. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
18. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 32.7 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
20. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
21. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
22. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
23. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
25. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
26. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
27. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
28. Permittee shall consume no more than 6,290 barrels per day of oil on a daily maximum average and no more than 5,700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
29. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
30. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
31. Permittee shall have installed an operable scrubber on the equipment. Exhaust gases from the generator shall be ducted through an operable scrubber. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
32. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
34. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit
35. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit
36. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

38. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-535-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NE26 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED DANIEL STEAM GENERATOR #11 (N.B. #124) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
7. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
10. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520, 4406] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. This unit is located west of interstate 5 in Kern county. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. This generator is permitted to operate at the following locations: Sections 21, 22, 25, 26, and 27 of Township 31S, Range 22E. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
16. Steam generator shall be equipped with operational gas volume flowmeters that measures each the fuel gas and the vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
17. Except for periods of startup and shutdown, emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, NOx (as NO2): 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.0056 lb/MMBtu, CO: 0.027 lb/MMBtu or 37 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Daily emissions shall not exceed any of the following: 32.7 lb NOx/day, 9,885 lb NOx/year. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5.0 gr S/100 scf. [District Rules 2201,4406, and 4320] Federally Enforceable Through Title V Permit
21. Permittee shall maintain no less than 0.45 miles of asphalt paved roadway. The 0.45 miles of roadways is in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Permittee shall measure and record, at least monthly, the sulfur content and BTU content of the TEOR gas incinerated in this unit. [District Rule 2201 and 4406] Federally Enforceable Through Title V Permit
23. Permittee shall maintain with the permit a current listing of all thermally enhanced well vent control systems providing TEOR vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain daily records of volume of fuel gas burned, TEOR gas incinerated, and permit number(s) of TEOR systems providing gas for incineration. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

27. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

28. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

29. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

30. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

31. Permittee shall consume no more than 6290 barrels per day of oil on a daily maximum average and no more than 5700 barrels per day of oil on an annual average basis. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

32. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

33. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

34. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

35. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

36. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

37. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-17] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

39. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

40. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

41. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-17] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-548-3 **EXPIRATION DATE:** 02/29/2016

EQUIPMENT DESCRIPTION:
200 HP JOHN DEERE MODEL 6076A DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Engine shall be equipped with turbocharger, intercooler/aftercooler and pollution control valve [PCV]. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. This unit is subject to Emergency Standby Engine Conditions on the facility wide permit S-1141-0. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-549-12 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED STRUTHERS STEEL STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW-NOX BURNER, WITH AN O2 ANALYZER/CONTROLLER AND FLUE GAS RECIRCULATION (FGR) SYSTEM WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS (NATIONAL BOARD #1026)

PERMIT UNIT REQUIREMENTS

1. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Emissions from the steam generator shall not exceed any of the following limits: 0.126 lb-SOx/MMBtu, 0.096 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
3. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
4. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
5. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District NSR Rule] Federally Enforceable Through Title V Permit
8. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-550-10 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED SMITH MOON STEEL STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH AN O2 ANALYZER/CONTROLLER AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS (NATIONAL BOARD #879)

PERMIT UNIT REQUIREMENTS

1. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201]
2. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions from the steam generator shall not exceed any of the following limits: 0.126 lb-SOx/MMBtu, 0.073 lb-PM10/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201and 4320] Federally Enforceable Through Title V Permit
4. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.0182 lb-NOx/MMBtu or 51 ppmvd CO @ 3% O2 or 0.0375 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320] Federally Enforceable Through Title V Permit
5. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
6. During start-up and shutdown periods emissions from the steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 54.0 lb-NOx/day, 9,965 lb-NOx/yr, 56.3 lb-CO/day, and 20,531 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
10. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
11. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-551-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #2369) WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA LOW NOX BURNER, AN O2 CONTROLLER, AND A FLUE GAS RECIRCULATION SYSTEM

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit is located west of interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
10. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM10: 0.078 lb/MMBtu, SOx (as SO2) 0.126 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District NSR Rule and District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 45 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

14. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]

15. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit

17. Permittee shall maintain daily records of volume of natural gas burned, TEOR and TVC gas incinerated, and permit number(s) of systems providing gas for incineration and shall make the preceding five years records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

18. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

19. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

20. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

21. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

22. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

23. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

25. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

38. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-552-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #192) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, AND FGR

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
10. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM10: 0.078 lb/MMBtu, SOx (as SO2) 0.126 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2 or CO: 0.033 lb/MMBtu or 45 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
16. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain daily records of volume of natural gas burned, TEOR and TVC gas incinerated, and permit number(s) of systems providing gas for incineration and shall make the preceding five years records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
19. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
20. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit
21. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
22. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
23. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
24. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
26. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
27. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
28. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
29. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
30. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
31. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit
32. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
33. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
34. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
35. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
36. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
37. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
38. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-553-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #552) WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, O2 ANALYZER/CONTROLLER, AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201]
10. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Emission rates shall not exceed any of the following: PM10: 0.078 lb/MMBtu, SOx (as SO2) 0.126 lb/MMBtu, or VOC: 0.006 lb/MMBtu . [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 45 ppmv @ 3% O2. [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall maintain daily records of volume of natural gas burned, TEOR and TVC gas incinerated, and permit number(s) of systems providing gas for incineration and shall make the preceding five years records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
18. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
19. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit
20. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
21. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
22. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit
23. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

25. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

35. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

36. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

37. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-554-11 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #690) WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA LOW NOX BURNER, AN O2 CONTROLLER, AND A FLUE GAS RECIRCULATION SYSTEM

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. This generator is permitted to operate at the following locations: Section 8 and NW17 of Township 32S, Range 23E. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The permittee shall notify the District Compliance Division in writing of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates, except during startup and shutdown, shall not exceed any of the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, NOx (as NO2): 15 ppmv @ 3% O2 or 0.018 lb/MMBtu, VOC: 0.006 lb/MMBtu or CO: 45 ppmvd @ 3% O2. [District Rule 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

13. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. This unit is located west of Interstate 5 in Kern County. Therefore, the requirements of District Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit

16. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

17. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit

18. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

19. Sulfur emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 - one hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [District Rules 2520 and 4406] Federally Enforceable Through Title V Permit

20. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

21. The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the condition below. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the condition below, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

22. The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted: A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and C. to inspect any equipment, operation, or method required in this Authority to Construct; and D. to sample emissions from the source(s). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

24. The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

25. The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

26. Permittee shall consume no more than 5125 barrels per day of oil on a daily maximum average and no more than 4648 barrels per day of oil on an annual average basis. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

27. The sulfur content of the fuel shall be no greater than 1.5% by weight on a daily maximum average and no greater than 1.5% by weight on an annual average basis, as determined by ASTM Methods D115-68, D129-64, or D151-64, or equivalent methods approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

28. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the District, the California Air Resource Board, and the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

29. Permittee shall have installed operable scrubbers on the equipment. Exhaust gases from the generators shall be ducted through operable scrubbers. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

30. Permittee shall not discharge into the atmosphere SO2 in excess of 0.063 lbs/MMBtu. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

31. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance tests for SO2, and furnish the District and the EPA a written report of the results of such tests. The tests for SO2 shall be conducted on an annual basis. The performance tests shall be conducted for each scrubber required for the generator. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

32. Permittee shall not discharge into the atmosphere NOx in excess of 0.277 lb/MMBtu (maximum 2-hour average). [PSD SJ 78-16] Federally Enforceable Through Title V Permit

33. Within 60 days after achieving the maximum production rate of the proposed facility, but not later than 180 days after initial start-up of this facility (as defined in 40 CFR 60.2(o)), and at such other times as specified by the EPA, permittee shall conduct performance test for NOx, and furnish the District and the EPA written report of the results of such tests. The tests for NOx shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

34. Permittee shall install and operate ammonia injection equipment to control nitrogen oxide emissions on the steam generator. This condition may be amended if other control technologies are determined by EPA to satisfy BACT requirements, in accordance with the periodic BACT review procedure below. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

35. Permittee shall submit updated Best Available Control Technology (BACT) proposals every six months. Based on the information submitted and on other information which is available at that time, EPA may impose more stringent emission limits for NOx. In no event shall EPA set a higher emission limit for NOx. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Performance tests for the emission of NOx and SO2 shall be conducted and results reported in accordance with the methods set forth in Parts 60.8 and 60.46 of the Standards of Performance for New Sources. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA. [PSD SJ 78-16] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-555-17 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #7953) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, FGR AND SO2 SCRUBBER SHARED WITH '-556 AND '-557

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Exhaust from unit shall be directed to SOx scrubber authorized herein except when unit is combusting only PUC quality natural gas with a sulfur content not exceeding 1.0 gr S/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber control efficiency shall be maintained at least 95% by weight sulfur compounds or greater, or SO2 concentration at the stack gas outlet that shall not exceed 9 ppmvd corrected to 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Daily average pH of scrubber liquor (calculated from hourly averages) shall be maintained between 6 and 8, and shall be continuously monitored. [District 2201Rule] Federally Enforceable Through Title V Permit
10. SO2 scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when total H2S loading to any one of the steam generators exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H2S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H2S concentration. The H2S loading shall be calculated using the generator actual fuel volumetric flow rate and H2S concentration of the TEOR and fuel gas. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Annual combined emissions of PM10 from units '-555, '-556, and '-557 shall not exceed 115,687 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall demonstrate compliance with the annual PM10 combined emission limit for units '-555, '-556, and '-557 by calculation using the amount of fuel combusted, and either the results from the latest source test or the permitted emission factor if there is no PM10 source test data. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day and 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, SOx (as SO2): 0.063 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. Except during periods of startup and shutdown, emission rates shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 37 ppmv @ 3% O2 or 0.0273 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Compliance with PM10 emissions limits (lb/MMBtu) shall be demonstrated by source testing, at startup and at least once every twelve (12) months thereafter. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Compliance with the scrubber control efficiency requirement shall be demonstrated at least once every twelve (12) months . [District Rule 2201]
21. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of H2S loading (lb H2S/min) and dates and duration of Brinks Mist Eliminator operation and shall make such records readily available for District. [District Rule 2201] Federally Enforceable Through Title V Permit
25. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
26. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
27. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-556-19 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #653) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH O2 ANALYZER/CONTROLLER AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), ELECTRONIC CONTROLS AND SHARED SO2 SCRUBBER LISTED ON S-1141-555

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Exhaust from unit shall be directed to SOx scrubber authorized herein except when unit is combusting only PUC quality natural gas with a sulfur content not exceeding 1.0 gr S/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber control efficiency shall be maintained at least 95% by weight sulfur compounds or greater, or SO2 concentration at the stack gas outlet that shall not exceed 9 ppmvd corrected to 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Daily average pH of scrubber liquor (calculated from hourly averages) shall be maintained between 6 and 8, and shall be continuously monitored. [District 2201Rule] Federally Enforceable Through Title V Permit
10. SO2 scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when total H2S loading to any one of the steam generators exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H2S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H2S concentration. The H2S loading shall be calculated using the generator actual fuel volumetric flow rate and H2S concentration of the TEOR and fuel gas. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
15. Annual combined emissions of PM10 from units '-555, '-556, and '-557 shall not exceed 115,687 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day and 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall demonstrate compliance with the annual PM10 combined emission limit for units '-555, '-556, and '-557 by calculation using the amount of fuel combusted, and either the results from the latest source test or the permitted emission factor if there is no PM10 source test data. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Except during periods of startup and shutdown, emission rates shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2 or 0.0375 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
19. Emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, or SOx (as SO2): 0.063 lb/MMBtu or 9 ppmv @ 3% O2, or VOC: 0.006 lb/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
20. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Compliance with PM10 emissions limits (lb/MMBtu) shall be demonstrated by source testing, at startup and at least once every twelve (12) months thereafter. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Compliance with the scrubber control efficiency requirement shall be demonstrated at least once every twelve (12) months . [District Rule 2201]
23. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
25. Permittee shall maintain records of H2S loading (lb H2S/min) and dates and duration of Brinks Mist Eliminator operation and shall make such records readily available for District. [District Rule 2201] Federally Enforceable Through Title V Permit
26. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

29. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-557-17 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED C.E. NATCO STEAM GENERATOR (NATIONAL BOARD #9333, SMPS #8) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW-NOX BURNER, WITH O2 ANALYZER/CONTROLLER AND FLUE GAS RECIRCULATION (FGR) SYSTEM WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), ELECTRONIC CONTROLS AND SHARED SO2 SCRUBBER LISTED ON S-1141-555

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Exhaust from unit shall be directed to SOx scrubber authorized herein except when unit is combusting only PUC quality natural gas with a sulfur content not exceeding 1.0 gr S/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Scrubber control efficiency shall be maintained at least 95% by weight sulfur compounds or greater, or SO2 concentration at the stack gas outlet that shall not exceed 9 ppmvd corrected to 3% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Scrubber recirculation liquid pH shall be maintained only by the addition of caustic unless prior approval for an alternative pH maintenance method is received from the District. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Daily average pH of scrubber liquor (calculated from hourly averages) shall be maintained between 6 and 8, and shall be continuously monitored. [District 2201Rule] Federally Enforceable Through Title V Permit
10. SO2 scrubber exhaust shall be vented to operational Brinks mist eliminator prior to being exhausted to atmosphere when total H2S loading to any one of the steam generators exceeds 1.24 lb/min for an aggregate of three or more minutes in any one hour period. H2S concentration of the TEOR gas shall be determined and entered into the generator fuel throughput processor weekly using gas detection tubes to determine H2S concentration. The H2S loading shall be calculated using the generator actual fuel volumetric flow rate and H2S concentration of the TEOR and fuel gas. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Scrubber mist eliminator shall be properly cleaned and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
13. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permittee shall pave and maintain with asphalt no less than 0.45 miles of roadway. The 0.45 miles of roadways constructed are in addition to new roadways associated with other steam injection and oil production well projects [District Rule 2201] Federally Enforceable Through Title V Permit
15. Annual combined emissions of PM10 from units '-555, '-556, and '-557 shall not exceed 115,687 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall demonstrate compliance with the annual PM10 combined emission limit for units '-555, '-556, and '-557 by calculation using the amount of fuel combusted, and either the results from the latest source test or the permitted emission factor if there is no PM10 source test data. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Emission rates shall not exceed any of the following: NOx (as NO2): 54.0 lb/day and 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emission rates shall not exceed any of the following: PM10: 0.073 lb/MMBtu, or SOx (as SO2): 0.063 lb/MMBtu or 9 ppmv @ 3%O2, or VOC: 0.006 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
19. Except during periods of startup and shutdown, emission rates shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 50 ppmv @ 3% O2 or 0.0375 lb/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
20. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Compliance with PM10 emissions limits (lb/MMBtu) shall be demonstrated by source testing, at startup and at least once every twelve (12) months thereafter. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Compliance with the scrubber control efficiency requirement shall be demonstrated at least once every twelve (12) months . [District Rule 2201]
23. Whenever the unit is switched to scrubbed operation, compliance source testing for SOx shall be conducted within 60 days of initial scrubbing date unless source testing has occurred within the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
25. Permittee shall maintain records of H2S loading (lb H2S/min) and dates and duration of Brinks Mist Eliminator operation and shall make such records readily available for District. [District Rule 2201] Federally Enforceable Through Title V Permit
26. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
27. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

29. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-558-12 **EXPIRATION DATE:** 02/29/2016

SECTION: NW17 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #2398) WITH A NORTH AMERICAN MAGNA-FLAME MODEL GLE ULTRA LOW NOX BURNER, FGR AND O2 CONTROLLER

PERMIT UNIT REQUIREMENTS

1. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rule 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rule 4306] Federally Enforceable Through Title V Permit
5. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Amended December 17, 1992), and 4301 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. The requirements of SJVUAPCD Rule 4351(Amended October 19, 1995) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Flue gas recirculation system may be designed such that ambient air may be drawn into flue gas recirculation piping. [District Rule 2201] Federally Enforceable Through Title V Permit
10. When combustion air orifice and flue gas recirculation orifice have been used to demonstrate compliance they shall not be changed without a District-witnessed compliance demonstration. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed: NOx (as NO2): 54.0 lb/day or 9855 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates shall not exceed any of the following: PM10: 0.096 lb/MMBtu, SOx (as SO2) 0.126 lb/MMBtu, or VOC: 0.006 lb/MMBtu. [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv @ 3% O2, or CO: 37 ppmv @ 3% O2. [District Rule 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. Fuel gas sulfur content shall not exceed 5 gr S/100 dscf unless SOx emissions are reduced by 95% or to 9 ppmv SOx @ 3% O2 in the exhaust with scrubber. [District Rule 4320]
15. During start-up and shutdown periods, emissions from the steam generator shall not exceed the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall maintain with the permit a current listing of all TEOR and TVC gas systems providing vapors to this steam generator and shall make such listing readily available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit
17. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
19. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
20. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-560-9 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
50,762 GALLON FREE WATER KNOCKOUT VESSEL AND VAPOR RECOVERY SYSTEM SHARED WITH -127 (K-709)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-571-4 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF WATER STORAGE TANK (T-600) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor recovery system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Emissions from this tank and associated tank vapor recovery system components, which are not exempt from fugitive component counts, shall not exceed 0.0 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-572-4 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF WATER STORAGE TANK (T-900) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. Maximum VOC content of vapor in the tank vapor recovery system shall not exceed 10% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Emissions from this tank and associated tank vapor recovery system components, which are not exempt from fugitive component counts, shall not exceed 0.0 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-575-7 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
1,209 BBL FREE WATER KNOCKOUT VESSEL (K431) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. Noncondensable vapors from pressure relief valves shall be routed only to knockout vessel listed on S-1141-560 and emergency flare S-1141-513. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-576-7 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
1,209 BBL FREE WATER KNOCKOUT VESSEL (K707) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. Noncondensable vapors from pressure relief valves shall be routed only to knockout vessel listed on S-1141-560 and emergency flare S-1141-513. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-577-6 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
699 BBL FREE WATER KNOCKOUT VESSEL (K708) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. Noncondensable vapors from pressure relief valves shall be routed only to knockout vessel listed on S-1141-560 and emergency flare S-1141-513. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-578-5 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
27,193 BBL CRUDE OIL PRODUCTION TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-579-5 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
27,193 BBL CRUDE OIL PRODUCTION TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-580-4 **EXPIRATION DATE:** 02/29/2016

SECTION: SW09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
27,193 BBL CRUDE OIL TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-581-3 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-01 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall only vent to vapor recovery system identified on Permit S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight.. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-582-3 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-02 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall only vent to vapor recovery system identified on Permit S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District NSR Rule and District Rule 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-583-3 **EXPIRATION DATE:** 02/29/2016

SECTION: SE22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-03 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall be used as wash tank, stock tank, shipping tank, reject tank, sump tank, or produced water tank. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall only vent to vapor recovery system identified on Permit S-1141-479, except during periods of tank cleaning and maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7 of Rule 4623. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
8. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
9. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-585-7 **EXPIRATION DATE:** 02/29/2016

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-590-2 **EXPIRATION DATE:** 02/29/2016

SECTION: SW9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
8,750 BBL VAPOR CONTROLED FIXED ROOF PRODUCED WATER STORAGE TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-591-3 **EXPIRATION DATE:** 02/29/2016

SECTION: SW9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
8,750 BBL VAPOR CONTROLED FIXED ROOF PRODUCED WATER STORAGE TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control equipment listed in S-1141-127 except during periods of tank cleaning and maintenance. VOC emissions shall be reduced by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Maximum VOC content of vapor in the tank vapor space and vapor control system piping shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit is subject to Heavy Oil Tank Inspection and Maintenance Conditions on the facility wide permit S-1141-0. [District Rules 2201 and, 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Heavy Oil Tank Cleaning Conditions on the facility wide permit S-1141-0. [District Rule 2080] Federally Enforceable Through Title V Permit
6. This unit is subject to Heavy Oil Tank Testing Conditions on the facility wide permit S-1141-0. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-594-5 **EXPIRATION DATE:** 02/29/2016

SECTION: NW21 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
62.5 MMBTU/HR STEAM GENERATOR WITH A NORTH AMERICAN GLE 4231 BURNER, AN O2 CONTROLLER, AND FLUE GAS RECIRCULATION

PERMIT UNIT REQUIREMENTS

1. Emissions shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.00285 lb/MMBtu, VOC: 0.0054 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmv at 3% O2, or CO: 0.037 lb/MMBtu or 50 ppmvd @3% O2. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
3. This unit is subject to Steam Generator General Conditions on the facility wide permit S-1141-0. [District Rules 2520, 4201, 4301, 4305, and 4306] Federally Enforceable Through Title V Permit
4. This unit is subject to Steam Generator Fuel Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
5. This unit is subject to Steam Generator Source Testing Conditions on the facility wide permit S-1141-0. [District Rules 1081, 4305, and 4306] Federally Enforceable Through Title V Permit
6. This unit is subject to Steam Generator Periodic Monitoring Conditions on the facility wide permit S-1141-0. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
7. Formerly S-1549-129.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-598-0 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-599-0 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-600-0 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-601-0 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-602-0 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-603-0 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 9 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

PERMIT UNIT REQUIREMENTS

1. This tank shall either (1) be equipped with its own pressure-vacuum valve, or (2) share a pressure-vacuum valve among multiple emergency tanks at Station 1-09. [District Rule 2201]
2. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free (as defined in Rule 4623, amended May 19, 2005) condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Tank shall only be operated for emergency purposes as defined below. No non-emergency use of the tank is permitted. [District Rule 2201]
5. An emergency is defined as an unforeseeable failure or malfunction of operating equipment that (1) is not due to neglect or disregard of air pollution laws or rules; (2) is not intentional or the result of negligence; (3) is not due to improper maintenance; and (4) is necessary to prevent or control an unsafe situation. [District Rule 2201]
6. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
7. Crude oil throughput shall not exceed 2,000 barrels per day during an emergency event. [District Rules 2201]
8. The permittee shall notify the District of any emergency use of the tank within 48 hours after organic liquid is introduced into the tank. [District Rule 1070]
9. Tank shall be emptied within 48 hours of resolving the emergency event and after it is safe to enter the area. [District Rule 2201]
10. The permittee shall report to the District in writing within 30 days of the resolution of the emergency. The report shall include (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event, (5) a statement that the failure or malfunction has been corrected, the date corrected, and proof of correction; (6) a specific statement of the reason or cause for the occurrence; (7) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future. [District Rule 1070]
11. Permittee shall maintain records showing (1) date(s) the organic liquid is first introduced into the tank, (2) the date(s) the tank is fully drained, (3) a description of each emergency event, (4) the barrels (or gallons) of organic liquid introduced into the tank during each emergency event. [District Rule 1070]
12. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-604-0 **EXPIRATION DATE:** 02/29/2016

