



APR 1 5 2013

Mr. Joseph Rossi San Joaquin Valley Concentrates 5631 E. Olive Ave. Fresno, CA 93727

Re: Notice of Preliminary Decision - Federally Mandated Operating Permit District Facility # C-3275 Project # C-1120643

Dear Mr. Rossi:

Enclosed for your review is the District's analysis of San Joaquin Valley. Concentrates's application for the Federally Mandated Operating Permit for its operation at 5631 E. Olive Avenue in Fresno, 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 this Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day comment, as specified in the public notice.

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

Sincerely,

**Director of Permit Services** 

**Enclosures** 

Mike Tollstrup, CARB (w/enclosure) via email CC:

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

Seved Sadredin

Executive Director/Air Pollution Control Officer

## NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED ISSUANCE OF FEDERALLY MANDATED OPERATING PERMITS

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed issuance of the Federally Mandated Operating permits to San Joaquin Valley Concentrates at 5631 E. Olive Avenue in Fresno, California.

The District's analysis of the legal and factual basis for this proposed action, project #C-1120643, is available for public inspection at http://www.valleyair.org/notices/public\_notices\_idx.htm and at any District office. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed Federally Mandated Operating initial permits. If requested, the District will hold a public hearing regarding issuance of this initial permit. For additional information, please contact the District at (559) 230-6000. Written comments on the proposed initial permit must be submitted by May 20, 2013 to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

## SAN JOAQUIN VALLEY CONCENTRATES

## PROPOSED ENGINEERING EVALUATION

### **TABLE OF CONTENTS**

SEC	TION	PAGE
I.	PROPOSAL	1
II.	FACILITY LOCATION	1
III.	EQUIPMENT LISTING	1
IV.	GENERAL PERMIT TEMPLATE USAGE	2
٧.	SCOPE OF EPA AND PUBLIC REVIEW	2
VI.	APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATE	S 2
VII.	APPLICABLE REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES	2
VIII.	REQUIREMENTS NOT FEDERALLY ENFORCEABLE	4
IX.	COMPLIANCE	4
X.	PERMIT SHIELD	34
XI.	PERMIT CONDITIONS	34
	ACHMENT A - DETAILED FACILITY PRINTOUT	

ATTACHMENT C - SJVUAPCD PERMITS

## TITLE V APPLICATION REVIEW

Project #: C-1120643 Deemed Complete: March 27, 2012

Engineer: Robert Gilles Date: April 8, 2013

Facility Number: C-3275

Facility Name: San Joaquin Valley Concentrates

Mailing Address: 5631 E. Olive Ave

Fresno, CA 93727

Contact Name: Jorge Ortiz

Phone: (559) 458-2810

Email: Jorge.Ortiz@SJVConc.com

Responsible Official: Mr. Joseph Rossi

Title: General Manager

#### I. PROPOSAL

San Joaquin Valley Concentrates is proposing that an initial Title V permit be issued for its existing agricultural products processing facility in Fresno, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

Since the facility submitted the application, permit C-3275-1 has been deleted and permit C-3275-3 has been revised. Compliance will be evaluated considering these changes.

#### II. FACILITY LOCATION

San Joaquin Valley Concentrates is located at 5631 E. Olive Ave., in Fresno, Fresno County, CA.

#### III. EQUIPMENT LISTING

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

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

## IV. GENERAL PERMIT TEMPLATE USAGE

The applicant has not chosen to use any model general permit templates.

### V. SCOPE OF EPA AND PUBLIC REVIEW

The applicant has not requested to utilize any model general permit templates. Therefore, the proposed permit in its entirety is subject to EPA and public review.

## VI. APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES

The applicant has not proposed to utilize any model general permit templates. All applicable requirements are explicitly addressed in the permit outside of the general permit templates.

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

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 2020 – Exemptions (Amended August 18, 2011)

District Rule 2031 – Transfer of Permits (Amended December 17, 1992)

District Rule 2040 – Applications (Amended December 17, 1992)

District Rule 2070 – <u>Standards for Granting Applications</u> (Amended December 17, 1992)

District Rule 2080 - Conditional Approval (Amended December 17, 1992)

District Rule 2201 – New and Modified Stationary Source Review Rule (Amended April 21, 2011)

District Rule 2410 – <u>Prevention of Significant Deterioration (Adopted June 16, 2011)</u>

District Rule 2520 – <u>Federally Mandated Operating Permits</u> (Adopted June 21, 2001)

District Rule 4101 – <u>Visible Emissions</u> (Amended February 17, 2005)

District Rule 4201 – <u>Particulate Matter Concentration</u> (Amended December 17, 1992)

District Rule 4301 – <u>Fuel Burning Equipment</u> (Amended December 17, 1992) (Non SIP replacement for Fresno County Rule 408)

District Rule 4304 – <u>Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters</u> (Adopted October 19, 1995)

District Rule 4305 – <u>Boilers, Steam Generators, and Process Heaters</u> – <u>Phase 2</u> (Amended August 21, 2003)

District Rule 4306 – <u>Boilers, Steam Generators, and Process Heaters - Phase 3 (Amended October 16, 2008)</u>

District Rule 4307 – <u>Boilers, Steam Generators, and Process Heaters – 2.0</u> MMBtu/hr to 5.0 MMBtu/hr (Amended May 19, 2011)

District Rule 4320 – <u>Advanced Emission Reduction Options For Boilers</u>, <u>Steam Generators</u>, and <u>Process Heaters</u> Greater than 5.0 MMBtu/hr (Adopted October 16, 2008)

District Rule 4351 – <u>Boilers, Steam Generators, and Process Heaters - Phase 1</u> (Amended August 21, 2003)

40 CFR Part 60, Subpart Dc – <u>Standards of Performance for Small</u> Industrial-Commercial-Institutional Steam Generating Units

40 CFR Part 61, Subpart M - National Emission Standards for Asbestos

40 CFR Part 64 - Compliance Assurance Monitoring (CAM)

40 CFR Part 82, Subpart F - Stratospheric Ozone

Fresno County Rule 107 - Inspections

Fresno County Rule 406 – Sulfuric Compounds

#### VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

### District Rule 4102 – Nuisance (Amended December 17, 1992)

This rule prevents the discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property.

- A. C-3275-0-1: Facility-wide Requirements
  - Condition number 1 on the proposed permit complies with the requirements of this rule.
- B. C-3275-3-1: 33.66 MMBTU/HOUR CLEAVER-BROOKS NATURAL GAS-FIRED BOILER MODEL NBI-800-250-LN-SKID WITH MODEL CBI.700.800.250 BURNER AND NATIONWIDE CATASTACK SELECTIVE CATALYTIC REDUCTION SYSTEM
  - Conditions 3, 26, 28, and 31 on the proposed permit comply with the requirements of this rule.

#### IX. COMPLIANCE

#### A. Requirements Not Addressed by Model General Permit Templates

#### 1. District Rule 1081 – Source Sampling

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

- A. C-3275-3-1: 33.66 MMBTU/HOUR CLEAVER-BROOKS NATURAL GAS-FIRED BOILER MODEL NBI-800-250-LN-SKID WITH MODEL CBI.700.800.250 BURNER AND NATIONWIDE CATASTACK SELECTIVE CATALYTIC REDUCTION SYSTEM
  - Condition 34 on the requirements for the proposed permit complies with the requirements of this rule.

## 2. District Rule 1100 - Equipment Breakdowns

This rule defines a breakdown condition and the procedures to follow if one occurs. The corrective action, the issuance of an emergency variance, and the reporting requirements are also specified. Sections 6.0 and 7.0 prescribe breakdown procedures and reporting requirements. District Rule 1100 has been submitted to the EPA to replace Kings County Rule 111 that is in the State Implementation Plan (SIP). District Rule 1100 is at least as stringent as the county SIP rule addressing breakdowns, as shown in following.

Comparison of District Rule 1100 to Fresno County Rule 110

REQUIREMENTS	District Rule 1100	Fresno County Rule 110
A breakdown occurrence must be reported as soon as reasonably possible but no later than 1 hour after detection.	×	x
A variance must be obtained if the occurrence will last longer than a production run or 24 hours, whichever is shorter (96 hours for CEM systems).	x	x
A report must be submitted to the APCO within 10 days of the correction of the breakdown occurrence which includes:	x	x
<ol> <li>A statement that the breakdown condition has been corrected, together with the date of correction and proof of compliance.</li> </ol>	x	x
A specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the APCO to determine whether the occurrence was a breakdown condition.	x	x
3) A description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future.	x	
4) Pictures of the equipment or controls which failed if available.	X	

## C-3275-0-1: Facility-Wide Requirements

• Conditions 5, 6 and 15 on the requirements for the proposed permit comply with the requirements of this rule.

#### 3. District Rule 1160 – Emission Statements

The purpose of this rule is to provide the District with an accurate accounting of emissions from significant sources with which the District and California EPA Air Resources Board (ARB) can compile an accurate inventory. §5.0 requires the owner or operator of any stationary source to provide the District with a written emissions statement showing actual

emissions of reactive organic gases (ROGs) and nitrogen oxides (NOx) from that source. The District waives this requirement for sources emitting less than 25 tons per year of these pollutants if the District provides the Air Resources Board (ARB) with an emissions inventory of sources emitting greater than 10 tons per year of NOx or ROGs based on the use of emission factors acceptable to the ARB.