SECTION: SE 35 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
500 BBL FIXED-ROOF (BAKER TYPE) CRUDE OIL STORAGE TANK (WELL 35G-23)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
2. Tank liquid throughput shall not exceed 30 barrels of oil per monthly averaged day. [District Rule 2201]
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 2201 and 4623]
4. The TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623]
5. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rules 2201 and 4623]
6. Records of TVP and API gravity testing shall be maintained on site and shall be made available for District inspection upon request. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623]
7. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 1070, 2201, and 4623]
8. Permittee shall maintain monthly records of average daily crude oil throughput. [District Rules 1070 and 2201]
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2201, and 4623]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1141-609-1 **EXPIRATION DATE:** 02/29/2016

SECTION: SW 09 **TOWNSHIP:** 32S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
324 BHP CUMMINS MODEL QSB7-G5 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]
6. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115]
7. Emissions from this IC engine shall not exceed any of the following limits: 2.8 g-NOx/bhp-hr, 2.6 g-CO/bhp-hr, or 0.2 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]
8. Emissions from this IC engine shall not exceed 0.147 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]
9. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
10. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
11. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]
12. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]
14. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]
15. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]
16. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]

ATTACHMENT C

Detailed Facility List

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

CHEVRON USA INC
HEAVY OIL WESTERN STATIONARY SOURCE
CA

FAC # S 1141
STATUS: A
TELEPHONE:

TYPE: TitleV
TOXIC ID: 50219

EXPIRE ON: 02/29/2016
AREA: 101 /
INSP. DATE: 10/16

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-1-6	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #3 (GAS/OIL FIRED) WITH THERMOX O2 CONTROLLER
S-1141-2-9	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR (GAS/OIL FIRED) #5 WITH THERMOX O2 CONTROLLER PERMITTED FOR 5 LOCATIONS (SECT'S 2, 15, 18, 21, & 22, T32S, R23E)
S-1141-3-2	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR STRUTHERS STEAM GENERATOR #9
S-1141-4-1	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25,200,000 BTU/HR STEAM GENERATOR
S-1141-5-3	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #11
S-1141-6-3	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #12
S-1141-7-3	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #14
S-1141-8-2	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 BTU/HR NATIONAL STEAM GENERATOR #16
S-1141-9-7	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR STRUTHERS STEAM GENERATOR #19 (OIL FIRED) WITH THERMOX O2 CONTROLLER
S-1141-10-6	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR STRUTHERS STEAM GENERATOR #22 (OIL FIRED) WITH THERMOX O2 CONTROLLER
S-1141-11-9	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #23 WITH NORTH AMERICAN BURNER, 20 HP COMBUSTION AIR BLOWER, AND THERMOX O2 ANALYZER
S-1141-12-5	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #25 (OIL FIRED) WITH THERMOX O2 CONTROLLER
S-1141-13-8	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR STRUTHERS STEAM GENERATOR #26, WITH NORTH AMERICAN BURNER, 20 HP COMBUSTION AIR BLOWER AND THERMOX O2 ANALYZER
S-1141-14-6	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #29, WITH NORTH AMERICAN BURNER, 20 HP COMBUSTION AIR BLOWER AND THERMOX O2 ANALYZER
S-1141-15-6	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #32 (GAS/OIL FIRED) WITH THERMOX O2 CONTROLLER
S-1141-16-5	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #35 (GAS/OIL FIRED) WITH THERMOX O2 CONTROLLER
S-1141-17-2	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #36
S-1141-18-9	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #37, WITH NORTH AMERICAN BURNER, 20 HP COMBUSTION AIR BLOWER AND THERMOX O2 ANALYZER

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-19-28	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED STRUTHERS STEAM GENERATOR 21S SG#7 (SN 80-37391-2, NB 983, DIS 20629-81) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, AND O2 CONTROLLER
S-1141-20-6	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR STRUTHERS OIL FIRED STEAM GENERATOR #40 (DIS 13156-67) WITH THERMOX O2 CONTROLLER
S-1141-21-14	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STEAM GENERATOR #41 (GAS FIRED) WITH LOW-NOX BURNER, FLUE GAS RECIRCULATION, O2 MONITOR/CONTROLLER, AND SO2 FLUE GAS SCRUBBER
S-1141-22-5	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS GAS/TEOR GAS FIRED STEAM GENERATOR #42 WITH NORTH AMERICAN #6131 BURNER, O2 ANALYZER/CONTROLLER AND SOX SCRUBBER PERMITTED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS
S-1141-23-8	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR NATURAL/TEOR GAS FIRED STEAM GENERATOR #43 WITH O2 CONTROLLER, LOW-NOX BURNER AND FLUE GAS RECIRCULATION
S-1141-24-2	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR PORTABLE STEAM GENERATOR #44
S-1141-25-10	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #47 (GAS/OIL FIRED) WITH THERMOX O2 CONTROLLER AND HEATER TECH SO2 SCRUBBER
S-1141-26-37	62,500 KBTU/HR STEAM GENERATOR	3020-02 H	1	1,080.00	1,080.00	A	DORMANT 62.5 MMBTU/HR STRUTHERS THERMOFLOOD NATURAL GAS/TEOR GAS/TVC VAPORS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL GLE 4231 ULTRA-LOW NOX BURNER, FGR, A THERMOX O2 CONTROLLER, VAPOR PIPING FROM TEOR SYSTEM, VAPOR PIPING FROM TVC SYSTEMS, AND A SULFA SCRUB HYDROGEN SULFIDE (H2S) SYSTEM (COMMON TO -31, -549, -550, -551, -552, -553, -555, -556, -557 AND -558) (#48, DIS #20660-81, NATIONAL BOARD #1041)
S-1141-27-13	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED SMITH MOON STEEL STEAM GENERATOR #49 (SN 74-37127-2, NB 669, DIS 11871-76) WITH FGR, NORTH AMERICAN BURNER, O2 ANALYZER/CONTROLLER.
S-1141-28-8	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR NATURAL/TEOR GAS FIRED STEAM GENERATOR #50 WITH O2 CONTROLER, LOW NOX BURNER, FLUE GAS RECIRCULATION
S-1141-29-12	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR NATURAL/TEOR GAS FIRED STEAM GENERATOR #56 WITH O2 CONTROLLER, LOW-NOX BURNER, AND FLUE GAS RECIRCULATION
S-1141-30-13	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR NATURAL AND TEOR GAS FIRED STEAM GENERATOR #58 WITH NORTH AMERICAN LOW NOX BURNER, 50 HP COMBUSTION AIR BLOWER, FLUE GAS RECIRCULATION SYSTEM, HEATER TECH SO2 SCRUBBER AND THERMOX O2 ANALYZER/CONTROLLER

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-31-38	62.5 MMBtu	3020-02 H	1	1,080.00	1,080.00	A	DORMANT 62.5 MMBTU/HR NATURAL GAS/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR #59 (DIS# 20639-81, NATIONAL BOARD #1352), WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER AND FGR PERMITTED TO OPERATE WITH EITHER AN AIR-FUEL MIXING ROD OR A MULTI-PORT (AKA GATLING GUN) PRIMARY MIXER
S-1141-32-9	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	SCRUBBED 62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #73 (SN 75-37149, NB 745, DIS 11865-77) WITH NORTH AMERICAN BURNER, O2 ANALYZER/CONTROLLER AND FGR.
S-1141-33-13	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED C E NATCO STEAM GENERATOR #74 (SN T-7294201-04, NB 858, DIS 30580-81) WITH NORTH AMERICAN BURNER, O2 ANALYZER/CONTROLLER, FGR, AND PIPING FROM TEOR OPERATIONS S-1141-253 AND '-263
S-1141-34-12	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR CE NATCO NATURAL GAS/TEOR GAS/TVC GAS FIRED STEAM GENERATOR #75 (SN T-7294201-05, NB 871, DIS 30581-81) WITH NORTH AMERICAN BURNER, AND FGR.
S-1141-35-14	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED CE NATCO STEAM GENERATOR #76 (SN T-7294201-03, NB 843, DIS 30582-81) WITH NORTH AMERICAN BURNER, FGR, AND O2 ANALYZER/CONTROLLER.
S-1141-36-7	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS STEAM GENERATOR #77 (GAS/OIL FIRED) WITH AIRPOL SO2 SCRUBBER, LOW-NOX BURNER AND WESTINGHOUSE O2 CONTROLLER
S-1141-37-7	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS STEAM GENERATOR #78 (GAS/OIL FIRED) WITH AIRPOL SO2 SCRUBBER, LOW-NOX BURNER AND WESTINGHOUSE O2 CONTROLLER
S-1141-38-33	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MM BTU/HR C. E. NATCO NATURAL GAS FIRED SG #79 (SN T-6155901-11, NB 9815, DIS 20664-77) WITH NORTH AMERICAN BURNER, FGR, AND O2 CONTROLLER
S-1141-39-15	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR NATURAL GAS/OIL FIRED C. E. NATCO STEAM GENERATOR #80 (SN T-7585901-08, NB 1247, DIS 20632-81) WITH NORTH AMERICAN BURNER, FGR, AND O2 CONTROLLER.
S-1141-40-15	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR GAS/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR #81 (SN T-7585901-05, NB 1211, DIS 20631-81) WITH NORTH AMERICAN BURNER, FGR, AND O2 ANALYZER.
S-1141-41-15	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR CE NATCO NATURAL GAS/TEOR GAS/TVC FIRED STEAM GENERATOR #82 (SN T-7209001-05, NB 687, DIS 20610-80) WITH NORTH AMERICAN BURNER, FGR, AND O2 CONTROLLER.
S-1141-42-15	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR CE NATCO NATURAL GAS/TEOR GAS/TVC GAS FIRED STEAM GENERATOR #83 (SN T-7637501-09, NB 1402, DIS 20645-81) WITH NORTH AMERICAN BURNER, FGR, AND O2 CONTROLLER.

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-43-26	62,500 KBTU/HR FUEL BURNING EQUIPMENT	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED STRUTHERS STEAM GENERATOR (SG #87, N.B. 998) WITH NORTH AMERICAN GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, AND FLUE GAS RECIRCULATION (FGR)
S-1141-44-33	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED STRUTHERS STEAM GENERATOR #106 (DIS 41757-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW NOX BURNER, O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1141-45-33	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #107 (DIS 41762-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW NOX BURNER, O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1141-46-35	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #103 (DIS 41754-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1141-47-28	62,500 KBTU/HR	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #95 (SN 80-37387-4, NB 967, DIS 12810-85) WITH FLUE GAS RECIRCULATION (FGR), NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND AN O2 ANALYZER/CONTROLLER
S-1141-48-27	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #96 (SN 80-37387-7, NB 970, DIS 12811-85) WITH FLUE GAS RECIRCULATION (FGR), NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER AND AN O2 ANALYZER/CONTROLLER
S-1141-49-27	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR #97 (SN 80-37387-15, DIS 12810-85) NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER
S-1141-50-25	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR SMITH MOON STEEL NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR #98 (SN 77-37182-12, NB 810, DIS 20654-78) WITH A NORTH AMERICAN BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER
S-1141-51-27	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR C. E. NATCO NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR #99 (SN T-6718101-08, NB 130, DIS 20640-79) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 ANALYZER/CONTROLLER
S-1141-52-26	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #100 (SN 81-37469-2, NB 1056, DIS 39545-88) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR AND TVC SYSTEMS

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-53-35	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #104 (DIS 41755-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1141-54-9	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR STRUTHERS NATURAL/TEOR GAS FIRED STEAM GENERATOR #102 NORTH AMERICAN #6131 BURNER, STAGED COMBUSTION, O2 ANALYZER/CONTROLLER, SOX SCRUBBER AND VAPOR PIPING FROM S-1141-381 PERMITTED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS
S-1141-55-26	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED STRUTHERS STEAM GENERATOR #105 (SN 81-37411-16, NB 1027, DIS 39622-90) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR AND TVC SYSTEMS
S-1141-56-8	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS STEAM GENERATOR #106 WITH NORTH AMERICAN BURNER, STAGED COMBUSTION, WESTINGHOUSE/HAGEN O2 CONTROLLER AND HEATER TECH SO2 SCRUBBER
S-1141-57-8	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS STEAM GENERATOR #109 WITH NORTH AMERICAN BURNER, STAGED COMBUSTION, WESTINGHOUSE/HAGEN O2 CONTROLLER AND HEATER TECH. SO2 SCRUBBER
S-1141-58-8	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS STEAM GENERATOR #110 WITH NORTH AMERICAN BURNER, STAGED COMBUSTION, WESTINGHOUSE/HAGEN O2 CONTROLLER AND AIR POL SO2 SCRUBBER
S-1141-59-8	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS STEAM GENERATOR #111 WITH NORTH AMERICAN BURNER, STAGED COMBUSTION, WESTINGHOUSE/HAGEN O2 CONTROLLER AND AIR POL SO2 SCRUBBER
S-1141-60-26	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	DORMANT EMISSION UNIT: 62.5 MMBTU/HR NATURAL GAS/TEOR/TVC GAS FIRED STRUTHERS STEAM GENERATOR #112 (SN 81-37411-12, NB 1022, DIS 39623-90) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN BURNER, O2 CONTROLLER, SO2 SCRUBBER, AND VAPOR PIPING FROM TEOR SYSTEMS AND TVC SYSTEMS
S-1141-61-35	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	69.0 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR #105 (DIS 41756-06) WITH FLUE GAS RECIRCULATION, NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER, AND O2 CONTROLLER - APPROVED FOR VARIOUS SPECIFIED LOCATIONS
S-1141-62-8	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS STEAM GENERATOR #115 WITH NORTH AMERICAN BURNER, STAGED COMBUSTION, WESTINGHOUSE/HAGEN O2 CONTROLLER AND AIR POL SO2 SCRUBBER
S-1141-63-14	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR NATURAL GAS FIRED STRUTHERS STEAM GENERATOR #116 WITH NORTH AMERICAN #5131-G BURNER, STAGED COMBUSTION, SOX SCRUBBER AND O2 ANALYZER/CONTROLLER PERMITTED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-64-14	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR NATURAL GAS FIRED STRUTHERS STEAM GENERATOR #117 WITH NORTH AMERICAN #5131-G BURNER, STAGED COMBUSTION, SOX SCRUBBER AND O2 ANALYZER/CONTROLLER
S-1141-65-14	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS NATURAL GAS FIRED STEAM GENERATOR #118 WITH NORTH AMERICAN #5131-G BURNER, STAGED COMBUSTION, O2 ANALYZER/CONTROLLER AND SOX SCRUBBER PERMITTED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS
S-1141-66-13	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR STRUTHERS STEAM GENERATOR #119 (TEOR/GAS FIRED) WITH NORTH AMERICAN LO-NOX BURNER, STAGED COMBUSTION, WESTINGHOUSE O2 CONTROLLER AND AIR POL SO2 SCRUBBER
S-1141-67-26	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR C.E. NATCO NATURAL GAS/TEOR GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR AND AN O2 CONTROLLER (#121, SN T-6718101-04, NB 108, DIS 20639-79)
S-1141-68-8	31,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	31.5 MM BTU/HR JOHN ZINK INCINERATOR/STEAM GENERATOR WITH HEATER TECH. SO2 SCRUBBER, FIRE-FLOOD VAPOR CONTROL SYSTEM PIPING AND WELL VENT VAPOR CONTROL SYSTEM PIPING TO INLET OF INCINERATOR/STEAM GENERATOR
S-1141-69-7	31,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	31.5 MM BTU/HR JOHN ZINK INCINERATOR/STEAM GENERATOR WITH HEATER TECH. SO2 SCRUBBER, FIRE-FLOOD VAPOR CONTROL PIPING AND WELL VENT VAPOR CONTROL SYSTEM PIPING TO INLET OF INCINERATOR/STEAM GENERATOR
S-1141-70-11	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR NATURAL GAS/TEOR GAS/TVC GAS FIRED C E NATCO STEAM GENERATOR #33 (SN T-7294201-02, NB 824, DIS 30583-81) WITH NORTH AMERICAN BURNER, O2 ANALYZER/CONTROLLER AND FGR.
S-1141-71-12	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MM BTU/HR NATURAL/TEOR GAS FIRED C.E. NATCO STEAM GENERATOR #34 WITH THERMOX O2 CONTROLLER AND FLUE GAS RECIRCULATION.
S-1141-72-7	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MM BTU/HR NATIONAL STEAM GENERATOR #2 (OIL FIRED) WITH THERMOX O2 CONTROLLER
S-1141-73-10	12,600,000 BTU/HR	3020-02 G	1	855.00	855.00	D	12.6 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #T-153 WITH TWO 6.3 MMBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-74-0	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR THERMOTICS GAS/TEOR FIRED STEAM GENERATOR #12 WITH PCC URQUHART #10 BURNER AND O2 ANALYZER/CONTROLLER. *** SURRENDERED UPON STARTUP OF S-1141-390-0 - MRB.***
S-1141-76-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-77-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-78-0	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	19,999 GALLONS FIXED ROOF STORAGE TANK
S-1141-83-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-85-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #14F-C51
S-1141-86-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #14F-C52
S-1141-87-0	31,500 GALLONS	3020-05 C	1	142.00	142.00	D	31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-88-13	420,000 gallon storage	3020-05 E	1	258.00	258.00	D	10,000 BARREL CRUDE OIL PRODUCTION AND OPERATION TANK #1001 (STATION 2-22) AND THREE DEPURATORS VENTED TO VAPOR CONTROL SYSTEM SHARED BETWEEN PERMIT UNITS S-1141-88 THROUGH '-91, '-105, '-106, '-473, AND '-474 INCLUDING INTAKE AND DISCHARGE COOLERS, GAS-LIQUID SEPARATOR(S), COMPRESSOR(S), AND NON-CONDENSIBLE VAPOR PIPING TO AUTHORIZED INCINERATING DEVICES OR TEOR CASING GAS COLLECTION/CONTROL SYSTEM S-1141-250 AND ASSOCIATED DISPOSAL OPTIONS
S-1141-89-10	126,000 gallon storage	3020-05 E	1	258.00	258.00	D	3,000 BBL (126,000 GALLON) CRUDE OIL PRODUCTION AND OPERATION TANK #30X025 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-88
S-1141-90-10	210,000 gallon storage	3020-05 E	1	258.00	258.00	D	5,000 BBL (210,000 GALLON) CRUDE OIL PRODUCTION AND OPERATION TANK #50X026 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-88
S-1141-91-10	420,000 gallon storage	3020-05 E	1	258.00	258.00	D	10,000 BBL (420,000 GALLON) CRUDE OIL PRODUCTION AND OPERATION TANK #1003 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-88
S-1141-92-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1526 (222 C20)
S-1141-93-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1492 (222 C19)
S-1141-94-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1527 (222 C18)
S-1141-95-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1493 (222 C17)
S-1141-96-0	210,000 GALLONS	3020-05 E	1	258.00	258.00	D	210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #5002 (222-C16)
S-1141-97-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1528 (222 C15)
S-1141-98-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1494 (222 C14)
S-1141-99-0	210,000 GALLONS	3020-05 E	1	258.00	258.00	D	210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #5003 (222-13)