### A. C-3275-0-1: Facility-wide Requirements

• Condition 7 on the requirements for the proposed permit complies with the requirements of this rule.

#### 4. District Rule 2010 - Permits Required

District Rule 2010 §3.0 and §4.0 require 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 or reduce or control the issuance of air contaminants, to obtain an Authority to Construct (ATC) from the District in advance. The ATC will remain in effect until the Permit to Operate (PTO) is granted.

## A. C-3275-0-1: Facility-wide Requirements

• Condition 8 on the requirements for the proposed permit complies with the requirements of this rule.

#### 5. District Rule 2020 – Exemptions

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions.

Current District Rule 2020 has been submitted to the EPA to replace SIP approved December 20, 2007 version of Rule 2020. The comparison of the current District Rule and the previous version, presented in the table below indicate that the current District Rule is at least as stringent as the previous SIP approved version of this rule.

## Comparison of District Rule 2020 (12/20/07) to Rule 2020 (8/18/11)

REQUIREMENTS	District Rule 2020 (12/20/07)	District Rule 2020 (8/18/11)
An ATC or PTO is not required for listed exempt equipment.	X	Х
Conditions are stated under which listed exempt equipment will require an ATC or PTO.	X	X
Record keeping is required to verify and maintain exemption, when the exemption is based on a maximum daily limitation.	X	Х
A compliance schedule is stated for equipment which loses exemption from permitting, necessitating submission of a PTO application.	X	X

#### A. C-3275-0-1: Facility-wide Requirements

• Condition 8 on the requirements for the proposed permit complies with the requirements of this rule.

#### 6. District Rule 2031 - Transfer of Permits

This rule requires a permit to operate or an authority to construct shall not be transferable, whether by operation of law or otherwise, from one location to another, from one piece of equipment to another, or from one person to another, unless a new application is filed with and approved by the APCO.

## A. C-3275-0-1: Facility-wide Requirements

• Condition 10 on the requirements for the proposed permit complies with the requirements of this rule.

#### 7. District Rule 2040 – Applications

The purpose of this rule is to explain the procedures for filing, denying, and appealing the denial of applications for an Authority to Construct or a Permit to Operate.

#### A. C-3275-0-1: Facility-wide Requirements

• Condition 11 on the requirements for the proposed permit complies with the requirements of this rule.

## 8. District Rule 2070 – Standards for Granting Applications

The purpose of this rule is to explain the standards by which an APCO may deny an application for an Authority to Construct or Permit to Operate. Any source operation must be constructed and operated in accordance with Rule 2201 (New and Modified Stationary Source Review Rule), Rule 4001 (New Source Performance Standards), and Rule 4002

(National Emissions Standards for Hazardous Air Pollutants), the Authority to Construct, and the Permit to Operate.

#### A. C-3275-0-1: Facility-wide Requirements

• Condition 9 on the requirements for the proposed permit complies with the requirements of this rule.

#### 9. District Rule 2080 – Portable Equipment Registration

The purpose of this rule is to grant authority to the APCO to issue or revise specific written conditions on an Authority to Construct or a Permit to Operate to assure compliance with air contaminant emission standards or limitations.

#### A. C-3275-0-1: Facility-wide Requirements

• Condition 9 on the requirements for the proposed permit complies with the requirements of this rule.

## 10. District Rule 2201 – New and Modified Stationary Source Review Rule (District NSR Rule)

The permit units are subject to the District Rule 2201 upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting Permit to Operate (PTO) were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- A. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model Cbi.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System
  - Conditions 1, 2, 9 through 17, 19, and 37 from the current PTO have been included as conditions 1, 2, 9 through 17, 19, and 35 on the requirements for the proposed.

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

The purpose of this rule is to incorporate the federal prevention of significant deterioration (PSD) rule requirements into the District's Rules and Regulations by incorporating the federal requirements by reference. The PSD program is a construction permitting program for new major stationary sources and major modifications to existing major stationary sources located in areas classified as attainment or in areas that are unclassifiable for any criteria pollutant. The provisions of this rule shall apply to any source and the owner or operator of any source subject to

any requirement under Title 40 Code of Federal Regulations (40 CFR) Part 52.21 as incorporated into this rule.

There are no PSD requirements for this source; therefore, this source is not subject to the provisions of this rule. No further discussion is required.

## 12. District Rule 2520 – Federally Mandated Operating Permits

The purpose of this rule is to provide for the following: An administrative mechanism for issuing operating permits for new and modified sources of air contaminants in accordance with requirements of 40 CFR Part 70; an administrative mechanism for issuing renewed operating permits for sources of air contaminants in accordance with requirements of 40 CFR Part 70; an administrative mechanism for revising, reopening, revoking, and terminating operating permits for sources of air contaminants in accordance with requirements of 40 CFR Part 70; an administrative mechanism for incorporating requirements authorized by preconstruction permits issued under District Rule 2201 (New and Modified Stationary Source Review) in a Part 70 permit as administrative amendments, provided that such permits meet procedural requirements substantially equivalent to the requirements of 40 CFR 70.7 and 70.8, and compliance requirements substantially equivalent to those contained in 40 CFR 70.6: and the applicable federal and local requirements to appear on a single permit.

This facility is a part of the E & J Gallo Winery stationary source, facility ID C-447. Per §3.30, a stationary source: same as that defined in District Rule 2201 (New and Modified Stationary Source Review) – Stationary Source: any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. Building, structure, facility or installation includes all pollutant emitting activities including emissions units which:

- Are under the same or common ownership or operation, or which are owned or operated by entities which are under common control; and
- Belong to the same industrial grouping either by virtue of falling within the same two-digit standard industrial classification code or by virtue of being part of a common industrial process, manufacturing process, or connected process involving a common raw material; and
- Are located on one or more contiguous or adjacent properties; or
- Are located on one or more properties wholly within either the Western Kern County Oil Fields or the Central Kern County Oil Fields or Fresno County Oil Fields and are used for the production of light oil, heavy oil or gas. Notwithstanding the provisions of this

definition, light oil production, heavy oil production, and gas production shall constitute separate Stationary Sources.

§5.2 requires permittees to submit applications for Title V permit renewal at least six months prior to permit expiration.

#### A. C-3275-0-1: Facility-wide Requirements

- Condition 41 on the requirements for the proposed permit complies with the requirements of this rule.
- §9.0 of District Rule 2520 requires certain elements to be contained in each Title V permit:
- §9.1.1 of District Rule 2520 requires all conditions on Title V permits specify a reference of the origin of an authority for each term or condition, and identify any difference in form as compared to the applicable requirements upon which the term or condition is based.
- §9.4 contains requirements to incorporate all applicable recordkeeping requirements into the Title V permit. This section also specifies records of any required monitoring and support data be kept for a period of five years.

## A. C-3275-0-1: Facility-wide Requirements

- Conditions 12 and 13 on the requirements for the proposed permit comply with the requirements of this rule.
- §9.5 requires the submittal of monitoring reports at least every six months. Prompt reporting of deviations from permitting requirements, including those attributable to upset conditions is also required. The responsible official must certify all required reports.

### A. C-3275-0-1: Facility-wide Requirements

- Condition 14 and 15 on the requirements for the proposed permit comply with the requirements of this rule.
- §9.7 states that the Title V permit must also contain a severability clause in case of a court challenge.

## A. C-3275-0-1: Facility-wide Requirements

- Condition 16 on the requirements for the proposed permit complies with the requirements of this rule.
- §9.8 contains requirements for provisions in the Title V permit stating 1) the permittee must comply with all permit conditions; 2) the permitted activity should not be reduced in order to comply with the permit

conditions. Further, this reasoning shall not be used as a defense in an enforcement action, 3) the permit may be revoked, modified, reissued, or reopened for cause, 4) the Title V permit does not reflect any property rights, and 5) the permittee will furnish the District with any requested information to determine compliance with the conditions of the Title V permit.

## A. C-3275-0-1: Facility-wide Requirements

• Condition numbers 17 through 20 on the requirements for the proposed permit comply with the requirements of this rule.

§9.9 requires the permit specify that the permittee pay annual permit fees and applicable fees from District Rules 3010, 3030, 3050, 3080, 3090, 3110, and 3120.

## A. C-3275-0-1: Facility-wide Requirements

• Condition numbers 9 and 21 on the requirements for the proposed permit comply with the requirements of this rule.

§9.13.1 requires any report or document submitted under a permit requirement or a request for information by the District or EPA contain a certification by a responsible official as to truth, accuracy, and completeness.

## A. C-3275-0-1: Facility-wide Requirements

• Condition number 30 on the requirements for the proposed permit complies with the requirements of this rule.

§9.13.2 contains inspection and entry requirements that allows an authorized representative of the District to enter a permittee's premises to inspect equipment, operations, work practices, permits on file, and to sample substances or monitor parameters for the purpose of assuring compliance with the permit requirements.

## A. C-3275-0-1: Facility-wide Requirements

 Conditions 22 through 25 on the requirements for the proposed permit comply with the requirements of this rule.

§9.16 requires that the permittee submit certification of compliance with the terms and standards of Title V permits to the EPA and the District annually (or more frequently as required by the applicable requirement or the District).

#### A. C-3275-0-1: Facility-wide Requirements

 Condition 40 on the requirements for the proposed permit complies with the requirements of this rule. §10.0 requires any application form, report, or compliance certification submitted pursuant to these regulations shall contain certification of truth, accuracy, and completeness by a responsible official.