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-100-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1529 (222 C12)
S-1141-101-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1495 (222 C11)
S-1141-102-0	210,000 GALLONS	3020-05 E	1	258.00	258.00	D	210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #5004 (222-C10)
S-1141-103-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1530 (222 C9)
S-1141-104-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30X1509 (222 C8)
S-1141-105-11	126,000 gallon storage	3020-05 E	1	258.00	258.00	D	3,000 BBL FIXED ROOF CRUDE OIL WASH TANK #30X029 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-88
S-1141-106-11	126,000 gallon storage	3020-05 E	1	258.00	258.00	D	3,000 BARREL FIXED ROOF CRUDE OIL STORAGE TANK #50X030 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-88
S-1141-107-0	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-108-0	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK #15P-C2
S-1141-109-0	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK #15P-C3
S-1141-110-0	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK #15P-C4
S-1141-111-1	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM WASH TANK
S-1141-112-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #15W-C52
S-1141-113-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #15W-C53
S-1141-114-1	31,500 GALLONS	3020-05 C	1	142.00	142.00	D	31,500 GALLON FIXED ROOF PETROLEUM WASH TANK #16C-C50
S-1141-115-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-116-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #16C-C52
S-1141-117-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-118-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-119-1	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #27S-C23
S-1141-120-1	63,000 GALLONS	3020-05 D	1	194.00	194.00	D	63,000 GALLON FIXED ROOF PETROLEUM WASH TANK #22C-C1
S-1141-121-1	63,000 GALLONS	3020-05 D	1	194.00	194.00	D	63,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #22C-C2
S-1141-122-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-123-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-124-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-125-0	210,000 GALLONS	3020-05 E	1	258.00	258.00	D	210,000 GALLON FIXED ROOF PETROLEUM WASH TANK
S-1141-126-3	210,000 gallons	3020-05 E	1	258.00	258.00	D	210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #109-D2
S-1141-127-47	126,000 gallons	3020-05 E	1	258.00	258.00	A	3,000 BBL FIXED ROOF CRUDE OIL TANK #T-127, DEPURATORS, TWO NATURAL GAS-FIRED EXEMPT HEATER TREATERS (T9 AND T10) (EACH RATED LESS THAN 5.0 MMBTU/HR), AND SHARED VAPOR CONTROL EQUIPMENT INCLUDING INTAKE AND DISCHARGE HEAT EXCHANGERS, GAS-LIQUID SEPARATOR(S), COMPRESSOR(S) SERVING PERMIT UNITS S-1141-127 THROUGH '-131, '-560, '-571, '-572, '-575, '-576, '-577, '-578, '-579, '-580, '-585, '-590, AND '591; INCLUDING OPTIONAL USE H2S SCRUBBER, AND VAPOR PIPING DISCHARGING TO STEAM GENERATORS S-1141-26, '-31, '-515, '-549, '-550, '-551, '-552, '-553, '-555, '-556, '-557, '-558, EMERGENCY FLARE S-1141-513, AND/OR DOGGR APPROVED DISPOSAL WELL(S)
S-1141-128-14	126,000 gallons	3020-05 E	1	258.00	258.00	A	3000 BBL FIXED ROOF CRUDE OIL TANK #109-C3 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)
S-1141-129-14	126,000 gallons	3020-05 E	1	258.00	258.00	A	3,000 BBL FIXED ROOF CRUDE OIL TANK #109-C2 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)
S-1141-130-10	126,000 gallons	3020-05 E	1	258.00	258.00	A	3,000 BBL CRUDE OIL TANK #109-C1 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127-2; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)
S-1141-131-13	126,000 gallons	3020-05 E	1	258.00	258.00	A	3,000 BBL FIXED ROOF CRUDE OIL TANK #109-P2 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)
S-1141-132-11	126,000 gallons	3020-05 E	1	258.00	258.00	D	3000 BBL CRUDE OIL TANK #109-P1 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-1141-127; CRUDE OIL IS RECEIVED FROM ON-SITE STATION 1-09 AND STATION 3-09 (S-1130)
S-1141-133-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-134-0	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF PETROLEUM WASH TANK
S-1141-135-0	105,000 GALLONS	3020-05 E	1	258.00	258.00	D	105,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-136-1	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-137-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-138-0	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #21N-C26
S-1141-139-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM WASH TANK #10X1942
S-1141-140-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #10X1941
S-1141-141-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-142-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-143-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-144-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #22G-C26
S-1141-145-1	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-146-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-147-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-148-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-149-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #23G-C1
S-1141-150-0	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK #23G-C2
S-1141-151-0	31,500 GALLONS	3020-05 C	1	142.00	142.00	D	31,500 GALLON FIXED ROOF PETROLEUM WASH TANK, #23L-C52
S-1141-152-0	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF PETROLEUM WASH TANK, #23L-C54
S-1141-153-0	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #23L-C53
S-1141-154-0	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #23L-C51
S-1141-155-0	63,000 GALLONS	3020-05 D	1	194.00	194.00	D	63,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-156-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #24F-C76
S-1141-157-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM WASH TANK, #25F-C2
S-1141-158-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #25F-C3
S-1141-159-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #25F-C4
S-1141-160-0	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #25F-C1
S-1141-161-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26A-C1
S-1141-162-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26A-C7
S-1141-163-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26A-E8
S-1141-164-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26F-A1
S-1141-165-1	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-166-1	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26A-C6
S-1141-167-1	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26A-C5
S-1141-168-4	42,000 gallons	3020-05 C	1	142.00	142.00	A	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26F-C25
S-1141-169-1	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-170-1	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26F-C27
S-1141-171-1	15,750 GALLONS	3020-05 B	1	98.00	98.00	D	15,750 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26F-C28
S-1141-172-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26F-C75
S-1141-173-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #26F-C76
S-1141-174-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-175-0	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-176-0	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK #27F-C51
S-1141-177-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #27G-C1
S-1141-178-0	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK #27G-C2
S-1141-179-0	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-180-0	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-181-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-182-4	5670 gallons	3020-05 B	1	98.00	98.00	D	5,670 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #35G-C50
S-1141-183-4	21,000 gallons	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #35G-C51
S-1141-184-4	5670 gallons	3020-05 B	1	98.00	98.00	D	5,670 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #35G-D50
S-1141-185-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #36F-C51
S-1141-186-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #36F-C50
S-1141-187-2	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-188-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-189-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-190-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-191-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-192-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-193-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-194-0	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-195-0	8,400 GALLONS	3020-05 B	1	98.00	98.00	D	8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-196-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-197-0	31,500 GALLONS	3020-05 C	1	142.00	142.00	D	31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #7F-C51

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-198-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #8F-C75
S-1141-199-1	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-200-0	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #8F-C76
S-1141-201-0	31,500 GALLONS	3020-05 C	1	142.00	142.00	D	31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #8F-C77
S-1141-202-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #8F-C78
S-1141-203-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #8F-C79
S-1141-204-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #8F-C80
S-1141-205-1	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-206-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #8F-S75
S-1141-207-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM WASH TANK
S-1141-208-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #9G-C26
S-1141-209-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-210-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #9G-C28
S-1141-211-0	42,000 GALLONS	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1141-212-1	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #31F-C75
S-1141-213-1	126,000 GALLONS	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #31F-C76
S-1141-214-4	840,000 gallons	3020-05 F	1	316.00	316.00	A	840,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-7
S-1141-215-4	840,000 gallons	3020-05 F	1	316.00	316.00	A	840,000 GALLONS FIXED ROOF PETROLEUM STORAGE TANK #T-6
S-1141-232-17	12.0 MMBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 12.0 MMBTU/HR NATURAL GAS/LPG FIRED HEATER TREATER #814 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127 AND PRESSURE RELIEF VALVE VENTED TO FLARE S-1141-513
S-1141-233-6	8,400 kBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 8.4 MMBTU/HR NATURAL GAS-FIRED HEATER TREATER #T-603 WITH TWO 4.2 MMBTU/HR BURNERS EQUIPPED WITH SEPARATE EXHAUST STACKS
S-1141-234-10	16.8 MMBTU	3020-02 H	1	1,080.00	1,080.00	D	16.8 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #T-605 WITH TWO 8.4 MBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-235-6	8.4 kBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 5.8 MMBTU/HR NATURAL GAS-FIRED HEATER TREATER #T-606 WITH TWO 2.9 MMBTU/HR BURNERS EQUIPPED WITH SEPARATE EXHAUST STACKS

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-236-6	8.4 kBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 8.4 MMBTU/HR NATURAL GAS-FIRED HEATER TREATER #T-607 WITH TWO 4.2 MMBTU/HR BURNERS EQUIPPED WITH SEPARATE EXHAUST STACKS
S-1141-237-0	22,000,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	22.0 MM BTU/HR HEATER TREATER #T-610 (OIL FIRED)
S-1141-238-6	8.4 kBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 8.4 MMBTU/HR NATURAL GAS-FIRED HEATER TREATER #T-613 WITH TWO 4.2 MMBTU/HR BURNERS EQUIPPED WITH SEPARATE EXHAUST STACKS
S-1141-239-6	8.4 kBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 8.4 MMBTU/HR NATURAL GAS-FIRED HEATER TREATER #T-614 WITH TWO 4.2 MMBTU/HR BURNERS EQUIPPED WITH SEPARATE EXHAUST STACKS
S-1141-240-10	12.6 MMBTU	3020-02 G	1	855.00	855.00	D	12.6 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #T-615 WITH TWO 6.3 MMBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-241-10	16.8 MMBTU	3020-02 H	1	1,080.00	1,080.00	D	16.8 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #T-616 WITH TWO 8.4 MMBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-242-11	16.8 MMBtu	3020-02 H	1	1,080.00	1,080.00	D	16.8 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #T-617 WITH TWO 8.4 MMBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-243-11	12.6 MMBTU	3020-02 G	1	855.00	855.00	D	12.6 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #T-618 WITH TWO 6.3 MMBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-244-17	12.6 MMBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 12.6 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #620 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127 AND PRESSURE RELIEF VALVE VENTED TO FLARE S-1141-513
S-1141-245-17	16.8 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	D	DORMANT 16.8 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #621 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127 AND PRESSURE RELIEF VALVE VENTED TO FLARE S-1141-513
S-1141-246-10	12.6 MMBTU	3020-02 G	1	855.00	855.00	D	12.6 MMBTU/HR NATURAL GAS FIRED HEATER TREATER (#T-622) WITH TWO 6.3 MMBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-249-0	900 HP	3020-01 G	1	855.00	855.00	D	900 HP FIRE FLOOD OPERATION MS 701
S-1141-250-28	2,906 wells	3020-09 A	2906	9.79	28,449.74	A	TEOR SYSTEM WITH COMPRESSORS, HEAT EXCHANGERS, KNOCKOUT VESSELS AND PIPING SERVING 2906 THERMALLY ENHANCED WELL VENTS
S-1141-251-7	234 WELLS	3020-09 A	234	9.79	2,290.86	D	THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING 234 STEAM ENHANCED WELLS, 3 LIQUID GAS SEPERATORS, 3 GAS COMPRESSORS AND WELL VENT VAPOR COLLECTION PIPING NETWORK

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-253-20	556 PRODUCTION WELLS	3020-09 A	556	9.79	5,443.24	A	THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING 556 STEAM ENHANCED WELLS, GAS/LIQUID SEPARATOR, AIR-COOLED VAPOR CONDENSER, CONDENSATE STORAGE VESSEL AND WELL VENT VAPOR COLLECTION PIPING NETWORK
S-1141-258-15	14 MMBTU	3020-02 G	1	855.00	855.00	D	14.0 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #T-815 WITH KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-259-10	14 MMBTU	3020-02 G	1	855.00	855.00	D	14.0 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #T-818 WITH TWO 7.0 MMBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-260-1	2 NOZZLE	3020-11 A	2	36.00	72.00	D	ONE 10,000 GALLON UNDERGROUND STORAGE TANK SERVED BY PHASE I VAPOR RECOVERY SYSTEM (G-70-97) AND TWO NOZZLES SERVED BY PHASE II VAPOR RECOVERY SYSTEM (G-70-52)
S-1141-263-21	184 WELLS	3020-09 A	184	9.79	1,801.36	A	THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING 184 STEAM ENHANCED WELLS, GAS/LIQUID SEPARATOR, AIR-COOLED CONDENSER, CONDENSATE STORAGE VESSEL AND WELL VENT VAPOR COLLECTION PIPING NETWORK
S-1141-284-3	31,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	31,500,000 BTU/HR INCINERATOR
S-1141-317-14	850 wells	3020-09 A	850	9.79	8,321.50	A	THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 850 STEAM-ENHANCED WELLS (PREVIOUSLY PERMITTED TEOR SYSTEMS S-1141-317, '-381, '-410, '-411, AND '-428), LIQUID KNOCKOUT VESSELS, CONDENSATE DRIP POT (V-3), AIR COOLED HEAT EXCHANGERS, CONDENSATE PUMPS, AND WELL VENT VAPOR COLLECTION PIPING NETWORK
S-1141-320-18	488 PRODUCTION WELLS	3020-09 A	488	9.79	4,777.52	A	THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 388 STEAM DRIVE AND 100 CYCLIC WELLS, GAS/LIQUID SEPARATORS, CONDENSATE TRANSFER PUMPS, AIR-COOLED HEAT EXCHANGERS, AND VAPOR COMPRESSOR
S-1141-322-15	16.8 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	D	DORMANT 16.8 MMBTU/HR NATURAL GAS/LPG FIRED HEATER TREATER #619 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127 AND PRESSURE RELIEF VALVE VENTED TO FLARE S-1141-513
S-1141-323-8	14,400 kBtu/hr heater treater	3020-02 G	1	855.00	855.00	D	14.4 MMBTU/HR NATURAL GAS FIRED KBS HEATER TREATER #805 WITH TWO 7.2 MMBTU/HR KVAERNER-HRI LOW-NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-331-9	831 STEAM ENHANCED WELLS	3020-09 A	831	9.79	8,135.49	D	TEOR OPERATION INCLUDING 162 CYCLIC AND 669 STEAM ENHANCED WELLS, GAS/LIQUID SEPARATORS, CONDENSATE TRANSFER PUMPS, HEAT EXCHANGERS, AND NON-CONDENSIBLE VAPOR COMPRESSOR
S-1141-352-4	166 bhp IC engine	3020-10 B	1	123.00	123.00	A	166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-1141-353-4	166 bhp IC engine	3020-10 B	1	123.00	123.00	A	166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-354-4	166 bhp IC engine	3020-10 B	1	123.00	123.00	A	166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-1141-355-4	166 bhp IC engine	3020-10 B	1	123.00	123.00	A	166 BHP CUMMINS DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-1141-362-5	12 MMBtu/hr	3020-02 G	1	855.00	855.00	D	12 MMBTU/HR HEATER TREATER WITH KVAERNER-HRI LOW NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-363-11	12 MMBTU	3020-02 G	1	855.00	855.00	A	12 MMBTU/HR HEATER TREATER WITH KVAERNER/HRI LOW NOX BURNERS AND FLUE GAS RECIRCULATION
S-1141-364-0	42 WELLS	3020-09 B	42	9.79	411.18	D	42 CLOSED CASING VENT STEAM DRIVE WELLS
S-1141-365-3	350 STEAM ENHANCED WELLS	3020-09 A	350	9.79	3,426.50	D	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WITH WELL VENT CASING VAPOR CONTROL SYSTEM SERVING 350 STEAM ENHANCED WELLS
S-1141-366-11	171 STEAM ENHANCED WELLS	3020-09 A	171	9.79	1,674.09	A	THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT CASING VAPOR CONTROL SYSTEM SERVING 171 STEAM ENHANCED WELLS
S-1141-367-3	126 STEAM ENHANCED WELLS	3020-09 A	126	9.79	1,233.54	D	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION SERVING 126 WITH WELL VENT CASING VAPOR CONTROL SYSTEM SERVING 126 CYCLIC STEAM WELLS
S-1141-368-10	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR WITH NORTH AMERICAN NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER
S-1141-369-19	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #131 (NB 890) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER
S-1141-370-19	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #132 (NB 888) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER
S-1141-371-22	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR 21S SG #8 DIS# 19962-71 WITH OXYGEN CONTROLLER, NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER
S-1141-372-25	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED C. E. NATCO STEAM GENERATOR #79 (SN T-7585901-07, NB 1220, DIS 20633-81) WITH A NORTH AMERICAN MODEL 4231-625-GLE LOW NOX BURNER, FLUE GAS RECIRCULATION, AND O2 CONTROLLER
S-1141-373-24	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #21S-4 (DIS# 19452-71, NB 551) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-374-13	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS-FIRED SMITH MOON STEEL STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR AND AN OXYGEN CONTROLLER (#4, SN 74-37127-1, NB 668)
S-1141-375-5	62.5 MMBtu/hr Steam Generator	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR SMITH MOON STEEL NATURAL GAS FIRED STEAM GENERATOR #14 (SN 76-37166-2, NB 776, DIS 27576-79) WITH OXYGEN CONTROLLER, NORTH AMERICAN 6141 LOW NOX BURNER AND FLUE GAS RECIRCULATION - 21N-137
S-1141-376-17	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #2 (DIS #30405-79) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER
S-1141-377-17	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR #4 (SN 78-37189-3, NB 828, DIS 30413-79) WITH NORTH AMERICAN MODEL GLE 4211 OR GLE 4231 MAGNA-FLAME LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), FUEL INDUCED RECIRCULATION (FIR), AND O2 CONTROLLER
S-1141-378-17	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED CE NATCO STEAM GENERATOR # 6 (NB 9807) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER
S-1141-380-22	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED CE NATCO STEAM GENERATOR # 141, NB 101, DIS# 20630-79 WITH OXYGEN CONTROLLER, NORTH AMERICAN BURNER AND FLUE GAS RECIRCULATION
S-1141-385-6	40 Electric Hp	3020-01 B	1	123.00	123.00	A	HEAVY CRUDE OIL TRUCK LOADING/UNLOADING OPERATION (TRUCK LACT #1) WITH VAPOR CONTROL INCLUDING TWO BOTTOM LOADING ARMS WITH CAMLOCK FITTINGS AND TWO VAPOR RETURN LINES WITH CAMLOCK FITTINGS
S-1141-386-6	40 Electric Hp	3020-01 B	1	123.00	123.00	A	HEAVY CRUDE OIL TRUCK LOADING/UNLOADING OPERATION (TRUCK LACT #2) WITH VAPOR CONTROL INCLUDING TWO BOTTOM LOADING ARMS WITH CAMLOCK FITTINGS AND TWO VAPOR RETURN LINES WITH CAMLOCK FITTINGS
S-1141-387-4	840,000 gallons	3020-05 F	1	316.00	316.00	A	840,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #1
S-1141-388-4	840,000 gallons	3020-05 F	1	316.00	316.00	A	840,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #2
S-1141-389-11	8.4 MMBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 8.4 MMBTU/HR NATURAL GAS FIRED HEATER TREATER #322 WITH TWO 4.2 MMBTU/HR NORTH AMERICAN BURNERS SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127 AND PRESSURE RELIEF VALVE VENTED TO FLARE S-1141-513
S-1141-391-4	23,000,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	23.0 MMBTU/HR CE NATCO OIL FIRED STEAM GENERATOR #7 (DIS# 21046-66) WITH NORTH AMERICAN BURNER. (SECURITY LEASE)
S-1141-392-9	23,000,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	23.0 MMBTU/HR CE NATCO NATURAL GAS/VAPOR RECOVERY GAS/OIL FIRED STEAM GENERATOR #11 (DIS# 21047-66) WITH NORTH AMERICAN BURNER AND FLUE GAS RECIRCULATION

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-393-1	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MMBTU/HR OIL-FIRED NATIONAL STEAM GENERATOR (HSG #13; DIS# 20758-66) WITH NORTH AMERICAN BURNER
S-1141-394-8	27,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	DORMANT EMISSION UNIT: 27.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED C E NATCO STEAM GENERATOR HSG #61 WITH NORTH AMERICAN BURNER AND FGR
S-1141-395-1	25,200,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	25.2 MMBTU/HR GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG #98; DIS# 20794-66) WITH NORTH AMERICAN BURNER. (REWARD-COMBINED LEASE)
S-1141-396-6	27,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	27.5 MMBTU/HR CE NATCO NATURAL GAS/VAPOR RECOVERY GAS/OIL FIRED STEAM GENERATOR #105 (DIS# 20761-66) WITH NORTH AMERICAN BURNER AND FLUE GAS RECIRCULATION - GOVERNMENT 35 LEASE
S-1141-397-2	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR NATURAL/CASING GAS-FIRED STRUTHERS STEAM GENERATOR (HSG# 171; DIS# 20620-76) WITH NORTH AMERICAN BURNER AND FGR - REWARD COMBINED LEASE
S-1141-398-2	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR NATURAL/TEOR GAS FIRED STRUTHERS STEAM GENERATOR (HSG #172) WITH NORTH AMERICAN BURNER AND FGR - SECURITY LEASE
S-1141-399-0	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR OIL-FIRED STEAM GENERATOR (HSG-173; DIS #20649-81) (GOVERNMENT 35 LEASE)***CANCELED PER INSPECTOR, EQUIPMENT NO LONGER IN FIELD LOCTION, DBT, 12/6/99***
S-1141-400-2	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR SMITH MOON STEEL NATURAL GAS/TEOR GAS FIRED STEAM GENERATOR HSG #184 (SN 79-37317-2, NB 879, DIS 20618-80) WITH LOW NOX BURNER AND OIL-FIRING CAPABILITIES DURING PERIODS OF NATURAL GAS CURTAILMENT - SECURITY LEASE
S-1141-401-0	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR GAS-FIRED STEAM GENERATOR (HSG-187; DIS #20671-77) (GOVERNMENT 35 LEASE)***CANCELED PER INSPECTOR, EQUIPMENT NO LONGER AT THIS LOCTION OR IN THE PRODUCTION AREA, DBT, 12/6/99***
S-1141-402-17	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR SMITH MOON STEEL NATURAL GAS FIRED STEAM GENERATOR HSG #192 (SN 79-37317-3, NB 901, DIS 20634-79) WITH NORTH AMERICAN BURNER - (INDIAN & COLONIAL LEASE)
S-1141-403-7	7,400,000 BTU/HR	3020-02 G	1	855.00	855.00	D	7.4 MMBTU/HR GAS FIRED HEATER TREATER WITH THREE 1.8 MMBTU/HR AND ONE 2.0 MMBTU/HR BURNERS (GOVERNMENT 35 LEASE)
S-1141-404-5	6,000,000 BTU/HR	3020-02 G	1	855.00	855.00	D	6.0 MMBTU/HR GAS FIRED HEATER TREATER WITH TWO BURNERS EACH RATED 3.0 MMBTU/HR (GOVERNMENT 35 LEASE)
S-1141-405-12	7,400 KBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 7.4 MMBTU/HR GAS FIRED HEATER TREATER WITH THREE BURNERS EACH RATED 1.8 MMBTU/HR AND ONE BURNER RATED AT 2.0 MMBTU/HR WITH VAPOR CONTROL SYSTEM SHARED WITH PERMIT S-1141-417 - MIDWAY

Detailed Facility Report

For Facility=1141
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-406-12	7,4000 KBtu/hr burners	3020-02 G	1	855.00	855.00	D	DORMANT 7.4 MMBTU/HR GAS FIRED HEATER TREATER WITH THREE BURNERS EACH RATED 1.8 MMBTU/HR AND ONE BURNER RATED AT 2.0 MMBTU/HR WITH VAPOR CONTROL SYSTEM SHARED WITH PERMIT S-1141-417 - MIDWAY
S-1141-407-11	7,400 KBtu burners total	3020-02 G	1	855.00	855.00	D	DORMANT 7.4 MMBTU/HR GAS FIRED HEATER TREATER WITH THREE BURNERS EACH RATED 1.8 MMBTU/HR AND ONE BURNER RATED AT 2.0 MMBTU/HR - MIDWAY
S-1141-408-11	7,400 KBtu burners total	3020-02 G	1	855.00	855.00	D	DORMANT 7.4 MMBTU/HR GAS FIRED HEATER TREATER WITH THREE BURNERS EACH RATED 1.8 MMBTU/HR AND ONE BURNER RATED AT 2.0 MMBTU/HR - MIDWAY
S-1141-409-2	95 WELLS	3020-09 A	95	9.79	930.05	D	THERMALLY ENHANCED OIL RECOVERY OPERATION SERVING 95 WELLS (SECURITY LEASE) INCLUDING TWO GAS/LIQUID SEPARATORS, FIN FAN HEAT EXCHANGER, AND COMPRESSOR
S-1141-410-2	34 WELLS	3020-09 A	34	9.79	332.86	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WITH PRODUCTION WELL VENT VAPOR COLLECTION PIPING NETWORK SERVING 34 STEAM DRIVE WELLS AND 3 CYCLIC WELLS, HEAT EXCHANGER, GAS/LIQUID SEPARATOR, AND VAPOR COMPRESSOR (REWARD COMBINED)
S-1141-411-1	90 WELLS	3020-09 A	90	9.79	881.10	D	THERMALLY ENHANCED OIL RECOVERY OPERATION SERVING 90 STEAM DRIVE WELLS AND TANK VAPOR CONTROL SYSTEM (S-1141-417), INCLUDING: WATER-COOLED HEAT EXCHANGER, 3 GAS/LIQUID SEPARATORS, ENCLOSED CONDENSATE COLLECTION TANK, AND THREE 15 HP VACUUM PUMP SKID.
S-1141-412-0	210,000 GALLONS	3020-05 E	1	258.00	258.00	D	210,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, WASH TANK
S-1141-413-2	210,000 GALLONS	3020-05 E	1	258.00	258.00	D	210,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, WASH TANK
S-1141-414-0	105,000 GALLONS	3020-05 E	1	258.00	258.00	D	105,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, GEN. FUEL TANK
S-1141-415-1	10,500 GALLONS	3020-05 B	1	98.00	98.00	D	10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, SKIM/DRAIN TANK
S-1141-416-2	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, LACT TANK
S-1141-417-17	126,000 gallon	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION WASH TANK WITH VAPOR CONTROL SYSTEM
S-1141-418-8	210,000 gallon	3020-05 E	1	258.00	258.00	D	210,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION WASH TANK WITH VAPOR CONTROL SYSTEM
S-1141-419-8	126,000 gallon	3020-05 E	1	258.00	258.00	D	126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #3GF4 WITH VAPOR CONTROL SYSTEM SHARED WITH PERMIT UNIT -417
S-1141-420-6	42,000 gallon	3020-05 C	1	142.00	142.00	D	42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, DRAIN TANK