### A. C-3275-0-1: Facility-wide Requirements

 Condition 30 on the requirements for the proposed permit complies with the requirements of this rule.

#### **Greenhouse Gas Requirements**

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

#### 13. District Rule 4101 – Visible Emissions

The purpose of this rule is to prohibit the emissions of visible air contaminants to the atmosphere. §5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in §5.1 of Rule 4101.

#### A. C-3275-0-1: Facility-Wide Requirements

 Condition 26 on the requirements for the proposed permit complies with the requirements of this rule.

#### 14. District Rule 4201 – Particulate Matter Concentration

The purpose of this rule is to protect the ambient air quality by establishing a particulate matter emission standard. §3.1 requires emissions to be at or below 0.1 grains of particulate matter per dry standard cubic foot of exhaust gas.

## A. C-3275-0-1: Facility-wide Requirements

 Condition number 3 on the requirements for the proposed permit complies with this rule.

The boilers at this facility are each fired exclusively on PUC quality natural gas. The following calculations show that the boilers in this facility emit less than 0.1 grains of particulate matter per dry standard cubic foot of exhaust gas.

B. C-3275-2-1: 4.9 MMBtu/Hr Dixon Model S-M Natural Gas-Fired Boiler With An Industrial Combustion Model LNDG-63P-20 Low NOx Burner (Facility Opted For Permit To Operate In Lieu Of A Permit Exempt Equipment Registration)

$$\left(\frac{7.6 lb PM}{10^6 ft^3}\right) \left(\frac{1 MMBtu}{8710 dscf}\right) \left(\frac{1 scf}{950 Btu}\right) \left(\frac{7000 gr}{1 lb}\right) = 0.006 \frac{grains}{dscf}$$

where:

7.6 lb-PM/10<sup>6</sup> ft<sup>3</sup> is:

the uncontrolled emission factor for natural gas-

fired boilers (AP 42, Table 1.4-12)

950 Btu/MMBtu is:

the minimum expected higher heating value of

natural gas (AP 42, 1.4.1)

8,710 dscf/MMBtu is:

the F factor (F<sub>d</sub>) for natural gas (40 CFR §60,

Appendix A, Method 19, Table 19-1

7,000 gr/lb is:

conversion factor (AP 42, Appendix A)

C. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model CBI.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System

$$\left(\frac{7.6 lb \text{ PM}}{10^6 ft^3}\right) \left(\frac{1 MMBtu}{8710 dscf}\right) \left(\frac{1 scf}{950 Btu}\right) \left(\frac{7000 gr}{1 lb}\right) = 0.006 \frac{\text{grains}}{\text{dscf}}$$

where:

7.6 lb-PM/10<sup>6</sup> ft<sup>3</sup> is:

the uncontrolled emission factor for natural gas-

fired boilers (AP 42, Table 1.4-12)

950 Btu/MMBtu is:

7,000 gr/lb is:

the minimum expected higher heating value of

natural gas (AP 42, 1.4.1)

8,710 dscf/MMBtu is:

the F factor (F<sub>d</sub>) for natural gas (40 CFR §60,

Appendix A, Method 19, Table 19-1 conversion factor (AP 42, Appendix A)

## 15. District Rule 4301 - Fuel Burning Equipment

The purpose of this rule is to limit the emission of air contaminants from fuel burning equipment. This rule limits the concentration of combustion contaminants and specifies maximum emission rates for sulfur dioxide, nitrogen oxide and combustion contaminant emissions.

- A. C-3275-2-1: 4.9 MMBtu/Hr Dixon Model S-M Natural Gas-Fired Boiler With An Industrial Combustion Model LNDG-63P-20 Low NOx Burner (Facility Opted For Permit To Operate In Lieu Of A Permit Exempt Equipment Registration)
  - Condition 4 on the requirements for the proposed permit complies with the requirements of this rule.
- B. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model CBI.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System
  - Conditions 11 and 12 on the requirements for the proposed permit comply with the requirements of this rule.

## 16. District Rule 4304 – Equipment Tuning Procedures for Boilers, Steam Generators, and Process Heaters

The purpose of this rule is to provide an equipment tuning procedure for boilers, steam generators and process heaters to control visible emissions and emissions of both nitrogen oxides (NOx) and carbon monoxide (CO). This procedure applies to any boiler, steam generator, or process heater that requires tuning pursuant to District regulations or permit conditions.

- A. C-3275-2-1: 4.9 MMBtu/Hr Dixon Model S-M Natural Gas-Fired Boiler With An Industrial Combustion Model LNDG-63P-20 Low NOx Burner (Facility Opted For Permit To Operate In Lieu Of A Permit Exempt Equipment Registration)
  - Condition 6 on the requirements for the proposed permit complies with the requirements of this rule.

## 17. District Rule 4305 – Boilers, Steam Generators, and Process Heaters - Phase 2

The purpose of this rule is to limit emissions of oxides of nitrogen  $(NO_X)$  and carbon monoxide (CO) from boilers, steam generators, and process heaters. This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a rated heat input greater than 5 million Btu per hour.

At this facility, natural gas-fired boiler unit C-3275-3 has a heat input rating of greater than 5 MMBtu/hr. Pursuant to §2.0 of District Rule 4305, these units are subject to District Rule 4305, Boilers, Steam Generators and Process Heaters – Phase 2.

Additionally, boiler unit C-3275-3 is subject to District Rule 4306, "Boilers, Steam Generators and Process Heaters – Phase 3" and District Rule

4320, "Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/hr".

Since the emissions limits of District Rule 4320 and all other requirements are equivalent or more stringent than the District Rule 4305 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4305 for boiler unit C-3275-3.

## 18. District Rule 4306 – Boilers, Steam Generators, and Process Heaters - Phase 3

The purpose of this rule is to limit emissions of oxides of nitrogen  $(NO_X)$  and carbon monoxide (CO) from boilers, steam generators, and process heaters. This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a rated heat input greater than 5 million Btu per hour.

#### §5.0 Requirements

#### §5.1 NOx and CO Emission Limits

## §5.1.1 Except for units subject to §5.2, NOx and carbon monoxide (CO) emissions shall not exceed the limits specified in Table 1.

	Operated on Gaseous Fuel			Operated on Liquid Fuel	
Category	NOx Limit		0011:11		0011
_	Standard option	Enhanced Option	CO Limit (ppmv)	NOx Limit	CO Limit (ppmv)
B. Units with a rated heat input greater than 20.0 MMBtu/hr	9 ppmv or 0.011 lb/MMBtu	6 ppmv or 0.007 lb/MMBtu	400	40 ppmv or 0.052 lb/MMBtu	400

#### §5.4 Monitoring Provisions

§5.4.2 The operator of any unit subject to the applicable emission limits in §5.1 shall install and maintain an operational APCO approved Continuous Emissions Monitoring System (CEMS) for NOx, CO, and oxygen, or implement an APCO-approved Alternate Monitoring System. An APCO approved CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Part 60 Appendix B (Performance Specifications) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures, and applicable provisions of Rule 1080 (Stack Monitoring). An APCO

approved Alternate Monitoring System shall monitor one or more of the following:

- §5.4.2.1 periodic NOx and CO exhaust emission concentrations,
- §5.4.2.2 periodic exhaust oxygen concentration,
- §5.4.2.3 flow rate of reducing agent added to exhaust,
- §5.4.2.4 catalyst inlet and exhaust temperature,
- §5.4.2.5 catalyst inlet and exhaust oxygen concentration,
- §5.4.2.6 periodic flue gas recirculation rate,
- §5.4.2.7 other operational characteristics.
- §5.4.3 For units subject to the requirements of §5.2.1 or §5.2.2, the operator shall monitor, at least on a monthly basis, the operational characteristics recommended by the manufacturer and approved by the APCO.

#### §5.5 Compliance Determination

- §5.5.1 The operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in §5.1. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).
- §5.5.2 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. Unless otherwise 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 §3.0.
- §5.5.4 For emissions monitoring pursuant to §5.4.2, §5.4.2.1, and §6.3.1 using a portable NOx analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings 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.
- §5.5.5 For emissions source testing performed pursuant to §6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

### §6.2 Test Methods

The following test methods shall be used unless otherwise approved by the APCO and EPA.

§6.2.1 Fuel HHV shall be certified by third party fuel supplier or determined by:

§6.2.1.2 ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.

Pollutant	Units	Test Method Required
NO <sub>X</sub>	ppmv	EPA Method 7E or ARB Method 100
NO <sub>x</sub> (Heat Input Basis)	lb/MMBtu	EPA Method 19
со	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O₂	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4
SO <sub>x</sub>	ppmv	EPA Method 6C, EPA Method 8, or ARB Method 100

## §6.3 Compliance Testing

- §6.3.1 Each unit subject to the requirements in §5.1 or §5.2.3 shall be source tested to determine compliance with the applicable emission limits at least once every 12 months, (no more than 30 days before or after the required annual source test date). Units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test for up to 36 months (no more than 30 days before or after the required 36-month source test date).
- A. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model Cbi.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System
  - Conditions 11 through 17, 19 through 25, 27 through 30, 32, 33 and 36 on the requirements for the proposed permit comply with the requirements of this rule.