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-421-7	57,540 gallon	3020-05 D	1	194.00	194.00	D	57,540 GALLON FIXED ROOF CRUDE OIL PRODUCTION WASH TANK WITH VAPOR CONTROL SYSTEM
S-1141-422-7	21,000 gallon	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION SKIM TANK WITH VAPOR CONTROL SYSTEM
S-1141-423-6	57,540 gallons	3020-05 D	1	194.00	194.00	D	57,540 GALLON FIXED ROOF CRUDE OIL PRODUCTION DUMP TANK WITH VAPOR CONTROL SYSTEM
S-1141-424-1	21,000 GALLONS	3020-05 C	1	142.00	142.00	D	21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #05GF11
S-1141-425-0	63,000 GALLONS	3020-05 D	1	194.00	194.00	D	63,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, WASH TANK
S-1141-426-5	1,512 wells	3020-09 B	1512	9.79	1,468.00	A	1,512 CYCLICALLY STEAM-ENHANCED HEAVY CRUDE OIL PRODUCTION WELLS WITH CLOSED CASING VENTS
S-1141-427-2	nozzles (not bootless)	3020-11 A	2	36.00	72.00	D	12,000 GALLON UNDERGROUND GASOLINE STORAGE TANK SERVED BY COAXIAL PHASE I VAPOR RECOVERY SYSTEM (G-70-97-A) WITH TWO FUELING POINTS AND TWO NOZZLES SERVED BY BALANCE VAPOR RECOVERY SYSTEM (G-70-52-AM) (MIDWAY YARD FACILITY @ HWY. 33)
S-1141-428-2	148 WELLS	3020-09 A	148	9.79	1,448.92	D	THERMALLY ENHANCED OIL RECOVERY OPERATION WITH VAPOR CONTROL PIPING EQUIPPED WITH HEAT EXCHANGER SERVING 148 STEAM DRIVE WELLS. (WESTSIDE)
S-1141-429-7	56,700 gallons	3020-05 D	1	194.00	194.00	A	56,700 GALLON FIXED ROOF WASTEWATER TANK WITH VAPOR CONTROL SYSTEM
S-1141-430-14	78 wells	3020-09 A	78	9.79	763.62	A	THERMALLY ENHANCED OIL RECOVERY WELL VENT CONTROL SYSTEM WITH 78 STEAM DRIVE WELLS, GAS/LIQUID SEPARATOR, HEAT EXCHANGER, CONDENSATE PIPING TO AUTHORIZED INCINERATION DEVICES
S-1141-431-14	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR C. E. NATCO NATURAL GAS-FIRED STEAM GENERATOR (#26 CENTRAL 6) WITH A NORTH AMERICAN GLE LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER
S-1141-432-12	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR STRUTHERS THERMOFLOOD NATURAL GAS-FIRED STEAM GENERATOR (#26 CENTRAL 8, NATIONAL BOARD# 1254) WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER
S-1141-436-1	62,500,000 BTU/HR	3020-02 H	1	1,080.00	1,080.00	D	62.5 MMBTU/HR GAS-FIRED STRUTHERS STEAM GENERATOR (HSG #181; DIS# 20622-81) WITH NORTH AMERICAN BURNER. (TAYLOR LEASE)
S-1141-454-0	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF HEAVY CRUDE OIL STORAGE TANK #2017
S-1141-455-0	84,000 GALLONS	3020-05 D	1	194.00	194.00	D	84,000 GALLON FIXED ROOF HEAVY CRUDE OIL STORAGE TANK #2018
S-1141-456-0	31,500 GALLONS	3020-05 C	1	142.00	142.00	D	31,500 GALLON FIXED ROOF PETROLEUM LIQUID STORAGE TANK WITH PRESSURE/VACUUM RELIEF VALVE.

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-457-0	4,200 GALLON	3020-05 A	1	79.00	79.00	D	4,200 GALLON OPEN-TOP TEST TANK
S-1141-466-3	5,400 kBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 5.4 MMBTU/HR NATURAL GAS-FIRED NATCO HEATER TREATER #T-604 SERVED BY THREE 1.8 MMBTU/HR RATED BURNERS EQUIPPED WITH SEPARATE EXHAUST STACKS
S-1141-467-3	5,400 kBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 5.4 MMBTU/HR NATURAL GAS-FIRED NATCO HEATER TREATER #T-611 SERVED BY THREE 1.8 MMBTU/HR RATED BURNERS EQUIPPED WITH SEPARATE EXHAUST STACKS
S-1141-468-3	5,400 kBtu/hr	3020-02 G	1	855.00	855.00	D	DORMANT 5.4 MMBTU/HR NATURAL GAS-FIRED NATCO HEATER TREATER #T-612 SERVED BY THREE 1.8 MMBTU/HR RATED BURNERS EQUIPPED WITH SEPARATE EXHAUST STACKS
S-1141-472-1	250 Barrel Drain Tank	3020-05 B	1	98.00	98.00	D	250 BARREL CRUDE OIL STORAGE TANK (DRAIN TANK)
S-1141-473-10	420,000 gallon storage	3020-05 E	1	258.00	258.00	D	10,000 BBL (420,000 GALLON) CRUDE OIL STORAGE TANK #D1 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-88
S-1141-474-3	420,000 gallons	3020-05 E	1	258.00	258.00	D	10,000 BARREL CRUDE OIL STORAGE TANK - FEE TANK #222-D2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-88
S-1141-479-26	210,000 gallons	3020-05 E	1	258.00	258.00	A	5,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-50-01 (STATION 2-22) VENTED TO VAPOR CONTROL SYSTEM SHARED BETWEEN PERMIT UNITS S-1141-479 AND -481 THROUGH -486, -500, -501, 581, -582, AND -583 INCLUDING AIR COOLED HEAT EXCHANGERS, COMPRESSOR INLET LIQUID KNOCKOUT VESSEL(S), COMPRESSOR(S), AFTERCOOLER(S), DISCHARGE LIQUID KNOCKOUT VESSEL(S), COMPRESSOR LIQUID KNOCKOUT VESSEL(S), AND NON-CONDENSIBLE VAPOR PIPING TO AUTHORIZED INCINERATION DEVICES OR TEOR CASING GAS COLLECTION SYSTEM S-1141-250, ASSOCIATED CONTROL OPTIONS, AND THREE 50 BBL PERMIT EXEMPT TANKS
S-1141-480-16	210,000 gallon	3020-05 E	1	258.00	258.00	D	5,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-50-02 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-481-15	210,000 gallon	3020-05 E	1	258.00	258.00	A	5,000 BBL (210,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-50-03 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-482-15	210,000 gallon	3020-05 E	1	258.00	258.00	A	5,000 BBL (210,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-50-04 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-483-19	420,000 gallon	3020-05 E	1	258.00	258.00	A	20,000 GALLON CRUDE OIL PRODUCTION OPERATION TANK T-100-001 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-484-19	420,000 gallon	3020-05 E	1	258.00	258.00	A	10,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-100-002 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-485-15	420,000 gallon	3020-05 E	1	258.00	258.00	A	10,000 BBL (420,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-100-003 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-486-15	420,000 gallon	3020-05 E	1	258.00	258.00	A	10,000 BBL (420,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-100-004 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-495-25	840,000 gallons	3020-05 F	1	316.00	316.00	A	20,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-200-1 (STATION 2-22) WITH INLET GAS BOOT #T-200-1A BOTH VENTED TO VAPOR CONTROL SYSTEM SHARED BETWEEN PERMIT UNITS S-1141-495 THROUGH '-498 INCLUDING AIR COOLED HEAT EXCHANGERS, COMPRESSOR INLET LIQUID KNOCKOUT VESSEL(S), COMPRESSOR(S), AFTERCOOLER(S), COMPRESSOR DISCHARGE LIQUID KNOCKOUT VESSEL(S), AND PIPING TO AUTHORIZED INCINERATION DEVICES OR TEOR CASING GAS COLLECTION SYSTEM S-1141-250 AND ASSOCIATED DISPOSAL OPTIONS
S-1141-496-19	840,000 gallons	3020-05 F	1	316.00	316.00	A	20,000 BARREL CRUDE OIL PRODUCTION OPERATION TANK #T-200-02 (STATION 2-22) WITH GAS BOOT #T-200-2A BOTH SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-495
S-1141-497-15	840,000 gallons	3020-05 F	1	316.00	316.00	A	20,000 BBL (840,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-200-03 (STATION 2-22) WITH GAS BOOT #T-200-3A BOTH SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-495
S-1141-498-15	840,000 gallons	3020-05 F	1	316.00	316.00	A	20,000 BBL (840,000 GALLON) CRUDE OIL PRODUCTION OPERATION TANK #T-200-04 (STATION 2-22) WITH GAS BOOT #T-200-4A BOTH SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-495
S-1141-499-2	8.4 MMBTU/HR	3020-02 G	1	855.00	855.00	D	8.4 MMBTU/HR LPG FIRED HEATER TREATER #23505 WITH TWO SEPARATE 4.2 MMBTU/HR BURNERS AND EXHAUST STACKS
S-1141-500-8	315,000	3020-05 E	1	258.00	258.00	A	7,500 BBL CRUDE OIL PRODUCTION OPERATION TANK D-1 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-501-10	315,000 gallon	3020-05 E	1	258.00	258.00	A	7,500 BBL CRUDE OIL PRODUCTION OPERATION TANK D-2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-513-9	167,000 KBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	167 MM BTU/HR DUAL BLOWER AIR-ASSISTED EMERGENCY GROUND FLARE WITH KALDAIR AZDAIR PLA-12 FLARE TIP AND 9' DIA X 40' TALL FLAME ENCLOSURE SERVING TANK VAPOR RECOVERY EQUIPMENT LISTED ON S-1141-127, STATION 109
S-1141-514-7	167 MM Btu/hr	3020-02 H	1	1,080.00	1,080.00	A	167 MMBTU/HR DUAL BLOWER AIR-ASSISTED EMERGENCY GROUND FLARE WITH KALDAIR AZDAIR PLA-12 FLARE TIP AND 9' DIA X 40' TALL FLAME ENCLOSURE SERVING TANK VAPOR RECOVERY EQUIPMENT LISTED ON S-1141-88-3 STATION 2-22, S-1141-479 THROUGH '-486, S-1141-487, S-1141-491, AND S-1141-495 THROUGH '-498
S-1141-515-5	62,500 KBTU/HR STEAM GENERATOR	3020-02 H	1	1,080.00	1,080.00	A	DORMANT 62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR WITH A NORTH AMERICAN MODEL #GLE MAGNA-FLAME WITH FGR AND O2 ANALYZER/CONTROLLER (N.B. #826)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-516-13	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED SMITH MOON STEEL STEAM GENERATOR #3 (N.B. #827 A) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER
S-1141-517-19	62,500 kBtu burner	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED STRUTHERS THERMOFLOOD STEAM GENERATOR N.B. #981 WITH MAGNA-FLAME LOW NOX BURNER, FGR O2 ANALYZER/ CONTROLLER
S-1141-518-13	62,500 kBtu/hr burner	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR GAS/TEOR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR N.B. #856 WITH GLE 4231 LOW NOX BURNER, FGR, O2 ANALYZER/CONTROLLER:
S-1141-519-13	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9777 WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 ANALYZER/CONTROLLER
S-1141-520-13	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR GAS-FIRED STRUTHERS THERMOFLOOD STEAM GENERATOR N.B. #973 WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 MONITOR/CONTROLLER
S-1141-521-10	62.5 MMBtu/hr steam generator	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR GAS-FIRED C.E. NATCO STEAM GENERATOR #11 (N.B. #9788) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR) SYSTEM, AND O2 ANALYZER/CONTROLLER
S-1141-522-11	62,500 KBTU/HR STEAM GENERATOR	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR STRUTHERS THERMOFLOOD NATURAL GAS-FIRED STEAM GENERATOR #12 (N.B. #979) WITH A NORTH AMERICAN MAGNA-FLAME MODEL GLE ULTRA LOW NOX BURNER, FGR AND O2 ANALYZER/CONTROLLER
S-1141-523-13	62.5 MMBtu/hr steam generator	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR #2 (N.B. #855) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 CONTROLLER
S-1141-524-11	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR (N.B. #776) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FLUE GAS RECIRCULATION (FGR), AND O2 CONTROLLER
S-1141-525-18	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID#98) WITH NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR
S-1141-526-17	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED STRUTHERS THERMOFLOOD STEAM GENERATOR #100 N.B.#980 WITH NORTH AMERICAN MAGNA-FLAME GLE LOW NOX BURNER, O2 CONTROLLER, AND FGR WITH BLOWER MOTOR AND VARIABLE SPEED DRIVE (VSD)
S-1141-527-15	62,500 KBTU/HR	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STEAM GENERATOR (CUSA ID# 99) WITH NORTH AMERICAN MAGNA-FLAME GLE LOW-NOX BURNER AND FGR
S-1141-528-13	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR (#101) WITH NORTH AMERICAN GLE MAGNA-FLAME LOW NOX BURNER, FGR, AND O2 CONTROLLER