## 19. District Rule 4307 – Boilers, Steam Generators, and Process Heaters – 2.0 MMBtu/hr to 5.0 MMBtu/hr

The purpose of this rule is to limit emissions of oxides of nitrogen (NOx), carbon monoxide (CO), oxides of sulfur (SO<sub>2</sub>), and particulate matter 10 microns or less (PM<sub>10</sub>) from boilers, steam generators, and process heaters. This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input of 2.0 million Btu per hour (MMBtu/hr) up to and including 5.0 MMBtu/hr.

#### §5.0 Requirements

All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 3.00 percent by volume stack gas oxygen. Emission concentrations shall be corrected to 3.00 percent oxygen in accordance with §8.1.

#### §5.1 NOx and CO Emission Limits

§5.1.1 Except for units subject to either §5.1.2 or §5.2, no unit shall be operated unless it is certified, according to §9.0, or source tested in accordance with the test methods in §6.2, to comply with the applicable emission limits specified in Table 1 and Table 2.

#### §5.3 Particulate Matter Control Requirements

- §5.3.1 To limit particulate matter emissions, an operator shall comply with one of the following requirements:
- §5.3.1.1 On and after July 1, 2015, operators shall fire units exclusively on PUC quality natural gas, commercial propane, butane, liquefied petroleum gas, or a combination of such gases; or
- §5.3.1.2 On and after July 1, 2015, operators shall limit fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet; or
- §5.3.1.3 On and after July 1, 2015, operators shall install and properly operate an emission control system that reduces SO2 emissions by at least 95% by weight; or limit exhaust SO2 to less than or equal to 9 ppmv corrected to 3.0% O2.
- §5.3.2 On and after July 1, 2015, liquid fuel shall be used only during a PUC quality natural gas curtailment period provided it contains no more than 15 ppm sulfur as determined by the test method specified in §6.2.7. An operator shall comply with the recordkeeping requirement of §6.1.3. In

lieu of testing the sulfur content of liquid fuel, an operator may demonstrate compliance with the 15 ppm sulfur content by obtaining a copy of the fuel sulfur content specification data from the fuel

- §5.5 Monitoring Provisions
- §5.5.1 For units subject to the emission limits of §5.1 the operator shall;
- §5.5.1.1 Monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO; and
- §5.5.1.2 Tune the unit at least twice per calendar year, (from four to eight months apart) using a qualified technician in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. In lieu of tuning the unit, operators shall monitor the emissions with a portable NOx analyzer and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule.
- §5.5.2 The operator of any unit limited to the annual heat input specified in §5.2.1 or §5.2.2 shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit. Volumetric flow measurements shall be periodically compensated for temperature and pressure. A master meter, which measures fuel to all units in a group of similar units, may satisfy these requirements if approved by the APCO in writing. The cumulative annual fuel usage may be verified from utility service meters, purchase or tank fill records, or other acceptable methods, as approved by the APCO.
- §5.5.3 Monitoring SOx Emissions
- §5.5.3.1 Operators complying with §5.3.1.3 by installing and operating a control device with 95% SOx reduction shall propose the key system operating parameters and frequency of the monitoring and recording. The monitoring option proposed shall be submitted for approval by the APCO.
- §5.5.3.2 Operators complying with §5.3.1.1 or §5.3.1.2 shall provide an annual fuel analysis to the District unless a more frequent sampling and reporting period is included in the Permit To Operate or Equipment Registration condition. Sulfur analysis shall be performed in accordance with the test methods in §6.2.

## §5.6 Compliance Determination

- §5.6.1 For the purposes of certification, the operator of any unit shall have the option of demonstrating compliance with either the applicable heat input emission limits (lb/MMBtu) or the concentration emission limits (ppmv) specified in §5.1. The emission limits selected to demonstrate compliance shall be specified in the Permit to Operate or Permit-Exempt Equipment Registration. The emission limit selected in §5.1 shall also be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).
- §5.6.2 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 or Permit-Exempt Equipment Registration.
- §5.6.3 Unless otherwise specified in the Permit to Operate or Permit-Exempt Equipment Registration 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 reignition as defined in §3.0.
- §5.6.4 Notwithstanding the requirements of §5.6.3, for units with a cyclical firing period that routinely interrupts fuel flow as part of its normal operation, source testing may commence sooner than specified in §5.6.3 and continue through its normal cyclical firing period.
- §5.6.5 For emissions source testing performed pursuant to §6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

#### §6.0 Administrative Requirements

#### §6.1 Recordkeeping

The records required by §6.1.1 through §6.1.5 shall be maintained, and retained for five calendar years. The records shall be made available to the APCO, ARB, and EPA upon request. Failure to maintain records or information contained in the records that demonstrates noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

- §6.1.1 The operator of any unit limited to the annual heat input specified in §5.2.1 or §5.2.2 shall record the amount of fuel use, at least once a month for each unit, or for a group of units as specified in §5.5.2. On and after the compliance schedule specified in §7.0 Table 3, any unit that exceeds the annual heat input limit specified in §5.2.1 or §5.2.2 shall be brought into full compliance with this rule as specified in §7.3.
- §6.1.2 The operator of any unit subject to the applicable requirements of §5.2.1.1, §5.5.1.1, and §5.5.1.2 shall maintain records to verify that tune-up and monitoring of the operational characteristics of the unit have been performed.
- §6.1.3 Operators who operate a unit on liquid fuel during PUC-quality natural gas curtailment period shall record the sulfur content of the fuel, amount of fuel used, and duration of the natural gas curtailment period.
- §6.1.4 The operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown that exceed the applicable requirements of §5.4.1 or §5.4.2.
- §6.1.5 Tree Nut Pasteurizers Operations and Maintenance Records

The operator of a tree nut pasteurizer shall maintain operation and maintenance records that demonstrate operation of the tree nut pasteurizer is within the limits of the manufacturer's specification and maintenance according to manufacturer's recommendation or APCO approved alternative procedures.

- §6.1.5.1 Operations records shall be maintained for the days on which the tree nut pasteurizer is operated.
- §6.1.5.2 The operator shall keep maintenance records that verify that maintenance was performed in accordance with manufacturer's specifications or APCO-approved alternative procedures.
- §6.1.5.3 A copy of the manufacturer's operation specifications and maintenance instruction manual or APCO-approved alternative procedures shall be maintained on-site during normal business hours.
- §6.1.5.4 If the manufacturer's operation specifications or maintenance instruction manual are not available, the operator of a tree nut pasteurizer shall submit alternative operation or maintenance procedures for approval by the APCO by November 1, 2011 or as part of the Authority to Construct application, whichever is later.

§6.1.5.5 The operator of a tree nut pasteurizer shall maintain records that demonstrate that the fuel used to fire the pasteurizer is PUC quality natural gas.

#### §6.2 Test Methods

The following test methods shall be used unless otherwise approved by the APCO, ARB, and EPA.

Pollutant	Units	Test Method Required
NO <sub>X</sub>	ppmv	EPA Method 7E or ARB Method 100
NO <sub>X</sub> (Heat Input Basis)	lb/MMBtu	EPA Method 19
со	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O <sub>2</sub>	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4
SO <sub>x</sub>	ppmv	EPA Method 6C, EPA Method 8, or ARB Method 100

#### §6.3 Compliance Demonstration

- §6.3.1 The operator shall conduct an initial source test at the time of installation and/or modification for each non-certified unit or each non-certified retrofit control technology to demonstrate compliance with the applicable certification emission limits in §5.1. Units demonstrating compliance are eligible for certification under the provisions of §9.0.
- §6.3.2 Source testing of a certified unit or certified retrofit control technology, as defined in §3.0, is not required provided the operator complies with the requirements of §6.3.2.1 and §6.3.2.2.
- §6.3.2.1 Operate the unit within range of operating parameters specified in the APCO-approved certification document.
- §6.3.2.2 Operate and maintain the unit in accordance with the manufacturer's instructions and conditions specified in the APCO-approved certification document.
- §6.3.3 A unit or retrofit control technology that loses its certification status shall be source tested within 60 days after the date the certification status is lost to demonstrate compliance with the emission limits of this rule. The

manufacturer or operator may request re-certification of a unit or retrofit control technology that lost its certification status provided the provisions of §9.0 are met.

- A. C-3275-2-1: 4.9 MMBtu/Hr Dixon Model S-M Natural Gas-Fired Boiler With An Industrial Combustion Model LNDG-63P-20 Low NOx Burner (Facility Opted For Permit To Operate In Lieu Of A Permit Exempt Equipment Registration)
  - Conditions 2 through 9 and 11 through 20 on the requirements for the proposed permit comply with the requirements of this rule.

## District Rule 4320 – Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr

The purpose of this rule is to limit the emissions of oxides of nitrogen  $(NO_X)$ , carbon monoxide (CO), oxides of sulfur  $(SO_2)$ , and particulate matter 10 microns or less  $(PM_{10})$  from boilers, steam generators, and process heaters. This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.

#### §5.0 Requirements

- §5.1 An operator of a unit(s) subject to this rule shall comply with all applicable requirements of the rule and one of the following, on a unit-by-unit basis:
- §5.1.1 Operate the unit to comply with the emission limits specified in §5.2 and §5.4; or
- §5.1.2 Pay an annual emissions fee to the District as specified in §5.3 and comply with the control requirements specified in §5.4; or
- §5.1.3 Comply with the applicable Low-use Unit requirements of §5.5.
- §5.2 NO<sub>x</sub> and CO Emission Limits
- §5.2.1 On and after the indicated Compliance Deadline, units shall not be operated in a manner which exceeds the applicable NOx emissions limit specified in Table 1. On and after October 1, 2008, units shall not be operated in a manner to which exceeds a carbon monoxide (CO) emissions limit of 400 ppmv.

Table 1: NO <sub>x</sub> Emission Limits			
Category	NO <sub>x</sub> Limit	Authority to Construct	Compliance Deadline
B. Units with a total rated heat input >20.0	a) Standard Schedule 7 ppmv or 0.08 lb/MMBtu: or	July 1, 2011	July 1, 2012
MMBtu/hr, except for Categories C through G units	b) Enhanced Schedule 5 ppmv or 0.0062 lb/MMBtu	January 1, 2013	January 1, 2014
E. Units from any Category, that were installed prior to January 1, 2009 and limited by a Permit to Operate to an annual heat input >1.8 billion Btu/yr but ≤ 30 billion Btu/year.	Standard Schedule 9 ppmv or 0.011 lb/MMBtu	Twelve months before the next unit replacement but no later than January 1, 2013.	At the next unit replacement but no later than January 1, 2014

#### §5.4 Particulate Matter Control Requirements

- §5.4.1 To limit particulate matter emissions, an operator shall comply with one of the following requirements:
- §5.4.1.1 On and after the applicable NOx Compliance Deadline specified in §5.2 Table 1, operators shall fire units exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases;
- §5.4.1.2 On and after the applicable NOx Compliance Deadline specified in §5.2 Table 1, operators shall limit fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet; or
- §5.4.1.3 On and after the applicable NOx Compliance Deadline specified in §5.2 Table 1, operators shall install and properly operate an emission control system that reduces SO2 emissions by at least 95% by weight; or limit exhaust SO2 to less than or equal to 9 ppmv corrected to 3.0% O2.
- §5.4.1.4 Notwithstanding the compliance deadlines indicated in §5.4.1.1 through §5.4.1.3, refinery units, which require modification of refinery equipment to reduce sulfur emissions, shall be in compliance with the applicable requirement in §5.4.1 no later than July 1, 2013.
- §5.6 states that on and after the full compliance schedule specified in §5.0, the applicable emission limits of §5.2, Table 1 and §5.5.2 shall not

apply during start-up or shutdown provided an operator complies with the requirements specified in §5.6.1 through §5.6.3.

- §5.6.1 The duration of each start-up or each shutdown shall not exceed two hours, except as provided in §5.6.3.
- §5.6.2 The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during start-up or shutdown.
- §5.6.3 Notwithstanding the requirement of §5.6.1, an operator may submit an application for a Permit to Operate condition to allow more than two hours for each start-up or each shutdown.
- §5.7 requires that permit units subject to District Rule 4320, §5.2 emissions limits shall either install and maintain Continuous Emission Monitoring (CEM) equipment for NOx, CO and O2, or install and maintain APCO-approved alternate monitoring system.

An APCO-approved Alternate Monitoring System shall monitor one or more of the following:

- §5.7.1.1 Periodic NOx and CO exhaust emission concentrations,
- §5.7.1.2 Periodic exhaust oxygen concentration,
- §5.7.1.3 Flow rate of reducing agent added to exhaust,
- §5.7.1.4 Catalyst inlet and exhaust temperature,
- §5.7.1.5 Catalyst inlet and exhaust oxygen concentration,
- §5.7.1.6 Periodic flue gas recirculation rate, or
- §5.7.1.7 Other operational characteristics.

In order to satisfy the requirements of District Rule 4320, the applicant has proposed to use pre-approved alternate monitoring scheme A (pursuant to District Policy SSP-1105), which requires that monitoring of NOx, CO, and O<sub>2</sub> exhaust concentrations shall be conducted at least once per month (in which a source test is not performed) using a portable analyzer.

- §5.7.6 requires the operators to monitor SOx emissions that comply with §5.4.1.1 or §5.4.1.2 by providing an annual fuel analysis to the District unless a more frequent sampling and reporting period is included in the Permit to Operate. Sulfur analysis shall be performed in accordance with the test methods in §6.2.
- §5.8.1 requires that the operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in §5.2. The

emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).

- §5.8.2 requires that 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 §3.0.
- §5.8.4 requires that for emissions monitoring pursuant to §5.7.1 and §6.3.1 using a portable NOx analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings 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.
- §5.8.5 requires that for emissions source testing performed pursuant to §6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 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.
- §6.1 requires that the records required by §6.1.1 through §6.1.5 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.
- §6.1.2 requires that the operator of a unit subject to §5.5 shall record the amount of fuel use at least on a monthly basis. Since the units are not subject to the requirements listed in §5.5, they are not subject to §6.1.2 requirements.
- §6.1.3 requires that the operator of a unit subject to §5.5.1 or §6.3.1 shall maintain records to verify that the required tune-up and the required monitoring of the operational characteristics have been performed. The units are not subject to §6.1.3. Therefore, the requirements of this section do not apply to the units.
- §6.1.4 requires that the operator of a unit with startup or shutdown provisions keep records of the duration of the startup or shutdowns.

§6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed:

Pollutant	Units	Test Method Required
NO <sub>X</sub>	ppmv	EPA Method 7E or ARB Method 100
NO <sub>x</sub> (Heat Input Basis)	lb/MMBtu	EPA Method 19
со	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O₂	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4
SO <sub>x</sub>	ppmv	EPA Method 6C, EPA Method 8, or ARB Method 100

- §6.3.1 states that the units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test for up to 36 months (no more than 30 days before or after the required 36-month source test date). During the 36-month source testing interval, the operator shall tune the unit in accordance with the provisions of §5.5.1, and shall monitor, on a monthly basis, the unit's operational characteristics recommended by the manufacturer to ensure compliance with the applicable emission limits specified in §5.2.
- §6.3.1.2 states that the tune-ups required by §5.5.1 and §6.3.1 do not need to be performed for units that operate and maintain an APCO approved CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored.
- §6.3.3 states that if the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits specified in §5.2, the source testing frequency shall revert to at least once every 12 months.

Additionally, since the applicant has proposed to use pre-approved Alternate Monitoring Scheme "A" using a portable analyzer, the tune-up requirements listed in §6.3.1 are not applicable to the units that are subject to this rule. §6.3.1 also requires that, during the 36-month source testing interval, the owner/operator shall monthly monitor the operational characteristics recommended by the unit manufacturer. Since the pre-approved Alternate Monitoring Scheme "A" using a portable analyzer requires monthly monitoring of NOx, CO, and O<sub>2</sub> exhaust emissions

concentrations, operational characteristics monitoring requirement is satisfied, and no further discussion is required.

§6.4.1 requires that the operator of any unit shall submit to the APCO for approval an Emissions Control Plan according to the compliance schedule in §7.0.

The facility submitted the Emissions Control Plan in 2009 and will be in compliance with the emissions limits listed in Table 1, §5.2 of this rule and with the periodic monitoring and source testing requirements. No further discussion is required.

- A. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model CBI.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System
  - Conditions 10 through 17, 19 through 25, 27 through 30, 32 through 34, and 36 on the requirements for the proposed permit comply with the requirements of this rule. For this unit, the facility is in compliance with Table 1, Category B, Enhanced Schedule NOx emissions 5 ppmv @ 3% O<sub>2</sub>, or 0.0062 lb/MMBtu.

## 21. District Rule 4351 – Boilers, Steam Generators, and Process Heaters - Phase 1

The purpose of this rule is to limit emissions of oxides of nitrogen (NOx) from boilers, steam generators, and process heaters to levels consistent with reasonably available control technology (RACT). This rule applies to any boiler, steam generator or process heater, with a rated heat input greater than 5 million Btu per hour that is fired with gaseous and/or liquid fuels, and is included in a major NOx source. The rule does not apply to any unit located west of Interstate 5 in Fresno, Kern, or Kings County. The emission limits, monitoring provisions, and testing requirements of this rule are satisfied when the unit is operated in compliance with Rule 4320. Therefore, compliance with this rule is expected for each subject unit.

## 22. 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

This subpart applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr.

#### §60.42c - Standards for Sulfur Dioxide

Since coal is not combusted by any boiler at this facility, the requirements of this section are not applicable.

#### §60.43c - Standards for Particulate Matter

The boilers at this facility are not fired on coal, mixtures of coal with other fuels, wood, mixtures of wood with other fuels, or oil; therefore they are not subject to the requirements of this section.

## §60.45c – Compliance and Performance Test Methods and Procedures for Particulate Matter

Since the boilers at this facility are not subject to the particulate matter requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the boilers at this facility.

#### §60.46c – Emission Monitoring for Sulfur Dioxide

Since the boilers at this facility are not subject to the sulfur dioxide requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the boilers at this facility.

#### §60.47c – Emission Monitoring for Particulate Matter

Since the boilers at this facility are not subject to the particulate matter requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the boilers at this facility.

#### §60.48c – Reporting and Recordkeeping Requirements

This section states that the owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

The design heat input capacity and type of fuel combusted at the facility are on the unit's equipment description. No conditions are required to show compliance with this requirement.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel mixture of fuels under §60.42c or §40.43c.

This requirement is not applicable since these units are not subject to §60.42c or §40.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

The facility has no annual capacity factor; therefore one will not be required.