Detailed Facility Report

For Facility=1141
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-529-17	69.0 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	69.0 MMBTU/HR NATURAL GAS-FIRED C.E. NATCO STEAM GENERATOR N.B. #9769 WITH A NORTH AMERICAN, MODEL MAGNA FLAME GLE, ULTRA LOW NOX BURNER AND FLUE GAS RECIRCULATION
S-1141-530-9	62.5 MMBtu/hr steam generator	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR #1 (N.B.#9814) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER SYSTEM WITH FGR
S-1141-531-9	62.5 MMBtu/hr steam generator	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED C.E. NATCO STEAM GENERATOR #3 (N.B.#3194) WITH FGR
S-1141-532-11	62.5 MMBtu/hr steam generator	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR GAS-FIRED NATIONAL TANK STEAM GENERATOR #5 (N.B.#6870) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 CONTROLLER
S-1141-533-9	62.5 MMBtu/hr steam generator	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED SMITH MOON STEEL STEAM GENERATOR #7 (N.B. #701) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR
S-1141-534-9	62.5 MMBtu/hr steam generator	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED HEATER TECHNOLOGY STEAM GENERATOR #9 (N.B. #8) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH FGR
S-1141-535-11	62.5 MMBtu/hr steam generator	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS/TEOR GAS-FIRED DANIEL STEAM GENERATOR #11 (N.B. #124) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, FGR AND O2 CONTROLLER
S-1141-548-3	200 hp	3020-10 C	1	252.00	252.00	A	200 HP JOHN DEERE MODEL 6076A DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-1141-549-12	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED STRUTHERS STEEL STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW-NOX BURNER, WITH AN O2 ANALYZER/CONTROLLER AND FLUE GAS RECIRCULATION (FGR) SYSTEM WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS (NATIONAL BOARD #1026)
S-1141-550-10	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED SMITH MOON STEEL STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH AN O2 ANALYZER/CONTROLLER AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS (NATIONAL BOARD #879)
S-1141-551-11	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #2369) WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA LOW NOX BURNER, AN O2 CONTROLLER, AND A FLUE GAS RECIRCULATION SYSTEM
S-1141-552-11	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #192) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, AND FGR

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-553-11	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #552) WITH NORTH AMERICAN GLE MAGNA FLAME LOW NOX BURNER, O2 ANALYZER/CONTROLLER, AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), AND ELECTRONIC CONTROLS
S-1141-554-11	62,500 kBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #690) WITH A NORTH AMERICAN MODEL MAGNA-FLAME GLE ULTRA LOW NOX BURNER, AN O2 CONTROLLER, AND A FLUE GAS RECIRCULATION SYSTEM
S-1141-555-17	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #7953) WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER, O2 CONTROLLER, FGR AND SO2 SCRUBBER SHARED WITH '-556 AND '-557
S-1141-556-19	62. 5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED SMITH MOON STEEL STEAM GENERATOR (NATIONAL BOARD #653) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA-LOW NOX BURNER WITH O2 ANALYZER/CONTROLLER AND FGR WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), ELECTRONIC CONTROLS AND SHARED SO2 SCRUBBER LISTED ON S-1141-555
S-1141-557-17	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS-FIRED C.E. NATCO STEAM GENERATOR (NATIONAL BOARD #9333, SMPS #8) WITH A NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW-NOX BURNER, WITH O2 ANALYZER/CONTROLLER AND FLUE GAS RECIRCULATION (FGR) SYSTEM WITH VARIABLE SPEED INTAKE AIR BLOWER, ORIFICE PLATE(S), ELECTRONIC CONTROLS AND SHARED SO2 SCRUBBER LISTED ON S-1141-555
S-1141-558-12	62.5 MMBtu/hr	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR NATURAL/TEOR/TVC GAS FIRED CE NATCO STEAM GENERATOR (NATIONAL BOARD #2398) WITH A NORTH AMERICAN MAGNA-FLAME MODEL GLE ULTRA LOW NOX BURNER, FGR AND O2 CONTROLLER
S-1141-560-9	50,762 gallons	3020-05 D	1	194.00	194.00	A	50,762 GALLON FREE WATER KNOCKOUT VESSEL AND VAPOR RECOVERY SYSTEM SHARED WITH -127 (K-709)
S-1141-571-4	126,000 gallons	3020-05 E	1	258.00	258.00	A	3,000 BBL FIXED ROOF WATER STORAGE TANK (T-600) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127
S-1141-572-4	126,000 gallons	3020-05 E	1	258.00	258.00	A	3,000 BBL FIXED ROOF WATER STORAGE TANK (T-900) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-127
S-1141-575-7	50,778 gallons	3020-05 D	1	194.00	194.00	A	1,209 BBL FREE WATER KNOCKOUT VESSEL (K431) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127
S-1141-576-7	50,778 gallons	3020-05 D	1	194.00	194.00	A	1,209 BBL FREE WATER KNOCKOUT VESSEL (K707) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127
S-1141-577-6	29,358 gallons	3020-05 C	1	142.00	142.00	A	699 BBL FREE WATER KNOCKOUT VESSEL (K708) VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON S-1141-127

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-578-5	1,142,106 gallons	3020-05 G	1	401.00	401.00	A	27,193 BBL CRUDE OIL PRODUCTION TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127
S-1141-579-5	1,142,106 gallons	3020-05 G	1	401.00	401.00	A	27,193 BBL CRUDE OIL PRODUCTION TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127
S-1141-580-4	1,142,106 gallons	3020-05 G	1	401.00	401.00	A	27,193 BBL CRUDE OIL TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127
S-1141-581-3	966,000 gallon	3020-05 F	1	316.00	316.00	A	23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-01 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-582-3	966,000 gallon	3020-05 F	1	316.00	316.00	A	23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-02 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-583-3	966,000 gallon	3020-05 F	1	316.00	316.00	A	23,000 BBL CRUDE OIL PRODUCTION OPERATION TANK #T-300-03 (STATION 2-22) SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1141-479
S-1141-585-7	420,000 gallons	3020-05 E	1	258.00	258.00	A	10,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1141-127
S-1141-589-2	100 wells w/ vapor recovery	3020-09 A	100	9.79	979.00	D	100 STEAM-ENHANCED CRUDE OIL PRODUCTION WELLS WITH CLOSED CASING VENTS
S-1141-590-2	367,500 gal (8750 bbl)	3020-05 E	1	258.00	258.00	A	8,750 BBL VAPOR CONTROLED FIXED ROOF PRODUCED WATER STORAGE TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127
S-1141-591-3	367,500 gallons	3020-05 E	1	258.00	258.00	A	8,750 BBL VAPOR CONTROLED FIXED ROOF PRODUCED WATER STORAGE TANK VENTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1141-127
S-1141-594-5	62.5 MMBTU/HR	3020-02 H	1	1,080.00	1,080.00	A	62.5 MMBTU/HR STEAM GENERATOR WITH A NORTH AMERICAN GLE 4231 BURNER, AN O2 CONTROLLER, AND FLUE GAS RECIRCULATION
S-1141-598-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	A	500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)
S-1141-599-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	A	500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)
S-1141-600-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	A	500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)
S-1141-601-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	A	500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)

Detailed Facility Report

For Facility=1141

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1141-602-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	A	500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)
S-1141-603-0	21,000 GALLONS	3020-05 C	1	142.00	142.00	A	500 BBL EMERGENCY TRANSPORTABLE FIXED ROOF CRUDE OIL/PRODUCED FLUIDS STORAGE TANK WITH PRESSURE-VACUUM VALVE (STATION 1-09)
S-1141-604-0	21,000 gallons	3020-05 C	1	142.00	142.00	A	500 BBL FIXED-ROOF (BAKER TYPE) CRUDE OIL STORAGE TANK (WELL 35G-23)
S-1141-609-1	324 hp	3020-10 C	1	252.00	252.00	A	324 BHP CUMMINS MODEL QSB7-G5 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

Number of Facilities Reported: 1