(4) Notification if an emerging technology will be used for controlling SO<sub>2</sub> emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

This requirement is not applicable since the unit is not equipped with an emerging technology used to control SO<sub>2</sub> emissions.

§60.48c(g) states that the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

- § 60.48c(i) states that all records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. District Rule 4320 requires that records be kept for five years.
- A. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model CBI.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System
  - Conditions 9 and 35 on the requirements for the proposed permit comply with the requirements of this subpart.

## 23. 40 CFR Part 61, Subpart M - National Emission Standards for Asbestos

There are applicable requirements from the National Emissions Standards for Hazardous Air Pollutants that apply to all sources in general. The requirements of this subpart pertain to asbestos removal and disposal from renovated or demolished structures.

- A. C-3275-0-1: Facility-Wide Requirements
  - Condition 39 on the requirements for the proposed permit complies with the requirements of this subpart.

#### 24. 40 CFR Part 64 – Compliance Assurance Monitoring (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;
- 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.
- A. C-3275-2-1: 4.9 MMBtu/Hr Dixon Model S-M Natural Gas-Fired Boiler With An Industrial Combustion Model LNDG-63P-20 Low NOx Burner (Facility Opted For Permit To Operate In Lieu Of A Permit Exempt Equipment Registration)

The permit for this boiler contains emission limits for  $NO_X$ , CO, VOC,  $PM_{10}$  and  $SO_X$  emissions. However, this boiler is not equipped with any add on control devices for  $NO_X$ , CO, VOC,  $PM_{10}$  or  $SO_X$  emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for these pollutants.

B. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model CBI.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System

The permit for this boiler contains emission limits for  $NO_X$ , CO, VOC,  $PM_{10}$  and  $SO_X$  emissions. However, this boiler is not equipped with any add on control devices for CO, VOC,  $PM_{10}$  or  $SO_X$  emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for these pollutants.

This boiler is equipped with a selective catalytic reduction (SCR) system and a flue gas recirculation (FGR) system. Both of these systems provide control for  $NO_X$  emissions. Typically the District assumes that an SCR system in combination with an FGR system will achieve a minimum of 90% control for the  $NO_X$  emissions generated in a natural gas fired boiler. This boiler is currently operating in compliance with Rule 4320, Table 1, Category B, Enhanced Option and is therefore required to meet the NOx emissions limit of 0.006 lb/MMBtu (5 ppmv @3%  $O_2$ ). To assess whether CAM is triggered the uncontrolled  $NO_X$  emission rate from this boiler can be determined using the emission factor and maximum heat input rating of the boiler and the control efficiency of the SCR and FGR systems.

#### NO<sub>x</sub> Emissions:

Controlled Emission Factor = 0.006 lb/MMBtu
Heat Input Rating = 33.66 MMBtu/hr
Maximum Operating Schedule = 8,760 hours/year
SCR + FGR System Control Efficiency = 90%

#### **Annual Uncontrolled Emissions:**

PE<sub>Uncontrolled</sub> = (0.006 lb-NOx/MMBtu) x (33.66 MMBtu/hr) x (8,760 hr/yr) + (1 – 0.90) = 17,692 lb-NOx/yr

Since  $17,692 \text{ lb/yr} < 20,000 \text{ lb-NO}_X/\text{yr}$ , this boiler is not subject to CAM.

#### 25. 40 CFR Part 82, Subpart F – Stratospheric Ozone

There are applicable requirements from Title VI of the CAA (Stratospheric Ozone) that apply to all sources in general. These requirements pertain to air conditioners, chillers, and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC).

#### A. C-3275-0-1: Facility-Wide Requirements

• Conditions 31 and 32 on the requirements for the proposed permit comply with the requirements of this subpart.

## 26. Fresno County Rule 107 - Inspections

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

- A. C-3275-2-1: 4.9 MMBtu/Hr Dixon Model S-M Natural Gas-Fired Boiler With An Industrial Combustion Model LNDG-63P-20 Low NOx Burner (Facility Opted For Permit To Operate In Lieu Of A Permit Exempt Equipment Registration)
  - Condition 20 on the requirements for the proposed permit complies with the requirements of this rule.
- B. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model Cbi.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System
  - Condition 36 on the requirements for the proposed permit complies with the requirements of this rule.

## 27. Fresno County Rule 406 – Sulfuric Compounds

This rule contains a limit on sulfur compounds. The limit at the point of discharge is 0.2 percent by volume, which is 2000 ppmv, calculated as sulfur dioxide (SO<sub>2</sub>), on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the emission factor for natural gas combustion, the sulfur compound emissions are calculated as follows:

Volume, 
$$SO_2 = \frac{nRT}{P}$$

Where:

#### **Natural Gas Combustion**

EPA F-Factor for Natural Gas: 8,710 dscf/MMBtu at 68 °F, equivalent to

Corrected F-factor = (8,710 dscf/MMBtu) x [(60°F+459.6) + (68°F+459.6)] = 8,578 dscf/MMBtu @ 60°F

### Sulfur Concentration (ppm)

0.00285 lb-SOx	MMBtu	1 lb-mol SO <sub>2</sub>	10.73 psi-ft <sup>3</sup>	520°R	1E6 parts
MMBtu	8,578 dscf	64 lb-SO <sub>2</sub>	lb-mol-°R	14.7 psi	million

Sulfur Concentration = 1.97 ppm < 2,000 ppmv (or 0.2%)

- A. C-3275-2-1: 4.9 MMBtu/Hr Dixon Model s-m Natural Gas-Fired Boiler With An Industrial Combustion Model Indg-63p-20 Low NOx Burner (Facility Opted For Permit To Operate In Lieu Of A Permit Exempt Equipment Registration)
  - Conditions 2 and 4 on the requirements for the proposed permit comply with the requirements of this rule.
- B. C-3275-3-1: 33.66 MMBtu/Hour Cleaver-Brooks Natural Gas-Fired Boiler Model NBI-800-250-LN-SKID With Model Cbi.700.800.250 Burner and Nationwide Catastack Selective Catalytic Reduction System
  - Conditions 10 through 12 on the requirements for the proposed permit comply with the requirements of this rule.

### X. PERMIT SHIELD

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

A. Requirements Addressed by Model General Permit Templates

The applicant has not requested to utilize any model general permit templates.

B. Requirements not Addressed by Model General Permit Templates

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

### XI. PERMIT CONDITIONS

See draft operating permits beginning on the following page.

FACILITY: C-3275-0-1

EXPIRATION DATE 02/28/2014

### **FACILITY-WIDE 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. Facilities C-447 and C-3275 are part of the same stationary source for Rule 2201 purposes. [District Rule 2201]
- 5. 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 and Fresno County Rule 110] Federally Enforceable Through Title V Permit
- 6. 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 and Fresno County Rule 110] Federally Enforceable Through Title V Permit
- 7. {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
- 8. 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 (8/18/11). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 9. {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
- 10. {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 Rule 2031] Federally Enforceable Through Title V Permit
- 11. {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

FACILITY-WIDE REDUITED THE CONTINUE ON NEXT PAGE

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES Location: 5631 E OLIVE AVE, FRESNO, CA 93727 C-3275-0-1; Mar 19 2013 9:07AM - GILLESR

- 12. {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
- 13. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 14. {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
- 15. {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
- 16. {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
- 17. {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
- 18. {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
- 19. {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
- 20. {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
- 21. {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
- 22. {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
- 23. {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
- 24. {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

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

- 25. {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
- 26. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
- 27. {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
- 28. {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
- 29. {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
- 30. {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
- 31. {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
- 32. {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
- 33. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
- 34. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
- 35. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
- 36. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
- 37. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES Location: 5631 E OLIVE AVE, FRESNO, CA 93727 C-3275-0-1; Mer 19 2013 9:07AM — GILLESR

- 38. {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 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 39. {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
- 40. {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
- 41. {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
- 42. {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
- 43. {109} 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]
- 44. {110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 45. {1407} 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]
- 46. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES Location: 5631 E OLIVE AVE, FRESNO, CA 93727 C-3275-0-1: Mar 19 2013 9:07AM — GILLESR

**PERMIT UNIT:** C-3275-2-1

#### **EQUIPMENT DESCRIPTION:**

4.9 MMBTU/HR DIXON MODEL S-M NATURAL GAS-FIRED BOILER WITH AN INDUSTRIAL COMBUSTION LNDG-63P-20 LOW NOX BURNER (FACILITY OPTED FOR PERMIT TO OPERATE IN LIEU OF A PERMIT EXEMPT **EQUIPMENT REGISTRATION)** 

### PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- The boiler shall only be fired on PUC-quality natural gas. [District Rule 4307] Federally Enforceable Through Title V Permit
- This boiler shall be equipped with an operational non-resettable, totalizing mass or volumetric fuel flow meter to 3. measure the amount of natural gas consumed which must be installed by July 1, 2009. [District Rule 4307] Federally Enforceable Through Title V Permit
- When fired on natural gas, emissions from the boiler shall not exceed any of the following limits: 30 ppmvd NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 400 ppmvd CO @ 3% O2 or 0.2956 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 4307] Federally Enforceable Through Title V Permit
- The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307] Federally Enforceable Through Title V Permit
- The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307] Federally Enforceable Through Title V Permit
- If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307] Federally Enforceable Through Title V Permit
- In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307] Federally Enforceable Through Title V Permit
- The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307] Federally Enforceable Through Title V Permit
- 10. 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
- 11. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES 5631 E OLIVE AVE FRESNO, CA 93727 Location:

LOCATION: 3031 E OLIVE C-3275-2-1: Mar 19 2013 9:07AM - GILLESR

- 12. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307] Federally Enforceable Through Title V Permit
- 13. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307] Federally Enforceable Through Title V Permit
- 14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4307] Federally Enforceable Through Title V Permit
- 15. 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 4307. [District Rule 4307] Federally Enforceable Through Title V Permit
- 16. 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 Rule 4307] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307] Federally Enforceable Through Title V Permit
- 18. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307] Federally Enforceable Through Title V Permit
- 19. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307] Federally Enforceable Through Title V Permit
- 20. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 4307] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES Location: 5631 E OLIVE AVE, FRESNO, CA 93727 C-3275-2-1: Mer 19 2013 907AM – GILLESR

**PERMIT UNIT:** C-3275-3-1

#### **EQUIPMENT DESCRIPTION:**

33.66 MMBTU/HR CLEAVER-BROOKS MODEL NBI-800-250-LN-SKID NATURAL GAS-FIRED BÖLLER EQUIPPED WITH A CLEAVER-BROOKS MODEL CBI.700.800.250 LOW NOX BURNER, FLUE GAS RECIRCULATION SYSTEM, AND O2 CONTROLLER SERVED BY A NATIONWIDE MODEL CATASTAK SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be constructed, maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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
- The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper 3. ok), roof overhang, or any other obstruction. [District Rule 4102]
- The boiler shall be equipped with an economizer system that consists of, at a minimum, a single stage economizer section which will recover energy from the boiler flue gas by heat exchange with the boiler feed water. The economizer system shall be designed at maximum boiler firing rate to either 1) reduce the temperature of the economizer flue gas outlet to a value no greater than 20 deg F above the temperature of the boiler feed water at maximum firing rate, or 2) heat the boiler feed water to a temperature which is no less than 30 deg F below the steam temperature at the steam drum, or 3) reduce the final temperature of the boiler's flue gas to a temperature no greater than 200 deg F. [California Environmental Quality Act]
- Electric motors driving combustion air fans or induced draft fans shall have an efficiency meeting the standards of the National Electric Manufacturer's Association (NEMA) for "premium efficiency" motors and shall each be operated with a variable speed control or equivalent for control of flow through the fan. [California Environmental Quality Act]
- The boiler shall be equipped with an O2 trim system designed to control oxygen content of the stack gases to a maximum of 3% by volume dry basis except during any period where the rate of fuel consumption by the boiler is less than 20% of maximum rated firing. [California Environmental Quality Act]
- The boiler shall be designed to limit the recirculation of flue gas to a value not exceeding 10 percent of total flue gas volume while meeting the applicable requirements for control of NOx emissions from the boiler. [California Environmental Quality Act]
- 8. The boiler blowdown rate shall not exceed 8% of steam production. [California Environmental Quality Act]
- A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
- 10. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENT CONTINUE ON NEXT PAGE part of the Facility-wide Permit to Operate. These terms and condition

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES Location:

Location: 5631 E OLIVE AVE, FRESNO, CA 93727

- 11. Except during start-up and shutdown, emissions from this unit shall not exceed any of the following limits: 5 ppmvd NOx @ 3% O2 or 0.006 lb-NOx/MMBtu; 0.00285 lb-SOx/MMBtu; 0.0076 lb-PM10/MMBtu; 200 ppmvd CO @ 3% O2 (equivalent to 0.147 lb-CO/MMBtu); or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 12. During start-up and shutdown, emissions from this unit shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu; 0.00285 lb-SOx/MMBtu; 0.0076 lb-PM10/MMBtu; 200 ppmvd CO @ 3% O2 (equivalent to 0.147 lb-CO/MMBtu); or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. The total duration of start-up time shall not exceed 2.0 hours per day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. The total duration of startup time shall not exceed 2.0 hours per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. The total duration of shutdown time shall not exceed 2.0 hours per day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. The total duration of shutdown time shall not exceed 2.0 hours per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain daily records of start-up and shutdown durations and number of occurrences of each. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 3% O2 over a 15 minute averaging period. [District Rule 4102]
- 19. Source testing to measure natural gas combustion NOx, CO, and NH3 emissions from this unit shall be conducted at least once every twelve months. After demonstrating compliance on two consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every 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 months. [District Rules 2201, 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. Nitrogen oxide (NOx) emission concentrations in ppmv referenced at dry stack emissions shall be corrected to 3% O2 and Ib/MMBtu rates shall be calculated as Ib NO2/MMBtu of heat input (hhv). [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. 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
- 22. 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. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 24. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 4102]
- 27. The source test plan shall identify which basis (ppmy or b/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES

Location: 5631 E OLIVE AVE, FRESNO, CA 93727 C-3275-3-1: Mar 19 2013 9:07AM - GILLESR

- 28. The permittee shall monitor and record the stack concentration of NOx, CO, NH3, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. NH3 monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. 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 five days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 29. If the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than one hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after one hour of operation following detection, the permittee shall notify the District within the following one 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 reestablished, 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
- 30. All NOx, CO, O2 and NH3 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 NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment 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 readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 31. NH3 emission readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rule 4102]
- 32. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO, and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 33. Operator shall provide that fuel hhv be certified by third party fuel supplier or determined annually by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 34. Permittee shall determine sulfur content of combusted natural gas annually or shall demonstrate that the combusted natural gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
- 35. Permittee shall maintain daily records of the type and quantity of fuel combusted by the boiler. [District Rule 2201 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
- 36. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES Location: 5631 E OLIVE AVE, FRESNO, CA 93727 C-3275-3-1: Mai 19 2013 9:07AM - GILLESR

### Attachment A

## **Detailed Facility Printout**

**SJVUAPCD** CENTRAL

Detailed Facility Report
For Facility=3275 and excluding Deleted Permits
Sorted by Facility Name and Permit Number
FAC # C 3275

3/5/13 2:12 pm

							<del></del>
SAN JOAQUIN VAL 5631 E OLIVE AVE FRESNO, CA 93727			FAC STA TELE		C 3275 A 5594582587		TYPE: <b>TitleV</b> EXPIRE ON: 02/28/20 TOXIC ID: AREA: 6 / INSP. DATE: 06/13
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
C-3275-2-0	4.9 MMBtu/hr	3020-02 F	1	607.00	607.00	Α	4.9 MMBTU/HR DIXON MODEL S-M NATURAL GAS-FIRED BOILER WAN INDUSTRIAL COMBUSTION MODEL LNDG-63P-20 LOW NOX BURNER (FACILITY OPTED FOR PERMIT TO OPERATE IN LIEU OF A PERMIT EXEMPT EQUIPMENT REGISTRATION)
C-3275-3-0	33.66 MMBtu/hour	3020-02 H	1	1,030.00	1,030.00	Α	33.66 MMBTU/HR CLEAVER-BROOKS MODEL NBI-800-250-LN-SKID NATURAL GAS-FIRED BOILER EQUIPPED WITH A CLEAVER-BROOK MODEL CBI.700.800.250 LOW NOX BURNER, FLUE GAS RECIRCULATION SYSTEM, AND O2 CONTROLLER SERVED BY A NATIONWIDE MODEL CATASTAK SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

Number of Facilities Reported: 1

### Attachment B

# **Insignificant Activities**

**Title V Application - INSIGNIFICANT ACTIVITIES** 

COMPANY NAME: San Joaquin Valley Concentrates

FACILITY ID: C-3275

Check the box next to the exemption category from Rule 2020 which describes any insignificant activity or equipment at your facility not requiring a permit.

Exemption Category	Rule 2020 Citation	1	Exemption Category	Rule 2020 Citation	1
Structure or incinerator assoc. with a structure designed as a dwelling for 4 families or less	4.1		Containers used to store refined lubricating oils (55-gallon barrels of lubricants)	6.6.8	х
Locomotives, airplanes, and watercraft used to transport passengers or freight	4.4		Unvented pressure vessels used exclusively to store liquified gases or assoc with exempt equipment	6.6.9 or 6.13	
Natural gas or LPG-fired boilers or other indirect heat transfer units of 5 MMBtu/hr or less	6.1.1	х	Portable tanks used exclusively to store produced fluids	6.6.10	
Piston-type i.c.engine with maximum continuous rating of 50 braking horsepower (bhp) or less	6.1.2		for ≤ six months  Mobile transport tanks on delivery vehicles of VOCs	6.6.11	
Gas turbine engines with maximum heat input rating of 3 MMBtu/hr or less	6.1.3		Loading racks used for the transfer of less than 4,000 gal/day of unheated organic material with initial boiling point ≥ 302 F or of fuel oil with specific gravity ≥0.8251	6.7.1.1	
Space heating equipment other than boilers	6.1.4		Loading racks used for the transfer of asphalt, crude or residual oil stored in exempt tanks, or crude oil with	6.7.1.2	
Cooling towers with a circulation rate less than 10,000 gal/min, and that are not used for cooling of process water, or water from barometric jets or condensers++	6.2		specific gravity ≥ 0.8762  Equipment used exclusively for the transfer of refined lubricating oil	6.7.2	1
Use of less than 2 gal/day of graphic arts materials	6.3		Equipment used to apply architectural coatings	6,8.1	1
Equipment at retail establishments used to prepare food for human consumption	6.4.1		Unheated, non-conveyorized cleaning equipment with < 10 ft <sup>2</sup> open area; using solvents with initial boiling	6.9	
Ovens at bakeries with total daily production less than 1,000 pounds and exempt by sec. 6.1.1	6.4.3		point ≥ 248 F; and < 25 gal/yr. evaporative losses  Brazing, soldering, or welding equipment	6.10	/
Equipment used exclusively for extruding or compression molding of rubber or plastics, where no plastisizer or blowing agent is used	6.5		Equipment used to compress natural gas	6.11	<b> √</b> 
Containers used to store clean produced water	6.6.1		Fugitive emissions sources assoc. with exempt equipment	6.12	
Containers ≤100 bbl used to store oil with specific gravity ≥ 0.8762	6.6.2		Pits and Ponds as defined in Rule 1020	6.15	
Containers ≤ 100 bbl installed prior to 6/1/89 used to store oil with specific gravity ≥ 0.8762	6.6.3		On-site roadmix manufacturing and the application of roadmix as a road base material	6.17	
Containers with a capacity ≤ 250 gallons used to store organic material where the actual storage temperature <150 F	6.6.4		Emissions less than 2 lb/day from units not included above	6.19	
Containers used to store unheated organic material with an initial boiling point ≥ 302 F	6.6.5		Venting PUC quality natural gas from for sole purpose of pipeline and compressor repair and or maintenance	7.2	
Containers used to store fuel oils or non-air-blown asphalt with specific gravity ≥0.9042	6.6.6		Non-structural repairs & maintenance to permitted equipment	7.3	
Containers used to store petroleum distillates used as motor fuel with specific gravity ≥ 0.8251	6.6.7		Detonation of explosives ≤ 100 lb/day and 1,000 lb/year	7.4	

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

### Attachment C

### SJVUAPCD Permits



# **Permit to Operate**

FACILITY: C-3275

**EXPIRATION DATE: 02/28/2014** 

**LEGAL OWNER OR OPERATOR:** 

SAN JOAQUIN VALLEY CONCENTRATES

MAILING ADDRESS:

5610 E OLIVE AVE FRESNO. CA 93727

**FACILITY LOCATION:** 

5631 E OLIVE AVE FRESNO, CA 93727

**FACILITY DESCRIPTION:** 

AGRICULTURAL PRODUCTS PROCESSING

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

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

Seyed Sadredin

David Warner
Director of Permit Services

**FACILITY:** C-3275-0-0 **EXPIRATION DATE:** 02/28/2014

### **FACILITY-WIDE 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. Facilities C-447 and C-3275 are part of the same stationary source for Rule 2201 purposes. [District Rule 2201]

7 \

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES Location: 5631 E OLIVE AVE, FRESNO, CA 93727 C-3275-0-0: Oct 25 2012 2:52PM - GILLESR

**PERMIT UNIT:** C-3275-2-0 EXPIRATION DATE: 02/28/2014

### **EQUIPMENT DESCRIPTION:**

4.9 MMBTU/HR DIXON MODEL S-M NATURAL GAS-FIRED BOILER WITH AN INDUSTRIAL COMBUSTION MODEL LNDG-63P-20 LOW NOX BURNER (FACILITY OPTED FOR PERMIT TO OPERATE IN LIEU OF A PERMIT EXEMPT **EQUIPMENT REGISTRATION)** 

### PERMIT UNIT REQUIREMENTS

- 1. The boiler shall only be fired on PUC-regulated natural gas. [District Rule 4307]
- 2. This boiler shall be equipped with an operational non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas consumed which must be installed by July 1, 2009. [District Rule 4307]
- When fired on natural gas, emissions from the boiler shall not exceed any of the following limits: 30 ppmvd NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 400 ppmvd CO @ 3% O2 or 0.2956 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 4307]
- The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO starting July 1, 2009. [District Rule 4307]
- The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
- If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. The six month period starts after July 1, 2009. [District Rule 4307]
- In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx 7. analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule starting July 1, 2009. [District Rule 4307]
- The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
- Source testing to measure NOx and CO emissions from the boiler while fired on natural gas, shall be conducted no later than July 1, 2009. [District Rule 4307]
- 10. 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]
- 11. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
- 12. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 43071
- 13. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES

- 14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4307]
- 15. 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 4307. [District Rule 4307]
- 16. 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 Rule 4307]
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
- 18. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
- 19. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance.

  [District Rule 4307]
- 20. 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 4307]

EXPIRATION DATE: 02/28/2014 **PERMIT UNIT:** C-3275-3-0

#### **EQUIPMENT DESCRIPTION:**

33.66 MMBTU/HR CLEAVER-BROOKS MODEL NBI-800-250-LN-SKID NATURAL GAS-FIRED BOILER EQUIPPED WITH A CLEAVER-BROOKS MODEL CBI.700.800.250 LOW NOX BURNER, FLUE GAS RECIRCULATION SYSTEM, AND O2 CONTROLLER SERVED BY A NATIONWIDE MODEL CATASTAK SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be constructed, maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein. [District Rule 2201] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize 2. emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper 3. ok), roof overhang, or any other obstruction. [District Rule 4102]
- The boiler shall be equipped with an economizer system that consists of, at a minimum, a single stage economizer section which will recover energy from the boiler flue gas by heat exchange with the boiler feed water. The economizer system shall be designed at maximum boiler firing rate to either 1) reduce the temperature of the economizer flue gas outlet to a value no greater than 20 deg F above the temperature of the boiler feed water at maximum firing rate, or 2) heat the boiler feed water to a temperature which is no less than 30 deg F below the steam temperature at the steam drum, or 3) reduce the final temperature of the boiler's flue gas to a temperature no greater than 200 deg F. [California Environmental Quality Act]
- Electric motors driving combustion air fans or induced draft fans shall have an efficiency meeting the standards of the National Electric Manufacturer's Association (NEMA) for "premium efficiency" motors and shall each be operated with a variable speed control or equivalent for control of flow through the fan. [California Environmental Quality Act]
- The boiler shall be equipped with an O2 trim system designed to control oxygen content of the stack gases to a maximum of 3% by volume dry basis except during any period where the rate of fuel consumption by the boiler is less than 20% of maximum rated firing. [California Environmental Quality Act]
- 7. The boiler shall be designed to limit the recirculation of flue gas to a value not exceeding 10 percent of total flue gas volume while meeting the applicable requirements for control of NOx emissions from the boiler. [California Environmental Quality Act]
- 8. The boiler blowdown rate shall not exceed 8% of steam production. [California Environmental Quality Act]
- A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
- 10. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN VALLEY CONCENTRATES

- 11. Except during start-up and shutdown, emissions from this unit shall not exceed any of the following limits: 5 ppmvd NOx @ 3% O2 or 0.006 lb-NOx/MMBtu; 0.00285 lb-SOx/MMBtu; 0.0076 lb-PM10/MMBtu; 200 ppmvd CO @ 3% O2 (equivalent to 0.147 lb-CO/MMBtu); or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 12. During start-up and shutdown, emissions from this unit shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu; 0.00285 lb-SOx/MMBtu; 0.0076 lb-PM10/MMBtu; 200 ppmvd CO @ 3% O2 (equivalent to 0.147 lb-CO/MMBtu); or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. The total duration of start-up time shall not exceed 2.0 hours per day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. The total duration of startup time shall not exceed 2.0 hours per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. The total duration of shutdown time shall not exceed 2.0 hours per day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. The total duration of shutdown time shall not exceed 2.0 hours per occurrence. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain daily records of start-up and shutdown durations and number of occurrences of each. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 3% O2 over a 15 minute averaging period. [District Rule 4102]
- 19. Source testing to measure natural gas combustion NOx, CO, and NH3 emissions from this unit shall be conducted at least once every twelve months. After demonstrating compliance on two consecutive annual source tests when unit is fired on natural gas, the unit shall be tested not less than once every 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 months. [District Rules 2201, 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. Nitrogen oxide (NOx) emission concentrations in ppmv referenced at dry stack emissions shall be corrected to 3% O2 and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. 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
- 22. 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. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 24. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. Source testing for ammonia slip shall be conducted utilizing BAAOMD Method ST-1B. [District Rule 4102]

- 27. 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
- 28. 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
- 29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 30. The permittee shall monitor and record the stack concentration of NOx, CO, NH3, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. NH3 monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. 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 five days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 31. If the NOx, CO or NH3 concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than one hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after one hour of operation following detection, the permittee shall notify the District within the following one 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 reestablished, 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
- 32. All NOx, CO, O2 and NH3 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 NOx, CO and O2 analyzer as well as the NH3 emission monitoring equipment 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 readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 33. NH3 emission readings shall be conducted at the time the NOx, CO and O2 readings are taken. The readings shall be converted to ppmvd @ 3% O2. [District Rule 4102]
- 34. The permittee shall maintain records of: (1) the date and time of NOx, CO, NH3, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx, CO, and NH3 concentrations corrected to 3% O2, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH3 emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- Operator shall provide that fuel hhv be certified by third party fuel supplier or determined annually by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 36. Permittee shall determine sulfur content of combusted natural gas annually or shall demonstrate that the combusted natural gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
- 37. Permittee shall maintain daily records of the type and quantity of fuel combusted by the boiler. [District Rules 2201 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
- 38. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit